

Empa Activities 2011

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Empa Activities 2011

Awards

	Meier, Urs	Aftab Mufti Medal for Innovation and High Achievements in Civil Structural Health Monitoring, SHMII-5 Conference in Cancun (MX)
	Meier, Urs	CME Distinguished Guest Speaker of the University of Illinois at Chicago (US)
	Meier, Urs	Special Issue in Honor of Professor Urs Meier of the ASCE Journal of Composites for Construction and the International Institute for FRP in Construction (IIFC), March/April Edition.
Acoustics/Noise Control	Pieren, Reto/Eggenschwiler, Kurt (Douglas, Annette)	Design Preis Schweiz, Textil Design Co-Award A, Bern
Advanced Fibers	Guex, Géraldine/Fortunato, Giuseppino/Körner, Enrico	Best poster, Swiss Experimental Surgery Symposium, Fribourg
Advanced Fibers	Guex, Géraldine/Fortunato, Giuseppino/Körner, Enrico	Best presentation of the day, 22 nd Students Conference: Perspectives and Challenges in Regenerative Medicine, Berlin (DE)
Advanced Fibers	Schurtenberger, Erich/Heuberger, Manfred	Best poster, International Nanotribology Forum: The Hoi An Discussions II, Hoi An (VN)
Advanced Materials Processing	Kwon, Hansang	Jang Young-sil Award
Air Pollution/Environmental Technology	Tuzson, Bela	Best Oral Presentation by a Young Scientist, Isotopes 2011, Gréoux-les-Bains (FR)
Analytical Chemistry	Müller, Claudia E.	Poster Award, Anakon, Zürich
	Wang, Jing	The Young Scientist Smoluchowski Award, GAeF, European Aerosol Conference, Manchester (UK)
	Zennegg, Markus	Award for Most Enthusiastic and Inspiring Oral Presentation at the ICCE, Zürich
Concrete/Construction Chemistry	Trtik, Pavel	Associate Professor, Czech Technical University, Prague (CZ)
Electronics/Metrology/Reliability	Jacob, Peter	Dresden Barkhausen Award, Materialforschungsbund Dresden, EUCEMAN and Technische Universität Dresden (DE)
	Jacob, Peter	Outstanding Poster Award ISTFA, San Jose (US)
Joining and Interface Technology	Kramer, Hendrik	Award Dr. Ziegler-Stiftung, TU Kaiserslautern (DE)
Materials Biology Interactions	Gasser, Michael	Best Poster Award, NanoImpactNet, Lausanne
Mechanical Systems Engineering	Maluk, C./Terrasi, Giovanni	Best Poster Award, IAFSS Conference, Maryland (US)

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Awards

Mechanics of Materials and Nanostructures	Elias, Jamil	Hans-Jürgen Engell Prize from the Intl. Soc. of Electrochemistry ISE (JP)
Nanoscale Materials Science	Jaeger, Dominik	E-MRS Graduate Student Award, Nice (FR)
Protection and Physiology	Rossi, René	Best paper award, FSC Hong Kong (CN)
Solid State Chemistry and Catalysis	Karvonen, Lassi	Poster Award, University School of Chemical Technology, Aalto (FN)
	Weidenkaff, Anke	Kavli Foundation Award, Fred Kavli Distinguished Lectureship in Nanoscience, MRS and E-MRS Conference on Energy, Nice (FR)
	Weidenkaff, Anke/Veziridis, Angelika	Third Place of: Article of the year in: Energy 2.0 Kompendium
Technology and Society	Steubing, Bernhard	Best Paper Award, World Renewable Energy Congress, Linköping (SE)
Thin Films and Photovoltaics	Chirila, Adrian	EU PVSEC Student Award, Hamburg (DE)

Empa Activities 2011

PhD Theses

Acoustics/Noise	Churchill, Claire	Direct and Flanking Transmission in Combined Heavyweight and Lightweight Structures Co-Supervisor Empa: Dr Lubos Krajci	2	University of Liverpool (UK)
	Chatterjee, Sanjukta	Structural and mechanical effects of carbon nanotubes in high-tensile strength thermoplastic polymer fibers Co-Supervisor Empa: Dr Rudolf Hufenus, Dr Frank Nüesch		Uppsala University (SE)
Advanced Fibers	Guex, Anne Géraldine	Development and functionalisation of electrospun scaffolds for contractile artificial muscle constructs for cardiac repair Co-Supervisor Empa: Dr Giuseppino Fortunato	2	University of Bern
	Kolbuk, Dorota	Investigation of the effects of electrospinning conditions on the structure and selected properties of polymeric blended nanofibers for tissue engineering (ESNANOTIS) Co-Supervisor Empa: Dr Giuseppino Fortunato	2	Academy of Sciences, Inst. of Fundamental echn. Research, Warsaw (PL)
	Kubincova, Jana	Funktionalisierung von Textilien mittels Atmosphärenplasma Co-Supervisor Empa: Dr Dirk Hegemann	2	Cornelius University in Bratislava, Dept. of Experimental Physics (SK)
	Schurtenberger, Erich	Thermodynamics of Confined Fluids Co-Supervisor Empa: Dr Manfred Heuberger	2	ETH Zurich, Dept. of Materials
	Afra, Bamdad	Focused electron beam induced processing Supervisor Empa: Prof Patrik Hoffmann	1	EPF Lausanne, Materials Science and Engineering
Advanced Materials Processing	Reinke, Michael	BaTiO ₃ deposition by HVCVD Supervisor Empa: Prof Patrik Hoffmann	2	EPF Lausanne, Photonics
	Rowthu, Sriharitha	Porous wear resitant, tailored wetting materials Supervisor Empa: Prof Patrik Hoffmann	2	EPF Lausanne, Materials Science and Engineering
	Saeidi, Fatemeh	Laser structuring of tribo-pair surface Supervisor Empa: Prof Patrik Hoffmann	2	EPF Lausanne, Materials Science and Engineering
	Wang, Li	Nanostructuring by self assembly of copolymer blends Supervisor Empa: Prof Patrik Hoffmann	1	EPF Lausanne, Materials Science and Engineering
	Air Pollution/ Environmental Technology	Gianini, Matthias	Quellenzuordnungen von Aerosolen aus der Verbrennung von Biomasse (IMBALANCE) Co-Supervisor Empa: Dr Christoph Hüglin	2
Keller, Christoph		Assessment of European emissions of non-CO ₂ greenhouse gases by a combination of continuous measurements, transport models and Rn-222 emission maps (LEMURE) Co-Supervisor Empa: Dr Stefan Reimann/Dr Dominik Brunner	1	ETH Zurich, Institute for Atmospheric and Climate Science
Knote, Christoph		Regional scale impacts of changing emissions on air quality and climate Co-Supervisor Empa: Dr Dominik Brunner	2	ETH Zurich, Institute for Atmospheric and Climate Science

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2 = in progress

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PhD Theses

Air Pollution/ Environmental Technology	Schrade, Sabine	Emissions of PM10 and Ammonia from open bovine barns Co-Supervisor Empa: Dr Lukas Emmenegger	1	Christian-Albrechts- University of Kiel (DE)
	Shubha, Pandey	Trends investigation of Nitrogen compounds (NO ₂ , NO _y) at Jungfrauoch Co-Supervisor Empa: Dr Dominik Brunner	1	ETH Zurich Institute for Atmospheric and Climate Science
Analytical Chemistry	Bahk, Yeion Kyoung	Characterization of airborne Carbon Nano Tubes and Filtration Supervisor Empa: Prof Jing Wang	2	ETH Zurich, Institute for Environmental Engineering
	Diefenbacher, Pascal	Investigations of emissions of POPs from buildings into air and modeling of environmental fate Co-Supervisor Empa: Dr Andreas C. Gerecke	2	ETH Zurich, Dep. Umwelt- naturwissenschaften
	Hagendorfer, Harald	Emission processes of nanoparticles at material-environment-interface – Field Flow Fractionation coupling to LIBD and ICPMS Co-Supervisor Empa: Dr Andrea Ulrich	1	EPF Lausanne
	Hess, Adrian	Online coupling of a scanning mobility particle sizer SMPS to an inductively coupled plasma mass spectrometer ICP-MS for size fractionated, elemental analysis of nanoparticles in aerosols Co-Supervisor Empa: Dr Andrea Ulrich	2	EPF Lausanne, Materials Science and Engineering
	Jozwiak, Lukasz Michal	Investigation of the release and environmental fate of nanoparticles in paints Co-Supervisor Empa: Dr Andrea Ulrich, Dr Bernd Nowack	1	ETH Zurich, Institute for Biogeochemistry and Pollutant Dynamics
	Kammenou, Izoldi-Maria	Study, Transport and Characterization of airborne Nanoparticles with the use of Empa Windtunnel Supervisor Empa: Prof Jing Wang	2	ETH Zurich, Institute for Environmental Engineering
	Kuo, Yu-Ying	Concurrence of nanoparticles and organic pollutants in atmosphere and photocatalytic removal of organic pollutants Supervisor Empa: Prof Jing Wang	2	ETH Zurich, Institute for Environmental Engineering
	Losert, Sabrina	Investigations of the release of nanoparticles from consumer spray products Co-Supervisor Empa: Dr Andrea Ulrich	2	ETH Zurich, Institute for Chemical and Bioengineering ICB
	Müller, Claudia	Perfluorinated Chemicals nPFCs from Materials in the Environment Co-Supervisor Empa: Dr Andreas C. Gerecke	1	ETH Zurich
	Ott, Naomi	Development of a novel micro-analytical technique for elemental, locally and time resolved in-situ investigations of micro corrosion processes using a microflow capillary online coupled via flow injection to an inductively plasma mass spectrometry with potentiation control Co-Supervisor Empa: Dr Andrea Ulrich	2	University of Bern
	Pavlova, Pavlina	Accelerated release of persistent organic pollutants from Alpine glaciers Co-Supervisor Empa: Dr Peter Schmid	2	University of Berne
Walaszak, Damian	Minimal invasive investigations of corrosion products on ancient metal objects using LA-ICP-MS Co-Supervisor Empa: Dr Andrea Ulrich	2	University of Warsaw, Faculty of Chemistry (PL)	
Applied Wood Materials	Eyholzer, Christian	Cellulose fibrils: Isolation, characterisation and reinforcing potential for elements biodegradable polymers Co-Supervisor Empa: Dr Tanja Zimmermann	1	Skellefteå Campus, Luleå University of Technology (SE)
	Fuhr, Matthias	Modelling the Growth and Impact of Wood Decay Fungi Co-Supervisor Empa: Prof Francis Schwarze	1	ETH Zurich, Dept. Bau, Umwelt und Geomatik
	Gebald, Christoph	Atmosphärische CO ₂ Abscheidung Co-Supervisor Empa: Dr Tanja Zimmermann	2	ETH Zurich, Dept. Mechanical and Process Engineering

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Applied Wood Materials	Ho, Thu Thao	Development of barrier layers in packaging materials by using nanofibrillated cellulose Co-Supervisor Empa: Dr Tanja Zimmermann	2	ETH Zurich, Material Sciences
	Jockwer, Robert	Glulam beams with notches or holes Co-Supervisor Empa: Dr René Steiger	2	ETH Zurich, Dep. Bau, Umwelt und Geomatik
	Lehringer, Christian	Examination of different methods to enhance wood properties on bioincised wood of <i>Picea abies</i> Karst. and <i>Abies alba</i> Mill. Co-Supervisor Empa: Dr Klaus Richter	1	Georg-August-Universität Göttingen (DE)
	Rafsanjani Abasi, Ahmad	Multiscale poro-elastic model: bridging the gap from cellular to macroscopic scale Co-Supervisor Empa: Prof Dominique Derome	2	ETH Zurich, Dept. Bau, Umwelt und Geomatik
	Stührk, Chris	Creation of <i>Physisporinus vitreus</i> Laccase knockdown mutants for improvement of the bioincising process Co-Supervisor Empa: Prof Francis Schwarze	2	ETH Zurich, Dept. Bau, Umwelt und Geomatik
	Zhang, Zheng	Silylated Nanofibrillated Cellulose in Polymer Composites Co-Supervisor Empa: Dr Philippe Tingaut	2	Université Bordeaux (FR)
Biomaterials	Follonier, Stéphanie	Global gene expression and physiological state of PHA-producing <i>P. putida</i> under conditions prevailing in high pressure bioreactors Co-Supervisor Empa: Dr Manfred Zinn	1	ETH Zurich, Dept. of Mechanical and Process Engineering
	Gattlen, Jasmin	Reproducible biofilm formation Co-Supervisor Empa: Dr Manfred Zinn, Dr Laurie Mauclair, Dr	1	University of Zurich, Dept. Microbiology
	Ketikidis, Pantelis	Interfacial behavior of biocompatible poly(hydroxyalkanoate)-based polymers for complex materials development. Co-Supervisor Empa: Dr Manfred Zinn	2	University of Basel, Dept. of Chemistry
	Le Meur, Sylvaine	Production of polyhydroxyalkanoates (PHAs) from cheap waste resources Co-Supervisor Empa: Dr Qun Ren, Dr Manfred Zinn	2	ETH Zurich, Dept. Umweltwissenschaften (UWIS)
	Müller, Christian	Sensor development for an implantable drug monitoring chip Supervisor Empa: Dr Linda Thöny-Meyer Co-Supervisor Empa: Dr Michael Fairhead	2	ETH Zurich, Dept. Chemistry and Applied Biosciences
Building Science & Technology	Allegrini, Jonas	Urban climate Supervisor Empa: Prof Jan Carmeliet Co-Supervisor Empa: Viktor Dorer	2	ETH Zurich, Dept. Bau, Umwelt und Geomatik
	Derluyn, Hannelore	Salt cristalisation in porous media Supervisor Empa: Prof Jan Carmeliet	2	ETH Zurich, Dept. Bau, Umwelt und Geomatik
	Ferdowsi, Behrooz	Vibratio-induced unjamming of sheared granular media Supervisor Empa: Prof Jan Carmeliet Co-Supervisor Empa: Dr Michele Griffa	2	ETH Zurich, Dept. Bau
	Goto, Yutaka	Sustainable building envelopes for Japan Co-Supervisor Empa: Dr Karim Ghazi Wakili	2	ETH Zurich, Dept. Bau, Umwelt und Geomatik
	Kubilay, Aytaç	Wetting of building façadesby wind driven rain in the urban context Supervisor Empa: Prof Jan Carmeliet	2	ETH Zurich, Dept. Bau
	Patera, Alessandra	4D experimental investigation of hygro-mechanical behaviour of wood at the cellular scale Supervisor Empa: Prof Jan Carmeliet Co-Supervisor Empa: Dr Michele Griffa	2	ETH Zurich, Dept. Bau, Umwelt und Geomatik
	Paterna, Enrico	Urban climate modelling Supervisor Empa: Prof Jan Carmeliet Co-Supervisor Empa: Dr Peter Moonen	2	ETH Zurich Dept. Bau, Umwelt und Geomatik

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Building Science & Technology	Peretti, Carlo	Biocides leaching from building façades	2	ETH Zurich, Dept. Bau
		Supervisor Empa: Prof Jan Carmeliet Co-Supervisor Empa: Wangler, Timothy		
Center for Synergetic Structures	Saneinejad, Saba	Urban climate	2	ETH Zurich, Dept. Bau, Umwelt und Geomatik
		Supervisor Empa: Prof Jan Carmeliet Co-Supervisor Empa: Dr Peter Moonen		
Concrete / Construction Chemistry	Rampf, Markus	Mechanische Charakterisierung und Optimierung selbstreparierender Membranen für pneumatische Strukturen	1	ETH Zurich, Dept. of Mechanical and Process Engineering
		Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Rolf Luchsinger		
	Arnd, Eberhard	Schwindreduzierende Zusatzmittel in selbstverdichtenden Mörteln und Betonen	1	Universität Weimar (DE)
		Supervisor Empa: Dr Josef Kaufmann		
	Deschner, Florian	Enhancing the reactivity of Portland fly ash cement	2	Universität Erlangen (DE)
		Co-Supervisor Empa: Dr Frank Winnefeld, Dr Barbara Lothenbach		
	Dilnesa, Belay	Fate of iron during hydration of cement	2	EPF Lausanne
		Co-Supervisor Empa: Dr Barbara Lothenbach		
Corrosion and Materials Integrity	Ferrari, Lucia	Cement superplasticizer interaction studied by atomic force microscopy	1	Technische Universität München (DE)
		Co-Supervisor Empa: Dr Josef Kaufmann, Dr Frank Winnefeld		
	Hôpital, Emilie	Al uptake in C-S-H and the influence of alkali	2	EPF Lausanne
		Co-Supervisor Empa: Dr Barbara Lothenbach		
	Kunther, Wolfgang	Sulfatresistenz: Resistance against sulfate attack	2	EPF Lausanne
		Co-Supervisor Empa: Dr Barbara Lothenbach, Dr Andreas Leemann		
	Breimesser, Matthias	Elektrochemische Rauschanalyse von lokalen Korrosionsprozessen	2	Universität Erlangen (DE)
		Co-Supervisor Empa: Dr Patrik Schmutz, Dr Thomas Suter		
Electronics/Metrology/Reliability	Izdebski Pawel	Investigation of atmospheric local oxidation mechanisms for Al based ultra-fine grained alloys: influence on aqueous corrosion and surface properties	2	Warsaw University of Technology (PL)
		Co-Supervisor Empa: Dr Patrik Schmutz		
	Ilari, Gabriele	Metal/CNT contacts	2	ETH Zurich, Dept. Materials
		Co-Supervisor Empa: Dr Rolf Erni		
	Iwaniuk, Daniel	Adaptive control of laser speckle fields in microscopy	1	EPF Lausanne, Civil and Environmental Engineering
		Co-Supervisor Empa: Dr Erwin Hack		
	Lotito, Valeria	SNOM	2	ETH Zurich, Dept. of Information Technology and Electrical Engineering
		Supervisor Empa: Prof Gian-Luca Bona Co-Supervisor Empa: Dr Urs Sennhauser		
Functional Polymers	Sanabria, Sergio	US Glued Timber	2	ETH Zurich, Inst. for Building Materials
		Co-Supervisor Empa: Dr Urs Sennhauser, Dr Jürg Neuenschwander		
	Scholder, Olivier	Platun	2	ETH Zurich, Dept. of Information Technology and Electrical Engineering
		Supervisor Empa: Prof Gian-Luca Bona Co-Supervisor Empa: Dr Urs Sennhauser		
	Zraggen, Eugen	Photonik Projekt	2	ETH Zurich, Dept. of Information Technology and Electrical Engineering
	Supervisor Empa: Prof Gian-Luca Bona Co-Supervisor Empa: Dr Urs Sennhauser			
	Chatterjee, Sanjukta	Structural and mechanical effects of carbon nanotubes in high-tensile strength thermoplastic polymer fibers	2	Uppsala University, (SE)
	Co-Supervisor Empa: Dr Rudolf Hufenus, Dr Frank Nüesch			

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Functional Polymers	Quinsaats, Jose-Enrico	Increasing the dielectric constant of dielectric elastomer actuators using silver nanoparticles Co-Supervisor Empa: Dr Frank Nüesch, Dr Dorina Opris	2	EPF Lausanne
	Schlagenhauf, Lukas	Evaluation platform for safety and environmental risks of carbon nanotube reinforced nanocomposites Supervisor Empa: Dr Frank Nüesch Co-Supervisor Empa: Prof Jing Wang	2	ETH Zurich
	Shaw-Stewart, James	Laser ablation forward transfer Co-Supervisor Empa: Dr Frank Nüesch	2	ETH Zurich
	Tisserant, Jean-Nicolas	Titel noch in Bearbeitung Co-Supervisor Empa: Dr Jakob Heier, Dr Roland Hany	2	ETH Zurich
High Performance Ceramics	Bora, Debajeet Kumar	Synthesis and assessment of mixed metal-oxide nanoparticles and films for solar photo-electrochemical hydrogen fuel production - BASELPEC Co-Supervisor Empa: Dr Artur Braun	2	University of Basel
	Chen, Qianli	Effect of lattice volume and imperfections on the proton-photon coupling in proton conducting lanthanide transition metal oxides: High pressure and high temperature neutron and impedance studies Co-Supervisor Empa: Dr Artur Braun	2	ETH Zurich/EPF Lausanne
	Flak, Dorota	New metal oxide nanopowders for gas sensors Co-Supervisor Empa: Prof Thomas Graule	2	AGH University of Science and Technology, Cracow (PL)
	Fleischhauer, Felix	Solid Oxide Fuel Cell Research Co-Supervisor Empa: Jakob Kübler	2	Montanuniversität Leoben, (AT)
	Märkl, Veronika	Novel nanocomposite based filter media for adsorption based water treatment Co-Supervisor: Prof Thomas Graule	2	Technische Universität Freiberg (DE)
	Popelo, Anastasyia	Fundamental spectroscopy studies on solar cell materials Co-Supervisor: Dr Artur Braun	2	EPF Lausanne
	Salehi, Mahdi	Development of thin tubular dead-end membranes for oxygen separation and syngas production Co-Supervisor Empa: Dr Frank Clemens	2	University of Fribourg
	Schlenthner, Evelyn	Processing aspects for the toughening of infiltrated Al_2O_3 /P/Steel Composites Co-Supervisor: Jakob Kübler	2	Technische Universität Freiberg (DE)
	Strehler, Claudia	Si_3N_4 /SiC based composites with optimised grain boundary phase evolution for cutting applications Co-Supervisor Empa: Prof Thomas Graule	1	Technische Universität Freiberg (DE)
	Van Garderen, Noémie	Development, in-situ investigations and application of attrition resistant reactive bed materials in fluidised beds Co-Supervisor Empa: Prof Thomas Graule	1	Technische Universität Freiberg (DE)
Wilkens-Heinecke, Judit	Novel shaping of polymer/ceramic nanocomposites Co-Supervisor Empa: Prof Thomas Graule	2	Technische Universität Bergakademie Freiberg, (DE)	
Hydrogen & Energy	Gorbar, Michal	Developments of new membranes based on inorganic materials for electrolyser cells Supervisor Empa: Prof Andreas Züttel Co-Supervisor Empa: Dr Ulrich Vogt	2	University of Fribourg, Physics Dept.

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PhD Theses

Hydrogen & Energy	Kato, Shunsuke	Physical Properties of Complex Hydrides e.g. $Mx + [BH_4]x$, and Hydrogen Sorption Mechanism Supervisor Empa: Prof. Andreas Züttel Co-Supervisor Empa: Dr. Andreas Borgschulte	2	University of Fribourg, Physics Dept.
	Martelli, Pascal	Electronic and Atomic structure of Complex Hydrides Supervisor Empa: Prof. Andreas Züttel Co-Supervisor Empa: Dr. Arndt Remhof	1	University of Fribourg, Physics Dept.
Internal Combustion Engines	Egli, Reto	Numerical and experimental optimisation of the combustion process and exhaust gas treatment of a direct injected natural gas engine Co-Supervisor Empa: Dr. Patrik Soltic	2	ETH Zurich, Labor für Aerothermochemie und Verbrennungssysteme
	Spiteri, Alexander Constantin	Investigation of the phenomena in deNO _x -SCR exhaust aftertreatment systems Co-Supervisor Empa: Dr. Dimopoulos Eggenschwiler Panayotis	2	ETH Zurich, Laboratorium für Aerothermochemie und Verbrennungssysteme
Joining and Interface Technology	Breimesser, Matthias	Elektrochemische Rauschanalyse von lokalen Korrosionsprozessen Co-Supervisor Empa: Dr. Patrik Schmutz, Dr. Thomas Suter	2	Universität Erlangen (DE)
	Buhl, Sebastian	Interfaces of brazed diamonds Co-Supervisor Empa: Dr. Christian Leinenbach	2	ETH Zurich, Institut für Machine Tools and Manufacturing
	Izdebski Pawel	Investigation of atmospheric local oxidation mechanisms for Al based ultra-fine grained alloys: influence on aqueous corrosion and surface properties Co-Supervisor Empa: Dr. Patrik Schmutz	2	Warsaw University of Technology (PL)
	Jin Shan	Experimental Study and Modeling of Au-Ge-based Alloy Systems for Novel High Temperature Lead Free Solders Co-Supervisor Empa: Dr. Christian Leinenbach	2	EPF Lausanne, Computational Materials Laboratory
	Lipecka, Joanna	Development of novel joining technologies for nanostructured materials Supervisor Empa: Prof. Jolanta Janczak-Rusch	2	Int. PhD Program CH-PL
	Sosnowska, Karolina	Sacrificial Passivation Supervisor Empa: Prof. Jolanta Janczak-Rusch	2	Int. PhD Program CH-PL
	Transchel, Robert	Experimental study and modelling of the single diamond-work piece interaction using particle-reinforced filler alloys Co-Supervisor Empa: Dr. Christian Leinenbach	2	ETH Zurich, Institut für Machine Tools and Manufacturing
	Weyrich, Nico	Low melting Au-based solder alloys for highly loaded applications Co-Supervisor Empa: Dr. Christian Leinenbach	2	ETH Zurich, Institut für Machine Tools and Manufacturing
Materials-Biology Interactions	Gasser, Michael	CNT-Protein interactions and biological effects of CNT Co-Supervisor Empa: Dr. Peter Wick	1	Universität Bern, Bretscher Center
	Grafmüller, Stefanie	Nanoparticle transport across the human placenta Supervisor Empa: Prof. Harald Krug Co-Supervisor Empa: Dr. Peter Wick	2	Universität Bern, Fakultät für Medizin
	Idaszek, Joanna	DeSTine: Development of a Scaffold for Tissue regeneration and Engineering Co-Supervisor Empa: Dr. Arie Bruinink	2	Warsaw University of Technology, Department of Materials Science and Engineering (PL)
	Mulky, Elias	Bone Substitute Materials Reinforced with Nanofibres: Effect of Delayed Fibre Degradation on Cells and Tissues Co-Supervisor Empa: Dr. Katharina Maniura	2	ETH Zurich, Mechanical and Process Engineering
	Rottmar, Markus	Studies of cells in 3D-microwells Co-Supervisor Empa: Dr. Katharina Maniura	1	ETH Zurich, Materials Dept.

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PhD Theses

Materials-Biology Interactions	Studer, Deborah	2D Patterned Co-Culture Systems for Investigating Stem Cell Differentiation Co-Supervisor Empa: Dr Katharina Maniura	2	ETH Zurich, Dept. of Information Technology and Electrical Engineering	
	Dürager, Christian	Development of a Structural Health Monitoring System for Aerospace Application Co-Supervisor Empa: Dr Andreas J. Brunner	2	ETH Zurich, Institut für Automatik	
Mechanical Systems Engineering	Eleni, Toumpanaki	Dauerhaftigkeit von mit nanomodifizierten CFK Drähten vorgespannten filigranen Hochleistungsbeton (HLB) Bauteilen Co-Supervisor Empa: Dr Gianni Terrasi	2	Civil engineering, University of Cambridge (UK)	
	Haba, Dietmar	Titel noch in Arbeit Co-Supervisor Empa: Dr Andreas J. Brunner	2	University of Fribourg	
	Jordi, Christa	Entwicklung und Bau eines Prall-Luftschiffes mit undulatorischem Antrieb basierend auf elektroaktiven Polymeren Co-Supervisor Empa: Silvain Michel	1	ETH Zurich, Inst. For Mechanical Systems	
	Maluk, Cristian	Fire-safe performance, design, and application of high-performance carbon fibre prestressed concrete structural elements Co-Supervisor Empa: Dr Gianni Terrasi	2	Civil engineering, University of Edinburgh (UK)	
	Ritschel, Franziska	Characterization of failure mechanisms of plywood and LVL from the macroscopic to the microscopic scale by combining optical methods, acoustic emission analysis, electron microscopy and X-ray tomography Supervisor Empa: Dr Andreas Brunner	2	ETH Zurich, Inst. for Building Materials	
	Senteler, Marco	Rigid body simulation of the human musculoskeletal system Co-Supervisor Empa: Bernhard Weisse, Christian Affolter	2	ETH Zurich, Inst. for Biomechanics	
	Mechanics for Modelling and Simulation	Ehrhardt, Frank	Lifetime assessment of 700°C steam turbine weldments Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Stuart Holdsworth	2	ETH Zurich
		Hasse, Alexander	Compliant Systems Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Flavio Campanile	1	ETH Zurich
Hosseini, Ehsan		Prediction of long time creep rupture properties of welded joints using the results of short duration creep crack incubation tests Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Stuart Holdsworth	2	ETH Zurich	
Jähne, René		Shape memory adaptive structures Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Flavio Campanile	2	ETH Zurich	
Mayer, Thomas		Microstructural evolution during fatigue (2CrMoNiWV) Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Stuart Holdsworth	2	ETH Zurich	
Pham-Minh, Son		Microstructural evolution during fatigue (17Cr12Ni2Mo) Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Stuart Holdsworth	2	ETH Zurich	
Radosavljevic, Marko		Creep-fatigue Assessment of High Temperature Steam Turbine Rotors Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Stuart Holdsworth	2	ETH Zurich	
Schmidt, Arne		Reliability of electroactive polymers Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Flavio Campanile	1	ETH Zurich	
Thwapiah, Ghalib		Aeroelastic effects and adaptive wings Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Flavio Campanile	1	ETH Zurich	

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PhD Theses

Mechanics for Modelling and Simulation	Vacchieri, Erica	Creep-fatigue Interaction and small size testing techniques	2	ETH Zurich
		Supervisor Empa: Prof Edoardo Mazza Co-Supervisor Empa: Dr Stuart Holdsworth		
Mechanics of Materials and Nanostructures	Nowag, Kai	Anisotropy in the deformation mechanisms of hard to machine metal alloys	2	University of Technology Braunschweig (DE)
		Co-Supervisor Empa: Dr Rudy Ghisleni		
Media Technology	Schamel, Matthias	Interaction of external and internal lengthscales in nanomechanics	2	ETH Zurich, Material Science, Laboratory for Nanometallurgy
		Co-Supervisor Empa: Dr Johann Michler		
Nanoscale Materials Science	Scheller Lichtenauer, Matthias	Measurement and Modeling of Multi-Attribute Psychometric Scales	2	University of Jena (DE)
		Co-Supervisor Empa: Dr Peter Zolliker		
nanotech@surfaces	Sormaz, Milos	Modellierung von Lichtstreuung	1	ETH Zurich, Fluidodynamik
		Co-Supervisor Empa: Prof Klaus Simon		
	Bauert, Tobias	Buckybowl@surfaces	1	Universität Zürich, Chemie
		Supervisor Empa: PD Dr Karl-Heinz Ernst		
	Fontani, Giacomo	Mechanisms of Aqueous Lubrication with Amphiphilic Polymers	2	ETH Zurich, Materials Science
		Co-Supervisor Empa: Dr Rowena Crockett		
	Jaeger, Dominik A.	Interfaces between Nanostructured metal nitrides and Si ₃ N ₄	2	EPF Lausanne
		Co-Supervisor Empa: Dr Jörg Patscheider		
	Karageorgaki, Chrysanthi	Chiral Molecules@surfaces	2	Universität Zürich, Chemie
		Supervisor Empa: PD Dr Karl-Heinz Ernst		
	Markovic, Marko	CNT precursors@surfaces	2	Universität Zürich, Chemie
		Supervisor Empa: PD Dr Karl-Heinz Ernst		
	Özer, Sevil	Exchange Bias Effect and Magnetic Memory	2	University of Basel
		Supervisor Empa: Prof Hans Josef Hug Co-Supervisor Empa: Dr Miguel Marioni		
	Roth, Christian	Chiral Surfaces	1	Universität Zürich, Chemie
	Co-Supervisor Empa: Dr Karl-Heinz Ernst			
Stickar, Pablo Guillermo	Versatile magnetic pathways for kinesin driven molecular shuttles	2	ETH Zurich	
	Co-Supervisor Empa: Dr Miguel Marioni			
Stoeckl, Quirin	CNT precursors@surfaces	2	Universität Zürich, Chemie	
	Supervisor Empa: PD Dr Karl-Heinz Ernst			
Thai Quang, Thanh	Scanning Force Microscopy Analysis of mechanical Properties of Single Molecules	1	University of Base	
	Supervisor Empa: Prof Hans Josef Hug Co-Supervisor Empa: Dr N. Pilet, Dr A. Norris			
Tolga, Goren	Understanding the role of sugar and glycan structure in natural lubrication mechanisms	2	ETH Zurich, Materials Science	
	Co-Supervisor Empa: Dr Rowena Crockett			
Gaspari, Roberto	Quasicrystal surfaces	2	ETH Zurich, Dept. of Chemistry and Applied Biosciences	
	Co-Supervisor Empa: Dr Daniele Passerone			
Mäder, Ruben	Quasicrystals and Complex Metallic Alloys	2	ETH Zurich, Materials Science	
	Co-Supervisor Empa: Dr Oliver Gröning			
Nguyen, Manh Thuong	Atomistic simulations of surface-supported molecular nanostructures	1	ETH Zurich, Dept. of Physics	
	Co-Supervisor Empa: Dr Daniele Passerone			

Empa Activities 2011

PhD Theses

nanotech@surfaces	Prinz, Jan	Experimental surface science investigations of palladium-gallium intermetallics for heterogeneous catalysis Supervisor Empa: Dr Roland Widmer	2	EPF Lausanne, Dept. of Physics
	Söde, Hajo	Electronic structure of graphene nanoribbons Supervisor Empa: Prof Roman Fasel Co-Supervisor Empa: Dr Pascal Ruffieux	2	Universität Zürich, Physik
	Talirz, Leopold	Organic nanowires with unusual transport properties: A theoretical study Co-Supervisor Empa: Prof Roman Fasel, Dr Carlo Pignedoli	2	Universität Zürich, Physik
Photovoltaics	Blösch, Patrick	Advanced Contact Layers for Thin Film Solar Cells Co-Supervisor Empa: Prof Ayodhya N. Tiwari	2	ETH Zurich, Dept. of Physics
	Chirila, Adrian	Properties of high growth rate deposited Cu(In,Ga)Se ₂ layers and flexible solar cells Co-Supervisor Empa: Prof Ayodhya N. Tiwari	2	ETH Zurich, Dept. of Physics
	Fella, Carolin	Kesterite absorber materials for thin film solar cells Supervisor Empa: Prof Ayodhya N. Tiwari	2	ETH Zurich, Dept. of Information Technology and Electrical Engineering
	Gretener, Christina	Design and stability of backcontacts for CdTe thin film solar cells Supervisor Empa: Prof Ayodhya N. Tiwari	2	ETH Zurich, Dept. of Information Technology and Electrical Engineering
	Hosseini Davood	Role of nano-scale inhomogeneities in chalcogenide absorbers of thin film Supervisor Empa: Prof Ayodhya N. Tiwari	2	ETH Zurich, Dept. of Information Technology and Electrical Engineering
	Kranz, Lukas	Development of highly efficient CdTe solar cells with a low temperature process Supervisor Empa: Prof Ayodhya N. Tiwari	2	ETH Zurich, Dept. of Information Technology and Electrical Engineering
	Perrenoud, Julian	Flexible CdTe solar cells Supervisor Empa: Prof Ayodhya N. Tiwari	2	ETH Zurich, Dept. of Physics
	Pianezzi, Fabian	Influence of impurities on the performance of CIGS thin film solar cells Supervisor Empa: Prof Gian Luca Bona Co-Supervisor Empa: Prof Ayodhya N. Tiwari	2	ETH Zurich, Dept. of Information Technology and Electrical Engineering
	Seyrling, Sieghard	CIGS Thin Film Solar Cells for Advances Photovoltaic Devices Co-Supervisor Empa: Prof Ayodhya N. Tiwari	1	ETH Zurich, Dept. of Physics
	Uhl, Alex	Low cost processing of Cu (In, Ga) Se ₂ , solar cells Co-Supervisor Empa: Prof Ayodhya N. Tiwari	2	ETH Zurich, Materials Dept.
Protection and Physiology	Baumann, Lukas	Light-responsive Membrane for Controlled Material Transport Co-Supervisor Empa: Dr Lukas Scherer	2	University of Basel
	Camerlo, Agathe	Cold Electrospinning Co-Supervisor Empa: Dr Ana-Maria Popa	2	University of Geneve
	Frackiewicz-Kaczmarek, Joanna	Contact area and air gap thickness - characterisation under wearing conditions Co-Supervisor Empa: Dr Agnieszka Psikuta, Dr René Rossi	2	ENSISA, Mulhouse (FR)
	Krehel, Marek	Polymeric Optical Fibers for sensing applications Supervisor Empa: Prof Gian Luca Bona Co-Supervisor Empa: Dr Lukas Scherer	2	ETH Zurich
	Niedermann, Reto	Modeling human heat stress to IR-radiation using a model of human physiology and the sweating agile manikin (SAM) Co-Supervisor Empa: Dr René Rossi	2	ETH Zurich, Institut für Bewegungswissenschaften

1 = submitted in 2011
2 = in progress

Empa Activities 2011

PhD Theses

Protection and Physiology	Zuber, Stefanie	Intelligent responsive nanofibers Co-Supervisor Empa: Dr Ana-Maria Popa	2	Johannes Gutenberg Universität Mainz (DE)
	Biruk Wobeshed, Hailesilassie	Measurement of Short-Term Blistering Affecting Bridge Decks with Asphalt Pavements Supervisor Empa: Prof Manfred Partl	2	KTH, Väg-och-Banteknik (SE)
Road Engineering/Sealing Components	Kalogeropoulos, Alexis	Effect of vehicle-road dynamic interaction on pavement structures Co-Supervisor Empa: Dr Johannes Hugenschmidt, Prof Manfred Partl	2	EPF Lausanne, ETH Zurich
	Poulikakos, Lily D.	A Fundamental Investigation of Interfacial Moisture Content and Adhesive Deterioration of Bitumen Aggregate Bond in Porous Asphalt Co-Supervisor Empa: Prof Manfred Partl	1	ETH Zurich, Institute for Building Materials
	Raab, Christiane	Development of a Framework for Standardization of Interlayer Bond of Asphalt Pavements Co-Supervisor Empa: Prof Manfred Partl	1	Carleton University Ottawa, Dept Civil Engineering (CA)
	Rohella, Muhel	Real-Time In-situ Quality Evaluation of Asphalt Pavements During Installation Supervisor Empa: Prof Manfred Partl	2	KTH, Väg-och-Banteknik (SE)
Solid State Chemistry and Catalysis	Alfaruq, Dimas	Layered thermoelectric converters Supervisor Empa: Prof Anke Weidenkaff	2	Universität Bern, Philosophisch-naturwis- senschaftliche Fakultät
	Eyssler, Arnim	Perovskite-type exhaust gas catalysts Supervisor Empa: Prof Anke Weidenkaff	1	University of Augsburg,
	Gałazka, Krzysztof	Novel intermetallic thermoelectric materials, their synthesis and characterization Supervisor Empa: Prof Anke Weidenkaff Co-Supervisor Empa: Dr Sascha Populoh	2	Universität Bern, Philosophisch-naturwis- senschaftliche Fakultät, Dep. Chemie und Bio- chemie
	Karvonen, Lassi	Oxygen Non-Stoichiometry, Ordering and Mobility in SrCoO _{3-δ} Perovskite Co-Supervisor Empa: Prof Anke Weidenkaff	1	Aalto University School of Chemical Technology, Espoo (FI)
	Lu, Ye	Perovskite-type exhaust gas catalysts for natural gas vehicles Supervisor Empa: Prof Anke Weidenkaff Co-Supervisor Empa: Dr Ferri Davide	2	Universität Bern, Philosophisch-naturwis- senschaftliche Fakultät
	Mägli, Alexandra	Perovskite-type oxynitrides as photoanode materials Supervisor Empa: Prof Anke Weidenkaff	2	Universität Bern, Philosophisch-naturwis- senschaftliche Fakultät
	Sagarna, Zudaire Leyre	Thermoelectric materials development Supervisor Empa: Prof Anke Weidenkaff Co-Supervisor Empa: Andrey Shkabko	2	Universität Bern, Philosophisch-naturwis- senschaftliche Fakultät
	Schäuble, Nina	Nanoblock and nanostructured interface design for advanced thermoelectric materials Supervisor Empa: Prof Anke Weidenkaff Co-Supervisor Empa: Dr Myriam Aguirre	2	Universität Bern, Philosophisch-naturwis- senschaftliche Fakultät
	Shkabko, Andrey	Plasma enhanced anionic substitutions (PEAS) for the generate ion of perovskite phases with different properties Supervisor Empa: Prof Anke Weidenkaff	1	Universität Bern
	Tomeš, Petr	Development of a Thermoelectric Oxide Module Supervisor Empa: Prof Anke Weidenkaff	1	Universität Bern, Philosophisch-naturwis- senschaftliche Fakultät
Structural Engineering	Czaderski, Christoph	Post-Strengthening of RC and PC Members By Prestressed FRP Reinforcement Co-Supervisor Empa: Prof Masoud Motavalli	2	ETH Zurich, Inst. für Baustatik und Konstruktion

Empa Activities 2011

PhD Theses

Structural Engineering

Ghafoori, Elyas	Strengthening of steel structures using prestressed CFRP plates Co-Supervisor Empa: Prof Masoud Motavalli	2	ETH Zurich, Inst. für Baustatik und Konstruktion
Gínés, Rebekka	Electrostatic modification of the bending stiffness of structural elements Co-Supervisor Empa: Prof Masoud Motavalli	2	ETH Zurich, Inst. Science de Base
Janke, Lars	Anwendungen von Formgedächtnislegierungen im konstruktiven Ingenieurbau Co-Supervisor Empa: Christoph Czaderski	2	University of Weimar (DE)
Khash-Erdene, Jalsan	Network planning Co-Supervisor Empa: Dr Glauco Feltrin	2	EPF Lausanne, ETH Zurich
Maria, Boberg	Distributed Attenuation of Wind-Induced Vibration in Long-Span Bridges Co-Supervisor Empa: Dr Glauco Feltrin	2	EPF Lausanne, Civil and Environmental Engineering
Sadeghi, Marzaleh Abdola	Prestressing of masonry walls to increase the inplane lateral load bearing capacity Supervisor Empa: Prof Masoud Motavalli Co-Supervisor: Dr K. Pfyl	2	ETH Zurich, Inst. für Baustatik und Konstruktion
Subrata, Bhowmik	Modeling and Control of Semi-active Dampers Co-Supervisor Empa: Dr Felix Weber	2	DTU, Mech. Engineering, Lyngby (DK)

Technology and Society Laboratory

Althaus, Hans-Jörg	Impact Assessment Method for Traffic Noise in Generic LCA Co-Supervisor Empa: Prof Lorenz Hilty	2	ETH Zurich, Human Environment Systems
Bornhöft, Nikolaus	Ereignisdiskrete Modellierung von Stoffflüssen in der Umwelt unter Unsicherheit Co-Supervisor Empa: Prof Lorenz Hilty, PD Dr. Bernd Nowack	2	Universität Zürich, IFI
Caduff, Marloes	Prospective Life Cycle Assessment (LCA) and Scale Up Effects Co-Supervisor Empa: Hans-Jörg Althaus	2	ETH Zurich, Earth Surface Dynamics
Hischier, Roland	Prospective LCA of nanotechnology applications in the ICT industry Co-Supervisor Empa: Prof Lorenz Hilty	2	ETH Zurich
Knoeri, Christof	Decision support and recommendations for a sustainable construction material management Co-Supervisor Empa: Hans-Jörg Althaus, Dr Patrick Wäger	2	University of Zurich
Piccinno, Fabiano	Combined LCA and LCC method for the evaluation of nanocellulose bio-composites Co-Supervisor Empa: Claudia Som, Roland Hischier	2	Universität Zürich, Mathematisch-Naturwissenschaftliche Fakultät
Schwab, Fabienne	Ecotoxicology of Nanoparticles: Biota-Nanoparticle-Pollutant Interactions in aqueous systems - Comparison of Black Carbon and Carbon Nanotubes Co-Supervisor Empa: PD Dr Bernd Nowack	2	ETH Zürich, Dept. Umweltwissenschaften
Schwyzler, Irène	Solubilization of carbon nanotubes and fullerenes in natural waters under environmental conditions Co-Supervisor Empa: PD Dr Bernd Nowack	1	ETH Zurich, UWIS
Stamp, Anna	Anticipating environmental impacts of scarce metals supply Co-Supervisor Empa: Dr Patrick Wäger	2	ETH Zurich, Natural and Social Science Interface
Steubing, Bernhard	Agent-based modelling of biomass availability for 2nd generation methanation Co-Supervisor Empa: Dr Patrick Wäger	1	EPF Lausanne

Empa Activities 2011

PHD Theses

Technology and
Society Laboratory

[Sun, Tianyin](#)

Development and applications of dynamic probabilistic material
flow modeling for estimation of quantity and property of engineered
nanomaterials released to environmental compartments
Co-Supervisor Empa: PD Dr Bernd Nowack

2 ETH Zurich, UWIS

Empa Activities 2011

Patents

Patents applied for:

Advanced Fibers	Nazarov, Dmitry/Schmid, Hansruedi/Ritter, Axel/ Vasnev, Valerii/Izmailov, B.	Permanent flame retardant treatment for cellulose fibers or fabrics and other polymeric materials	EP 07 022 567.7
	Ritter, Axel/Schmid, Hansruedi/Nazarov, Dmitry	Synthesis and application of new phosphorus containing flame retardant substances	EP 07 405 235.8
Air Pollution/ Environmental Technology	Graf, Peter/Hüglin, Christoph	Procédé et dispositif pour l'analyse d'une atmosphère gazeuse	CH 01677/07
Biomaterials	Ren Zulian, Qun/Pletscher, Ernst/ Zinn, Manfred/Thöny-Meier, Linda	Method for the production of R-hydroxycarboxylic acids	WO PCT/CH2007/000156
Center for Synergic Structures	Crettol, René/Luchsinger, Rolf	Faltbarer pneumatischer Träger	CH 01781/07
Electronics/ Metrology/Reliability	Thierry, Raphaël/Miceli, Alice/ Sennhauser, Urs/Flisch, Alexander	Verfahren zur Streukorrektur von röntgentomografischen Daten	EP 07 012 409
High Performance Ceramics	Mattmann, Corinne/ Tröster, Gerhard/Clemens, Frank	Recognizing upper body postures using textile strain sensors	US 60/976806
Internal Combustion Engines	Soltic, Patrik/Bach, Christian	Fluidbetriebener Ventiltrieb	EP 07 022 717.8
Mechanical Systems Engineering	Weisse, Bernhard/ Affolter, Christian/Stutz, Alex	Proof-Test für keramische Hüftgelenksgugeln	DE 102007056973.6

Patents granted:

High Performance Ceramics	Höland, Wolfram/Apel, E./ Vital, Andri/ Zürcher, Simone/ Graule, Thomas/Van't Hoen, Ch./ Rheinberger, V./Burtscher	Dentalglas, Verfahren zu dessen Herstellung sowie dessen Verwendung	10 2005 051 387
Internal Combustion Engines	Schmatloch, Volker/ Rauch, Stephan	Elektrofilter für eine Feuerungsanlage	10 2004 039 124.6-09

Empa Activities 2011

Teaching Activities

Swiss Federal
Institute of Technology,
Zürich (ETH)

Architecture	Carmeliet, J.	Building Physics 1
	Carmeliet, J. (with others)	Buiding Materials
	Derluyn, H.	Moisture & durability exercises
	Dorer, V.	Building Physics 4
	Eggenschwiler, K.	Raumakustik
	Moonen, P.	Building Physics 2 + 4
	Richner, P./Winnefeld, F./ Zimmermann, T./ von Trzebiatowski, O.	Baumaterialien I
	Richner, P./Zimmermann, T.	Baumaterialien II
	Winnefeld, F.	Mineral building materials in: Baustoffe
	Zimmermann, T.	Baustoffkunde I + II
Chemistry and Applied Biosciences	Ernst, K.-H.	Surface Science in Heterogenous Catalysis
Civil and Environmental Engineering	Burlando, P./Wang, J.	Seminar Umweltingenieurwissenschaften
	Wang, J.	Environment and Computer Laboratory, ESD (Ecological System Design) 2: Introduction to Indoor Particle Measurements; Nanoparticle mechanics and technology
Civil Engineering	Leemann, A.	Alkali-aggregate reaction in concrete, part of the «Concrete Science» course
	Lura, P.	Werkstoffe I, (Materialeigenschaften); Shrinkage and Cracking of Concrete: Mechanisms and Impact on Durability
	Wyrzykowski, M.	Werkstoffe III (Beton: Technologie, Festigkeit und Verformbarkeit)
Civil, Environmental and Geomatic Engineering	Brunner, A. J.	Anwendung amorpher Materialien im Bauwesen; Praktikum Werkstoffe III
	Eggenschwiler, K.	Lärmbekämpfung
	Müller, E.	Prospective Environmental Assessments
	Rossi, R.	Thermoregulation and sports textiles
	Thöny-Meyer, L.	Applied Microbial Biotechnology; Biologie I – Teil Genetik

Empa Activities 2011

Teaching Activities

Environmental Sciences	Brunner, D.	Einführung in die Chemie und Physik der Atmosphäre
	Gottschalk, F.	Introduction to decision analysis and game theory
	Hofer, P.	Luftreinhaltung 1, 2a und 2b
	Liatì, A.	Advanced Geochronology
	Nowack, B.	Gesellschaftlicher Umgang mit aktuellen Umweltrisiken
	Scholz, R./Gottschalk, F.	Mathematical principles and representations of Game and Decision Theory
Geomatics Engineering	Partl, M.	Bituminous Materials
	Steiger, R.	Holz- und Holzwerkstoffe
Humanities; Informatics	Simon, K.	Farbe im Digitalen Publizieren; Technik des Digitalen Publizierens;
Information Technology	Heutschi, K.	Akustik 1 und 2; Akustisches Kolloquium
	Maniura, K.	Mechanobiology: Implications for Development, Regeneration and Tissue Engineering
	Sennhauser, U./Grossmann, G.	Physik der Ausfälle und Ausfallanalyse elektronischer Schaltungen
	Sennhauser, U./Held, M.	Zuverlässigkeit von Geräten u. Systemen
	Stämpfli, R.	Biomechanik von Sportverletzungen und Rehabilitation: Mechanische Prüfung von Schutzausrüstung
	Tiwari, A. N.	Solar cells
Geomatic Engineering	Motavalli, M.	Fibre composite material in structural Engineering
	Weber, B.	Tragswerksdynamik und Schwingungsprobleme
Materials Science	Barbezat, M.	Integrity of Materials and Structures
	Born, A.-K.	Biocompatible Materials I
	Clemens, F.	Advanced Composite and Adaptive Material Systems; Verbundwerkstoffe
	de Geus, M.	Biocompatible Materials I, Teil Polymere
	Ernst, K.-H.	Biomineralization
	Ferri, D.	XRD
	Graule, T.	Integrity of Materials and Structures; Keramik I
	Heuberger, M. (mit anderen Dozenten)	Surfaces and Interfaces
	Hug, H. J.	CCMX
	Jaeger, D./Patscheider, J.	Praktikum III
	Kübler, J.	Mechanical Properties of Ceramics
	Maniura, K.	Biocompatible Materials I / II
	Patscheider, J.	Functional Surfaces

Empa Activities 2011

Teaching Activities

	Materials Science	Populoh, S.	Thermoelektrizität Vorlesung
		Roth, M.	Integrity of materials and structures
		Sagarna, L.	REM-Praktikum
		Schmutz P.	Corrosion and Durability of Engineering Materials
		Terrasi, G. P./Clemens, F.	Advanced Composite and Adaptive Material Systems
		Vogel, N.	REM Praktikum
		Weidenkaff, A./Saucke, G.	XRF, REM Praktikum
	Mechanical and Process Engineering	Dimopoulos Eggenschwiler, P.	Abgasnachbehandlung in modernen Dieselmotoren / Übung Abgasmesstechnik
		Hack, E./Brönnimann, R.	Optical Methods in Experimental Mechanics
		Koller, R./Guillaume, M.	Betriebsfestigkeit
		Kovacs, G.	Seilbahnen
		Mazza, E.	Continuum Mechanics for Engineers; Introduction to non linear continuum mechanics; Mechanik II für BauIng; Methoden der Strukturanalyse
		Terrasi, G. P.	GL zum Bemessen von Kunststoffbauteilen
		Weisse, B.	Dimensionieren
	Sustainability Summer School	Schluep, M.	Massflow Analysis
		Graule, T.	Nanopowders and Nanoceramics
AGH Krakow, (PL)			
Albert-Ludwigs-Universität, Freiburg im Breisgau (DE)	Institut für Pharmazeutische und Medizinische Chemie	Richter, M.	Biocatalysis
Central South University of Changsha, China (CN)	Materials and Mechanical	Roth, M.	Advanced Materials Technology Engineering
Centre Henri Tudor (LU)	SITec	Zimmermann, M.	Construction & Energy
École Polytechnique Fédérale, Lausanne (EPF)	Atmospheric Chemistry Modelling	Reimann, S.	Measurements of air pollutants
	Construction Materials	Lothenbach, B.	Thermodynamic modelling and determining solid solution limits
		Lura, P.	Early Age properties
	EDME	Balic, E.	Mechanics of Thin Films
	Materials	Hoffmann, P./ Kuzminykh, Y.	Laser Micromachining
	Materials Science	Michler, J.	Materials Selection; Thin Film Mechanics
	Materials Science	Nüesch, F.	Organic Semiconductors
	Mechanical Engineering	Vaucher, S.	Materials Selection
	Microtechnique (SMT)	Hoffmann, P.	Chimie des Surfaces; Laser Micromachining
	Science et Génie des Matériaux	Lüthi, T.	Non-destructive Evaluation Methods

Empa Activities 2011

Teaching Activities

Swiss Federal Institute of Technology (ETH) Basel	Biosystems Science and Engineering	Zinn, M.	Biopolymers; Bioprocesses; Growth and Metabolism Responses to the Chemical Environment; Microbial Life on the Surface: detrimental and Beneficial Effects of Biofilms
Fachhochschule Horw	Bautechnik	Piskoty, G.	Metallische Baustoffe
Fachhochschule Voralberg	Micro- and Nanotechnology	Erni, R.	Electron Microscopy and Microanalysis
Fachhochschule Zürich	Architecture	Zimmermann, T.	Bauchemie Holz, Laborübungen
Hochschule für Technik Zürich HSZ-T		Raab, C.	Materialtechnologie A&B
Institut Supérieur de l'Automobile et des Transports (ISAT), Nevers (FR)		Galliot, C.	Adhesive structural bonding
International Packaging Institute (IPI) Schaffhausen	Master of Engineering in Packaging Technology	Hischier, R.	Sustainability in Packaging
Montan Universität, Leoben (AT)	Dept. für allgemeine, analytische und physikalische Chemie	Rösslein, M.	Mess- und Ergebnisunsicherheit; Prozessanalytik und Prozessfähigkeit
National technical University of Athens (GR)	Naval Engineering School	Dimopoulos Eggenschwiler, P.	Abgasnachbehandlung in Dieselmotoren/ Schiffsmotoren
Sveriges Största Tekniska Universitet (KTH) Stockholm (SE)	Division of Highway and Railway Engineering	Partl, M.	Advanced Rheology of Bituminous Materials; Advanced Pavement Engineering/Analysis and Design
Technical College TSH Pfäffikon		Partl, M.	Baustoffkunde
Technische Universität Freiberg (DE)	Verfahrens- und Umwelttechnik	Graule, T.	Nano- und Biokeramik
Technische Universität Kaiserslautern (DE)	Maschinenbau & Verfahrenstechnik	Leinenbach, C.	Metallische Hochleistungswerkstoffe
Technische Universität München (DE)	Lehrstuhl für Bauklimatik und Haustechnik	Zimmermann, M.	Energiekonzept Forum Chriesbach
Technische Universität München (DE)	Wissenschaftszentrum Weihenstephan	Jacob, P.	Einführung in die Rasterelektronenmikroskopie
Technische Universität Warschau (PL)	Werkstoffwissenschaften	Janczak-Rusch, J.	Joining Materials
The University Centre in Svalbard (UNIS) Longyearbyen, Spitzberegn (NO)	Arctic Technology	Reimann, S.	Measurements of air pollutants within the Arctic environment
Universita degli studi Parma (IT)	Ingegneria Industriale	Dimopoulos Eggenschwiler, P.	Tecnologie Innovative Di Post-Trattamento die Gas Scarico nei motori Diesel: ricerca e sperimentazione - Exhaust aftertreatment technologies in Diesel engines: Research and development
Università della Svizzera Italiana (USI), Lugano	CCMX	Weidenkaff, A.	Synthesis of Inorganic Solids

Empa Activities 2011

Teaching Activities

Universität Joseph Fourier, Grenoble (FR)	ESONN'2010', Grenoble	Hug, H. J.	Scanning Probe Microscopy
University of Applied Sciences Berne	Mechanical engineering	Wasmer, K.	Chemistry and Materials 1
University of Applied Sciences Berne	Micro- and Medicaltechnology	Wasmer, K.	Chemistry and Materials 3
University of Applied Sciences, Dornbirn (AT)	Master Mikro- und Nanotechnologie der Euregio Bodensee	Bruinink, A.	Optik
		Fasel, R./Ruffieux, P./Widmer, R.	Scanning Tunneling Microscopy
		Graule, T.	«Empa» Nanomaster
		Wick, P./Hirsch, C./Bürki, T.	Nano (Öko)toxikologie
University of Applied Sciences for the graphic Industry, Wallisellen		Hischier, R.	Ökologie
University of Applied Sciences Luzern	Bautechnik	Loser, R.	Beton und Bindemittel
	Dept. HVAC	Dorer, V.	Natural Ventilation and Passive Cooling
	Technics & Architecture	Hugi, E.	Prüfen und Klassifizieren
University of Applied Sciences Rapperswil		Neuenschwander, J.	Experte bei Bachelor-Arbeiten/Einsichtnahme und Mündliche Prüfungen
	Mechanical Engineering	Weilenmann, M.	Messtechnik
	Renewable Energies and Environmental Engineering	Weilenmann, M.	Messtechnik und Datenerfassung
University of Applied Sciences Sion	Life Technologies	Zinn, M.	Biomaterials
University of Applied Sciences, Wädenswil	Biotechnology	Buchmann, B.	Air Pollution
	Institut für Chemie und biologische Chemie (ICBC)	Nagel, M.	Industrielle Chemie II, Makromolekulare Chemie
	Lifescience	Ihssen, J.	Escherichia coli – the working horse of biotechnology
	Institut für Biotechnologie (IBT)	Gauch, M.	Umweltauswirkungen von Biotreibstoffen
University of Applied Sciences Winterthur	Institut für Chemie und Biologische Chemie	Wick, P.	Biomaterialien
	Institut für Material- und Verfahrenstechnik	Henes, B.	Zellbiologie und Bioingenieurtechnik
	Institute of Materials and Process Engineering IMPE	Zinn, M.	Natürliche Biopolymere
	Life Sciences und Facility Management	Bach, C.	Nachhaltige(re) verbrennungsmotorische Antriebe
	Materials and Process Engineering	Hegemann, D.	Grundlagen zu Vakuumbeschichtungstechnik, Plasma, CVD und PVD
	Verfahrenstechnik, Department of Industrial Technologies	Clemens, F.	Funktionsmaterialien

Empa Activities 2011

Teaching Activities

University of Basel	Institut für Physik	Hug, H. J./ Marioni, M.	Magnetismus und magnetische Mineralien
	Umweltwissenschaften	Reimann, S.	Umweltsystem Atmosphäre: Luftverschmutzung und Klimaerwärmung
University of Bern	Chemie	Sagarna, L./ Vogel, N.	Anorg. Chemie II, Praktikum
		Weidenkaff, A.	Materials for Future Energy Technologies
	Chemistry and Biochemistry	Fasel, R./Ruffieux, P./Widmer, R.	Introduction to the Physics & Chemistry of Surfaces
		Meyer, V.	High-Performance Liquid Chromatography; Measurement Uncertainty in Analytical Chemistry
	Oeschger-Center	Wick, P.	Climate and Air Pollutants
	Physik	Populoh, S./ Saucke, G.	Anorg. Chemie II, Praktikum
University of Freiburg (DE)	Fakultät für Chemie, Pharmazie und Geowissenschaften	Vogt, U.	Angewandte Mineralogie mit dem Schwerpunkt Keramik; Modern Ceramics, Cements, and Glasses
	Forest Sciences	Schubert, M.	Dendrologie
		Schwarze, F.	Holzschutz I + II; Holzpathologie
	Physik	Züttel, A.	Umweltwissenschaften
University of Graz (AT)	Institute für Systemwissenschaften	Knöri, C.	Proseminar: Qualitative Systemwissenschaften; Agent-based modeling for socio-ecological systems; A practical introduction; Geländepraktikum: Akzeptanzanalyse von Energietechnologien
University of Teheran (IR)	Faculty of Civil Engineering	Motavalli, M.	Fibre composite material in structural Engineering
University of Zurich	Chemie	Ernst, K.-H.	Chemical Processes at Solid Surfaces
		Hilty, L.	Informatik und Gesellschaft, Informatik für Ökonomen; Informatik und nachhaltige Entwicklung
Vrije Universiteit Amsterdam (NL)	Physik	Züttel, A.	Hydrogen Production and Storage, Big Issues in Energy Materials
Zurich University of the Arts (ZHdK)	Dept. of Music	Heutschi, K.	Audiotechnik

Empa Activities 2011

Publications

Empa staff publish in many national and international scientific and technical journals as well as in daily press and other special organs. Please note that the list below represents, on the one hand, the full number of SCI/E publications, but only a selection of all other publications or public relations activities on the other hand.

Advanced Materials and Surfaces

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- Dabirian, A./Harada, S./Kuzminykh, Y./Sandu, S. C./Wagner, E./Benvenuti, G./Brodard, P./Rushworth, S./Mural, P./Hoffmann, P.** Combinatorial chemical beam epitaxy of lithium niobate thin films on sapphire. *Journal of the Electrochemical Society* 2011, 158(2), D72–D76 (joint paper) ★
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- Graça, S./Carvalho, P. A./Colaço, R.** Dislocation structures in nanoindented ductile metals—a transmission electron microscopy direct observation. *Journal of Physics D: Applied Physics* 2011, 44(33), Article number 335402 (9 pp.) ★
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- Jäggi, C./Frauchiger, V./Eitel, F./Stiefel, M./Schmotzer, H./Siegmann, S.** The effect of surface alloying of Ti powder for vacuum plasma spraying of open porous titanium coatings. *Acta Materialia* 2011, 59(2), 717–725 (joint paper) ★

Empa Activities 2011

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- Kurita, H./Kwon, H./Kawasaki, A.** Fabrication of carbon nanotube reinforced aluminum matrix composite by spark plasma sintering and hot extrusion hybrid process. *Journal of the Japan Institute of Metals* 2011, 75(4), 259–264 ★
- Kwon, H./Bradbury, C. R./ Leparoux, M.** Fabrication of functionally graded carbon nanotube-reinforced aluminum matrix composite. *Advanced Engineering Materials* 2011, 13(4), 325–329 ✱
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- Kwon, H./Leparoux, M./ Heintz, J. M./Silvain, J. F./ Kawasaki, A.** Fabrication of single crystalline diamond reinforced aluminum matrix composite by powder metallurgy route. *Metals and materials international* 2011, 17(5), 755–763 ★
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Electron Microscopy
Center

SCI = ★
SCIE = ✱
SSCI = ◆

Empa Activities 2011

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- de Hazan, Y./Märkl, V./Heinecke, J./Aneziris, C./Graule, T. J.** Functional ceramic and nanocomposite fibers, cellular articles and microspheres via radiation curable colloidal dispersions. Journal of the European Ceramic Society 2011, 31(14), 2601–2611 ★
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Empa Activities 2011

Publications

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- Suter, C./Tomeš, P./Weidenkaff, A./Steinfeld, A.** A solar cavity-receiver packed with an array of thermoelectric converter modules. *Solar Energy* 2011, 85(7), 1511–1518 ★
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- Tomeš, P./Aguirre, M. H./Robert, R./Shkabko, A./Otal, E. H./Weidenkaff, A.** Transport and magnetic properties of $\text{PrCo}_{1-x}\text{Ni}_x\text{O}_3$ ($x = 0.0-0.7$). *Journal of Physics D* 2011, 44(30), Article number 305402 (12 pp.) ★
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Publications

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Media Technology

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- Schubert, M./Mourad, S./Schwarze, F. W. M. R.** Automated image processing for quantification of blue-stain discolouration of Norway spruce wood. Wood Science and Technology 2011, 45(2), 331–337 ★
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Empa Activities 2011

Conferences

Advanced Materials Processing

Advanced Materials and Surfaces

- Cabanes-Sempere, M./
Catala-Civera, J. M./Cozzo, C./
Vaucher, S./Pouchon, M. A.** Innovative Production of Nuclear Fuel by Microwave Internal Gelation: Theoretical
Microwaves-Microspheres Interaction, AMPERE 13, Toulouse, FR, 09-05 thru 09 ▶
- Colombo, V./Concetti, A./
Ghedini, E./Gherardi, M./
Sanibondi, P./Leparoux, M./
Deschenaux, Chr./Jäggi, Chr.** Validation of 3-D modelling of an inductively coupled thermal plasma reactor through enthalpy
probe and OES measurements,
ISPC 20, International Symposium on Plasma Chemistry, Philadelphia, US, 07-24 thru 29 ◆
- Colombo, V./Ghedini, E./
Sanibondi, P./Gherardi, M./
Leparoux, M./Delval, Chr./
Deschenaux, Chr./Jäggi, Chr.** Diagnostics and Modeling of an RF thermal plasma reactor for nanoparticles synthesis- Part 2:
Modeling of turbulence, precursor evaporation and nanoparticle growth for reaction chamber
design, 3rd International Round Table on Thermal Plasmas for Industrial Applications,
Johannesburg, ZA, 10-31 thru 11-04 ▶●
- Cozzo, C./Cabanes-Sempere, M./
Pouchon, M. A./Vaucher, S./
Nicula, R.** Influence of Gelation Kinetics by Microwaves,
Workshop on Hard X-Ray Instrumentation at the SwissFEL, Bern, 09-21 ▶●
- Cozzo, C./Vaucher, S./Ishizaki, K./
Megias-Alguacil, D./
Pouchon, M. A.** Chemistry of uranium surrogate during internal gelation for fuel fabrication,
GLOBAL 2011, Makuhari, JP, 12-11 thru 16 ◆
- Ishizaki, K./Cervellino, A./
Gozzo, F./Stir, M./Vaucher, S./
Radu, N.** Time-resolved synchrotron radiation study of nucleation and growth of Ca-doped La-ferrites,
ECerS XII – 12th Conference of the European Ceramic Soci, Stockholm, SE, 06-23 ◆
- Ishizaki, K./Stir, M./Gozzo, F./
Catala-Civera, J. M./Vaucher, S./
Nicula, R.** The microwave route to iron and steel: first results from in situ time-resolved experiments using
synchrotron radiation,
International Conference on Sintering 2011, Jeju-Island, KR, 08-28 thru 09-01 ▶
- Ishizaki, K./Stir, M./Gozzo, F./
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synchrotron radiation,
International Conference on Sintering 2011, Jeju-Island, KR, 08-28 thru 09-01 ▶●
- Jäggi, C./Leparoux, M./
Deschenaux, C./Delval, C./
Nelis, D./Put, S.** In-situ carburization of silicon in an inductively coupled plasma synthesis process,
Montpellier, F, 09-12 thru 15 ▶
- Jäggi, Chr./Leparoux, M.** Nanopulversynthese und Herstellung von porösen Schichten mittels thermischem Plasma,
Workshop 'Oberflächenfunktionalisierung auf Kunststoffen, Metallen und Glas', Konstanz, DE,
05-11 thru 12 ▶●
- Kiley, E./Yakovlev, Vadim V./
Ishizaki, K./Vaucher, S.** Applicability Study of Classical and Contemporary Models for Effective Complex Permittivity of
Metal Powders, AMPERE 13, Toulouse, FR, 09-05 thru 09 ▶
- Kwon, H./Cho, S./Kurita, H./
Miyazaki, T./Kawasaki, A./
Leparoux, M.** Dual reinforcements gradient layered aluminum matrix composite materials,
Autumn Meeting of The Japan Institute of Meta, Okinawa, JP, 11-07 thru 09 ▶

Empa Activities 2011

Conferences

Advanced Materials Processing

- Kwon, H./Kim, A./Kwon, A./Jung, U./Jo, H./Kawasaki, A./Leparoux, M.** Carbon nanotube gradient layers reinforced aluminum matrix composite materials, 18th International Conference on Composite Materials, Jeju-Island, KR, 08-21 thru 26 **▶**
- Kwon, H./Leparoux, M./Silvain, J. F./Kawasaki, A.** Nanoparticulate reinforced metal matrix composite materials, 1st International Conference on Powder Metallurgy in Asia (APMA2011), Jeju-Island, KR, 10-30 thru 11-02 **▶**
- Leparoux, M./Deschenaux, Chr./Jäggi, Chr./Colombo, V./Ghedini, E./Sanibondi, P./Gherardi, M.** Diagnostics and Modeling of an RF thermal plasma reactor for nanoparticles synthesis- Part 1: diagnostics: enthalpy probe, OES, FTIR, particle sampling, 3rd International Round Table on Thermal Plasmas for Industrial Applications, Johannesburg, ZA, 10-31 thru 11-04 **▶●**
- Leparoux, M./Jaeggli, Chr./Deschenaux, Chr.** Investigation of the synthesis of nanoparticles by an inductively coupled plasma process, The international conference «Physics of Radio Frequency Discharges», ICPFRD, Kazan, RU, 04-05 thru 08 **▶●**
- Radu, N.** Watching microwaves: opportunities for materials science at GHz frequencies, Invited Lecture at the Institute of Materials Science, University of Münster, D, Münster, DE, 01-11 **▶●**
- Vaucher, S.** Microwave Sintering in Perspective, Specific issues and Challenges, Poudres et Matériau1 Frittés 2011, St. Etienne, FR, 05-22 thru 27 **▶●**
- Vaucher, S./Catala-Civera, J. M./Ishizaki, K./Stir, M./Radu, N.** New Light on Microwave Processing of Ceramics by In-Situ Time-resolved Synchrotron Methods, ECerS XII – 12th Conference of the European Ceramic Society, Stockholm, SE, 06-23 **▶**
- Vaucher, S./Ishizaki, K./Radu, N./Catala-Civera, J. M.** Enlightening the Invisible, Materials Response to High Power Microwave Irradiation Revealed by Synchrotron Methods, AMPERE 13, Toulouse, FR, 09-05 thru 09 **▶●**
- Vaucher, S./Ishizaki, K./Stir, M./Catala-Civera, J. M./Radu, N.** In-situ Analytics for Real Time Observation of Materials under Microwave Processing, Jeju-Island, KR, 08-28 thru 09-01 **▶●**

Electron Microscopy Center (EMC)

- Erni, R.** Deutsche Physikalische Gesellschaft, Frühjahrestagung, Dresden, DE, 03-13 thru 18 **▶●**
- Erni, R.** Swiss COST Workshop NanoTP, Dübendorf, 04-07 **■**
- Erni, R.** GraphITA 2011, Gran Sasso National Lab, L'Aquila, IT, 05-15 thru 18 **▶●**
- Erni, R.** International Materials Research Congress IMRC 11, Cancun, MX, 08-14 thru 19 **▶●**
- Parlinska, M.** E-MRS, Nice, FR, 05-09 thru 13 **▶**
- Rossell, Marta, D.** International Materials Research Congress IMRC 11, Cancun, MX, 08-14 thru 20 **▶●**
- Rossell, Marta, D.** NanoTP Annual Scientific Meeting, Trieste, IT, 11-09 thru 12 **▶●**

Functional Polymers

- Dobre, O./Nüesch, F./Hofmann, H./Opris, D.** «Synthesis of silver nanoparticles and their polydimethylsiloxane composites», Annual Fall Meeting of the Swiss Chemical Society, Lausanne, 09-09 **◆**
- Geiger, T./Oswald, F./Meyer, T./Nüesch, F./Hochleitner, S./Simeunovic, M./Shcherbakova, I.** «Frontiers in Organic Dye-sensitized and Hybrid Solar Cells», VIII International Krutyn Summer School 2011, Krutyn, PL, 06-14 thru 20 **◆**
- Heier, J./Hany, R.** Structured organic cyanine dye thin films for applications in photovoltaics and photonics, Nanoclub CSEM, Neuchatel, 10-27 **▶●**
- Hufenus, R./Chu, B. T. T./Reifler, F. A./Chatterjee, S.** Crystalline and tensile properties of carbon nanotube-filled polyamide-12 Fibers meltspun by industry-related processes., CharlestonSC, US, 10-10 thru 13 **▶**
- Keller, B. A./Maniglio, Y./Mayerhofer, K./Heier, J.** Analysis of Organic Blend Films with AFM and TOF-SIMS, 2nd Int. Conf. and Exhib. Org. Photovoltaics, Würzburg, DE, 09-20 thru 21 **◆**
- Maniglio, Y./Mayerhofer, K./Heier, J./Keller, B. A.** Three Dimensional Analysis of Self-Structuring Organic Thin Films Using Time-Of-Flight Secondary Ion Mass Spectrometry, SIMS XVIII, International Conference on Secondary Ion Mass Spectrometry, Riva del Garda, I, 09-18 thru 23 **◆**
- Mezzenga, R./Nüesch, F./Hany, R./Heier, J./Tisserant, J. N.** Patterned PCBM templates for applications in photonics and photovoltaics, EmpaPhD Symposium, St. Gallen, 01-14 **▶**

Organisation **■**
 Poster = **◆**
 Lecture = **▶**
 invited = **●**

Empa Activities 2011

Conferences

Functional Polymers

- Mezzenga, R./Nüesch, F./Hany, R./Heier, J./Tisserant, J. N.** Organisation of organic donor-acceptor blends into 2d-photonic crystals for enhanced light absorption, EMRS Spring meeting, Nice, FR, 05-09 thru 13 ◆
- Mezzenga, R./Nüesch, F./Hany, R./Heier, J./Tisserant, J. N.** Organisation of organic donor-acceptor blends into 2d-photonic crystals for enhanced light absorption, MRC Graduate Symposium, Zürich, 06-08 ◆
- Mezzenga, R./Nüesch, F./Hany, R./Heier, J./Tisserant, J. N.** SCS Fall Meeting, Organisation of organic donor-acceptor blends into 2d-photonic crystals for enhanced light absorption, Lausanne, 09-09 ◆
- Nüesch, F.** Photovoltaik der Zukunft, Empa Dübendorf, 01-17 ●●
- Nüesch, F.** Organic Optoelectronic. Device Interfaces, SAOG 2011, Fribourg, 01-28 ●●
- Opris, D.** Electroactive polymer actuators and devices (EAPAD), SPIE, San Diego, US, 03-06 thru 10 ●
- Opris, D./Molberg, M./Nüesch, F./Löwe, Ch./Crespy, D.** Material development for soft dielectric elastomer actuators, Makromolekulares Kolloquium, Freiburg, DE, 02-24 thru 26 ◆
- Opris, D./Molberg, M./Nüesch, F./Walder, C./Fischer, B.** «Dielectric elastomer materials for actuators and energy harvesting», EuroEAP First international conference on Electromechanical Active Polymer transducers & artificial muscles, Pisa, IT, 06-08 thru 09 ◆
- Racles, C./Cazacu, M./Opris, D.** «Silicone elastomers for actuation», EuroEAP First international conference on Electromechanical Active Polymer transducers & artificial muscles, Pisa, IT, 06-08 thru 09 ◆
- Rentsch, D./Bach, C./Weidenkaff, A./Ferri, D./Matam, S. K./Aguirre, M. H./Hug, P./Winkle, A./Ulrich, A.** Lab scale fixed-bed reactor for operando x-ray absorption spectroscopy for structure activity studies of supported catalysts, 1st Swiss Heterogeneous Catalysis Meeting, Grindelwald, 06-16 thru 17 ◆
- Schlagenhauf, L.** ICCE 2011, EuCheMS International Conference on Chemistry and the Environment, Zürich, 09-11 thru 15 ◆
- Schlagenhauf, L.** «Understanding Human Health Effects and Environmental Impacts of Engineered Nanomaterials», Third Nanosafety Autumn School, Venice, IT, 11-20 thru 25 ◆
- Shcherbakova, I.** Unsymmetrical Squaraine Dyes for Dye Sensitized Solar Cells, Empa PhD Symposium, St. Gallen, 10-18 ◆
- Tisserant, J. N./Shaw Stewart J.** Organisation of organic donor-acceptor blends into 2d-photonic crystals for enhanced light absorption (EMRS), Nice, F, 05-09 thru 13 ◆
- Walder, C./Kramer, H./Fischer, B./Löwe, Ch.** Waterproofing Systems for Tunnels – Chemical Resistance after 10 Years E1posure, AFTES Congress 2011, Lyon, F, 10-17 thru 19 ●

High Performance Ceramics

- Bora, D.** Synthesis and Properties of Nanostructured Hematite Thin Film and its Modified Nanoarchitectures for Solar Water Splitting, 2011 MRS Spring Meeting, San Francisco, Cal, US, 04-25 thru 29 ●
- Bora, D.** Effect of Structure – Property Relationship on the Photoresponse Functionality of Hematite Based Hybrid Integrated System With Light Harvesting Protein, 2011 MRS Spring Meeting, San Francisco, al, USA, 04-25 thru 29 ●
- Bora, D./Braun, A./Graule, T./Constable, E. D.** Zinc Oxide / Hematite Hybrid Nanoarchitecture for photo-electrochemical solar water splitting, Int. Conference on Advanced Nanomaterials and Nanotechnology ICANN 2011, Guwahati, IN, 11-23 thru 27 ●
- Bora, D./Braun, A./Rozhkova, E./Graule, T./Constable, E. D.** Design and Understanding of an Integrated Photo-System as Artificial Photosynthetic Device, Artificial Photosynthesis: Faraday Discussion 155, Edinburgh, UK, 09-05 thru 07 ◆
- Braun, A.** Diagnostics and analysis of electrochemical energy storage and conversion devices, components and materials with synchrotron X-ray and neutron scattering and spectroscopy, Gustav-Stresemann-Institut, Bonn, DE, 03-08 ●
- Braun, A.** «Soot Effects on Climate – The Global Context» (The Science of Climate Change in Hawaii), University of Hawaii, Manoa, Hawaii, US, 01-19 ●

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Conferences

High Performance Ceramics

- Braun, A.** The Contribution of C(1s) NEXAFS Spectroscopy to the Understanding of Air Pollution from Diesel Soot and Biomass Smoke; 12th Swiss Global Change Day in Bern (2011), Bern, 04-19 ◆
- Braun, A.** Protons in Solids; MRS Symposium J, 2011 MRS Spring Meeting, San Francisco, Cal, US, 04-25 thru 29 ■
- Braun, A.** 2011 MRS Spring Meeting, Symposium J, Protons in Solids, San Francisco, USA, US, 04-25 thru 29 ■
- Braun, A.** Structure and transport in fuel cell components, 481. Wilhelm and Else Hearaeus Seminar, Bad Honnef, DE, 05-09 thru 11 ▶●
- Braun, A.** E-MRS Spring Meeting 2011 Symposium Hydrogen Generation, Nizza, FR, 05-09 thru 11 ■
- Braun, A.** Multiscale and element specific microstructure characterization of SOFC assemblies with resonant ultra small angle X-ray scattering, E-MRS 2011 Spring Meeting, Nice, FR, 05-09 thru 13 ▶
- Braun, A.** Evolution of an oxygen NEXAFS transition in the upper Hubbard band in α -Fe₂O₃ upon electrochemical oxidation, E-MRS 2011 Spring Meeting, Nice, FR, 05-09 thru 13 ▶
- Braun, A.** Molecular speciation of sulfur in solid oxide fuel cell anodes with X-ray absorption spectroscopy, E-MRS 2011 Spring Meeting, Nice, FR, 05-09 thru 13 ◆
- Braun, A.** Multiscale and element specific microstructure characterization of SOFC assemblies with resonant ultra small angle x-ray scattering, E-MRS 2011 Spring Meeting, Nice, FR, 05-09 thru 13 ▶
- Braun, A.** (1) Basic principles of XAS methods for the analysis of energy materials, (2) Basic principles and application of neutron methods in materials science, Summerschool of Tartu University Estonia, Otepää, EE, 06-21 thru 23 ▶●
- Braun, A.** Evolution of an Oxygen NEXAFS Transition in the Upper Hubbard Band in α -Fe₂O₃ upon electrochemical oxidation, 5. Gerischer Symposium, Berlin, DE, 06-22 to 24 ▶●
- Braun, A.** Multiscale and element specific microstructure characterization of SOFC assemblies with resonant ultra small angle x-ray scattering, European Cell Forum 2011, Lucerne, 06-28 thru 07-01 ▶
- Braun, A.** Functionalized metal oxide nanoparticulate films for solar photo-electrochemical hydrogen generation, European Cell Forum 2011, Lucerne, 06-28 thru 07-01 ▶
- Braun, A.** Correlation of electronic structure and electronic transport in LaSrFeNi-oxide – a potential IT-SOFC cathode material, European Cell Forum 2011, Lucerne, 06-28 thru 07-01 ▶
- Braun, A.** Application of x-ray and electron spectroscopy to energy materials, CECAM Workshop on x-ray Spectroscopy : Recent Advances in Modelling and New Challenges, ETH Höggerberg, Zürich, 07-13 thru 15 ▶
- Braun, A.** X-rays and neutrons: Small probes for big problems; 13th Int. Conference – School – Advanced Materials and Technology, Palanga, LT, 08-30 ▶●
- Braun, A.** Diagnostics and analysis of electrochemical energy storage and conversion devices, components, and materials with neutron and synchrotron x-ray scattering and spectroscopy; Hanyang University Physics Seminar, Ansan, KR, 10-10 ▶●
- Braun, A.** Diagnostics and analysis of electrochemical energy storage and conversion devices, components, and materials with neutron and synchrotron x-ray scattering and spectroscopy; Kyongbuk National University Chemistry Seminar, Teagu, KR, 10-12 ▶●
- Braun, A.** Diagnostics and analysis of electrochemical energy storage and conversion devices, components, and materials with neutron and synchrotron x-ray scattering and spectroscopy; Pohang Lightsource Seminar, Pohang, KR, 10-14 ▶●
- Braun, A.** Application of X-Ray and Electron Spectroscopy to Energy Materials; PRORA – Fachtagung Prozessnahe Röntgenanalytik, PRORA – Fachtagung Prozessnahe Röntgenanalytik, Berlin, DE, 11-25 ▶●
- Braun, A.** ASAXS on lithium ion batteries and solid oxide fuel cells – operando and ultra-small studies; ASAXS Workshop 2011, Berlin, DE, 11-25 ▶

Empa Activities 2011

Conferences

High Performance Ceramics

- Braun, A./Erat, S./Gauckler, L. J./Graule, T.** Correlation of electronic structure and electronic transport in LaSrFeNi-oxide – a potential IT-SOFC cathode material., European Cell Forum 2011, Lucerne, 06-28 thru 01-07 ▶
- Budzinauskas, K./Navickas, E./Ahrens, M./Braun, A./Tamulevičius, S./Fleig J.** End-point detection of Ion etching by optical emission spectroscopy, Advanced Materials and Technologies, the 13th international conference-school, Palanga, LT, 08-23 thru 27 ■◆
- Chen, Q.** Structure and Transport of Ceramic Proton Conductors: Combination Studies of Solid State Electrochemistry, Synchrotron and Neutron Scattering, 2011 MRS Spring Meeting, San Francisco, Cal, US, 04-25 thru 29 ◆
- Chen, Q.** Probing the Effects of Pressure-induced Strain and Imperfections on the Proton Transport Properties of Ceramic Proton Conductors, 2011 MRS Spring Meeting, San Francisco, Cal, US, 04-25 thru 29 ▶
- Chen, Q.** The Effects of Pressure-induced Strain on Ceramic Proton Conductors, Nanoionics, Prof. Shu Yamaguchi, University Tokyo, Tokyo, JP, 05-17 ▶●
- Chen, Q.** Strategies how to «jump-start» protons for better ceramic fuel cell electrolytes, European Cell Forum 2011, Lucerne, 06-28 thru 01-07 ▶
- Chen, Q.** Interaction of Water with Ceramic Proton Conductors - A study with complementary in-situ methods using synchrotron and neutron scattering, Joint Users' Meeting @ PSI 2011, Villigen PSI, 09-15 thru 16 ◆
- Chen, Q.** The Effect of Hydration and Strain on Ceramic Proton Conductors, Annual Meeting of Swiss Society for Crystallography 2011, Bern, 09-16 ◆
- Chen, Q.** The Effect of Hydration and Strain on Ceramic Proton Conductors, Empa PhD students' symposium 2011, St. Gallen, 10-18 ▶
- Clemens, F.** Development of thin planar and tubular BSCF oxygen membranes by using thermoplastic process route, ECerS XII, 12th Conference of the European Ceramic Society, Stockholm, SE, 06-19 thru 23 ▶
- Clemens, F.** Microfabrication of hollow ferroelectric fibers by co-extrusion, ECerS XII, 12th Conference of the European Ceramic Society, Stockholm, SE, 06-19 thru 23 ▶
- Clemens, F.** Mechanical and Electro-mechanical characterization of finesingle Pb(Zr, Ti)O₃ fibres for AFC and 1-3 composite applications, COST Action MP0904, Bordeaux, FR, 06-30 thru 07-01 ▶
- Clemens, F.** Thermoplastic ceramic processing and rheological demands to achieve insitu multi-material architecture structures, DTU, Risoe, DK, 11-07 thru 08 ▶●
- Clemens, F. / Koll, B. / Graule, T.** Piezoresistive strain sensor fibres, Technology Briefing: Smart Textiles, Dübendorf, 09-30 ◆
- Clemens, F. /Salehi, M./Diethem, S./Pfaff, E. M./Graule, T./Grobéty, B.** Entwicklung von dünnwandigen, planaren und rohrförmigen BSCF Sauerstoffmembranen über die thermoplastische Formgebung, DKG Jahrestagung, Saarbrücken, DE, 03-28 thru 30 ▶
- Clemens, F./Graule, T.** Plastische Massen für die Extrusion von faser-verstärkten Verbundwerkstoffen und deren Charakterisierung, DKG Symposium Charakterisierungsverfahren in der keramischen Aufbereitung: Vom Pulver bis zum Grünkörper, Erlangen, DE, 11-29 thru 30 ▶●
- De Hazan, Y./Knies, F./Graule, T.** Stability of nanodispersions in high-ionic strength media – effect of surfactants, temperature and additives, ECerS XII, 12th Conference of the European Ceramic Society, Stockholm, SE, 06-19 thru 23 ▶
- De Hazan, Y./Thänert, M./Graule, T.** 3d robotic deposition of fibre networks using UV curable colloidal ceramic dispersions, ECerS XII, 12th Conference of the European Ceramic Society, Stockholm, SE, 06-19 thru 23 ▶
- Flak, D./Braun, A./Graule, T./Rekas, M.** Intrinsic flame-spray synthesized metal oxide nanopowders for hydrogen sensing, E-MRS Fall Meeting, Warsaw, PL, 09-19 thru 23 ▶
- Gajdane-Schranz, K.** Hybrid photoelectrochemical water splitting electrode with multiple band gap materials, E-MRS 2011 Spring Meeting, Nice, FR, 05-09 thru 13 ▶

Empa Activities 2011

Conferences

High Performance Ceramics

- Gajdane-Schranz, K.** Removal of persistent organic pollutants (pharmaceuticals and pesticides) from waters using Advanced Oxidation Processes, 17th International Conference on Advanced Oxidation Technologies for Treatment of Water, Air, and Soil (AOTs-17), San Diego, Cal, US, 11-07-10 ▶●
- Gajdane-Schranz, K.** Synthesis and characterization of protein films on hematite, Center for Nanoscale Materials, Argonne National Laboratory, Argonne, Ill, US, 11-14 thru 15 ▶
- Graule, T.** Flame spray synthesis (FSS) of nanopowders with increased visible light activity and their advanced photocatalytic testing, European Coatings Conferences, Easy-to-clean coatings/self-cleaning coatings III, Berlin, DE, 02-07 thru 11 ▶
- Graule, T.** Towards the sun: Flame spray processed nanoparticles with enhanced photocatalytic activity, European Coatings Congress, Nürnberg, DE, 03-29 thru 31 ▶●
- Graule, T.** Electrostatic and steric stabilization of oxide based nanoparticles within highly loaded aqueous dispersions, European Coatings Conference, «High Performance Waterborne Clearcoats III», Berlin, DE, 05-22 thru 24 ▶●
- Graule, T.** Ceramic Processing for SOFC, Joint European Summer School for Fuel Cell and Hydrogen Technology, Viterbo, IT, 08-23 thru 27 ▶●
- Graule, T.** Nanoparticle Synthesis and Nanoparticle Surface Modification for the Efficient Processing of Nanoceramics and Nanocomposites, 13th Int. Conference – School – Advanced Materials and Technology, Palanga, LT, 08-27 thru 31 ▶●
- Graule, T.** Introduction to nanoparticle synthesis and processing of nanoparticle based nanocomposites. CAS Visiting Lectures Series, Warsaw University of Technology., Warsaw, PL, 10-11 ▶●
- Graule, T.** Nanopowder technology for nanomaterials – a challenge for chemists. CAS Visiting Lectures Series, Warsaw University of Technology, Warsaw, PL, 10-14 ▶●
- Graule, T.** Ceramic based nanomaterials for applications in filtration, photocatalysis and fuel cell research. CAS Visiting Lectures Series, Warsaw University of Technology, Warsaw, PL, 10-17 ▶●
- Graule, T.** Seminar concerning nanoparticle synthesis and processing of nanoparticle based nanocomposites. CAS Visiting Lectures Series, Warsaw University of Technology., Warsaw, PL, 10-19 ▶●
- Graule, T./Clemens, F./Barne, E./de Hazan, Y.** Hochfeststoffhaltige Dispersionen und Compounds in der Hochleistungskeramik – Motivation, Herstellung, Einsatz, DECHEMA 2011 Veranstaltung Handhabung hochviskoser Systeme, Eisenach, DE, 11-08 thru 10 ▶●
- Graule, T./Michen, B.** New Concepts for adsorption based virus filtration, ECerS XII, 12th Conference of the European Ceramic Society, Stockholm, SE, 06-19 thru 23 ▶
- Heinecke, J.** Fabrication of multilayered cellular ceramics via radiation curable dispersions. The Ninth Students Meeting, Processing and Application of Ceramics, University of Novisad, Novisad, RS, 11-16 thru 18 ▶
- Holzer, L.** 6th int. FIB workshop, SSOM-DGE/DGM-ASEM, ETHZ, Zürich, 6-27 thru 29 ■
- Holzer, L.** Microstructure effects on the activity of SOFC electrodes: basic principles and preliminary results”, Workshop «Thin Films for Solid Oxide Fuel Cells” ETHZ, Zürich, 07-12 ▶●
- Holzer, L./Keller, L./Muench, B.** Quantitative microstructure analysis in materials science”, Lectures at the Summer Academy 2011 «Stochastic Analysis, Modelling and Simulation of Complex Structures», Uni Ulm, Kleinwalsertal, AT, 09-11 thru 24 ▶●
- Holzer, L./Keller, L./Muench, B.** «Microstructure analysis and modelling related to degradation of SOFC-electrodes» 2nd int. Workshop on fuel cell degradation, Thessaloniki, GR, 09-21 thru 23 ▶●
- Kang, J./Oh, C. M./Kim, C. S./Lee, J. Y./Kim, J. H./Rekas, M./Flak, D./Yaacob, M. H./Wlodarski, W.** Fabrication of ZnO and WO₃ nanostructured thin films by ArF Excimer Laser for gas sensing applications, E-MRS Fall Meeting, Warsaw, PL, 09-19 thru 23 ◆
- Keller, L.** Bentonite under the microscope, 4th Swiss Bentonite Meeting, Universität Bern, 06-24 ▶

Empa Activities 2011

Conferences

High Performance Ceramics

- Keller, L.** Spatial analysis of tomographic data and its implications on mass transport in Opalinus Clay, NEA ClayClub Workshop Clay under Nano- to Microscope resolution, Karlsruhe, DE, 09-06 thru 08 ▶
- Knoknerytė, J./ Navickas, E./ Chen, Q./ Braun, A./ Tamulevičius, S./ Fleig J.** Proton conductivity in γ substituted barium cerate, Advanced Materials and Technologies, the 13th international conference-school, Palanga, LT, 08-23 thru 27 ■◆
- Kübler, J.** Development of Near Net Shaped $\text{Si}_3\text{N}_4/\text{SiC}$ Composites with Optimized Grain Boundary Phase for Industrial Wood Machining, University of Central Florida – MMAE Fall Seminar, Orlando, US, 09-23 ▶●
- Kübler, J.** Integrity of Materials and Structures, UCF MMAE 2011 Lecture Series, Orlando, US, 09-26 thru 28 ▶●
- Kübler, J./Strehler, C./Blugan, G./ Graule, T./Ehrle, B./Weinreich, A./ Kaiser, B./Aneziris, C. G.** Lebensdauer und Verschleisseigenschaften endabmessungsnah hergestellter $\text{Si}_3\text{N}_4/\text{SiC}$ Schneidwerkzeuge für Holz, DGM Symposium Hochleistungskeramik, Karlsruhe, DE, 10-26 ▶
- Michalow, K./Staniuk, M./ Lavagnini, M./Ferri, D./Otal, E./ Parlinska-Wojtan, M./ Fortunato, G./Graule, T.** Flame spray synthesis of visible light active codoped $\text{TiO}_2:\text{Cr}/\text{Ag}$ nanopowders, JEP 2011: 2nd European Symposium on Photocatalysis, Bordeaux, FR, 09-29 thru 30 ▶
- Navickas, E./Gerstl, M./Chen, Q./ Tamulevičius, S./Kubel, F./ Doebeli, M./Braun, A./Fleig, J.** INTERFACE CONTRIBUTION TO IONIC CONDUCTIVITY IN THIN FILMS, 20th International Baltic Conference «MATERIALS ENGINEERING 2011», Kaunas, LT, 10-27 thru 28 ▶
- Navickas, E./Gerstl, M./ Friedbacher, G./Kubel, F./ Doebeli, M./Braun, A./ Tamulevičius, S./Fleig J.** In-and across-plane conductivity of YSZ thin films on silicon, Advanced Materials and Technologies, the 13th international conference-school, Palanga, LT, 08-23 thru 27 ■◆
- Navickas, E./Knoknerytė, J./ Chen, Q./Braun, A./ Tamulevičius, S./Fleig, J.** Proton Conductivity Studies of Barium Cerate Doped with Yttrium, 39th Lithuanian National Conference of Physics 2011, Vilnius, LT, 10-06 thru 08 ◆
- Navickas, E./Gerstl, M./Kubel, F./ Doebeli, M./Braun, A./Fleig, J.** Anisotropy of ionic conductivity in YSZ thin films, 18th International Conference on Solid State Ionics, Warsaw, PL, 07-03 thru 08 ▶
- Nurk, G./Braun, A./Holtappels, P./ Graule, T.** Influence of artificial wood-gas with alkali salt vapors on the Solid Oxide Fuel Cell Ni-cermet anode; European Fuel Cell Forum 2011, Luzern, 06-28 thru 07-01 ▶
- Nurk, G./Struis, R./Ludwig, Ch./ Braun, A./Lust, E.** Influence of polarization, temperature, and chemical nature of poisoning sulphur compounds on the Ni-S surface chemistry of IT-SOFC electrodes: An in situ S K-edge XAS study; SOLEIL Synchrotron School on X-ray Microscopy, Paris, FR, 05-02 thru 06 ◆
- Salehi, M./Clemens, F./ Diethem, S./Pfaff, E. M./ Graule, T./Grobéty, B.** Fabrication of the thin planar and tubular BSCF oxygen membranes using thermoplastic process route, ICOM 2011, Int. Congress on Membranes and Membrane Processes, Amsterdam, NL, 07-23 thru 29 ▶
- Scharf, D./Clemens, F./Graule, Th.** Mineralische Hochleistungs-Leichtgranulate of SiO_2 , Silikatbasis mit variabel einstellbarer Dichte und Druckfestigkeit, Leichtbau-Kongress, Nürnberg, DE, 06-07 thru 09 ▶
- Toth R.** Self-organised microdots formed by dewetting in a highly volatile liquid, International Workshop on Complex Systems in Chemistry, Physics and Biology, 2011, Budapest, HU, 11-02 thru 03 ▶●
- Van Garderen, N./Clemens, F./ Graule, T./Aneziris, C. G.** Highly porous catalyst support based on diatomite material for fluidized bed reactor applications: A microstructure comparison between boehmite and clay based inorganic binder systems, 9th International Symposium on the Characterisation of Porous Solids – COPS 9, Dresden, DE, 06-05 thru 08 ▶
- Van Garderen, N./Clemens, F./ Graule, T./Aneziris, C. G.** Microstructure comparison between boehmite and clay based inorganic binder systems for highly porous catalyst support based on diatomite material for fluidized bed reactor applications, ECerS XII, 12th Conference of the European Ceramic Society, Stockholm, SE, 06-19 thru 23 ▶
- Van Garderen, N./Clemens, F./ Graule, T./Aneziris, C. G.** Development and characterization of diatomite based granulaes for chemical-looping combustion, CEEC-TAC Conference, Craiova, RO, 09-07 thru 10 ◆

Organisation ■
Poster = ◆
Lecture = ▶
invited = ●

Empa Activities 2011

Conferences

High Performance Ceramics

**Van Garderen, N./Clemens, F./
Graule, T./Aneziris, C. G.** Hochfeststoffhaltige Dispersionen und Compounds in der Hochleistungskeramik – Motivation, Herstellung, Einsatz, The Ninth Students' Meeting, SM-2011, Processing and Application of Ceramics, Novisad, RS, 11-16 thru 18 **▶**

**Zalga, A./Abakeviciene, B./
Navickas, E./Beganskiene, A./
Kareiva, A./Tamulevicius, S./
Fleig, J.** Synthesis of YSZ thin films by the novel aqueous sol-gel citrate-precursor method, 18th International Conference on Solid State Ionics, Warsaw, PL, 07-03 thru 08 **◆**

Joining Technology and Corrosion

**Antusek, A./Passerone, D./
Pignedoli, C. A./Janczak-Rusch, J./
Parlinska-Wojtan, M.** Interfaces between Ag-Cu brazing filler films and AlN from first principles: origin of melting point depression, EUROMAT 2011, Montpellier, F, 09-12 thru 15 **▶**

**Beni, A./Ott, N./Ura-Binczyk, E./
Wardé, M./Bauer, B./Rajput, P./
Ulrich, A./Zegenhagen, J./
Barthes-Labrousse, M. G./
Schmutz, P.** Characterisation of the Corrosion Resistance of new Al-based Complex Metallic Alloys, 220th ECS Meeting and Electrochemical Energy Summit, Boston, US, 10-09 thru 14 **▶**

**Beni, A./Ott, N./Wardé, M./
Bauer, B./Rajput, P./Detlefs, B./
Zegenhagen, J./
Barthés-Labrousse, M. G./
Schmutz, P.** Characterisation of the protecting passive oxide layer of new Al-Cr-Fe Complex Metallic Alloys by HAXPES, 4th International Workshop on Hard X-Ray Photoelectron Spectroscopy, Synchrotron Desy, Hamburg, DE, 09-14 thru 16 **◆**

**Beni, A./Ott, N./Wardé, M./
Young, K. M./Parle, J./
Pawelkiewicz, M./Bauer, B./
Gille, P./Rajput, P./Detlefs, B./
Zegenhagen, J./McGrath, R./
Bartés-Labrousse, M. G./
Schmutz, P.** Characterisation of the corrosion resistance of new Al-Cr-Fe Complex Metallic Alloys (CMA) in relation to surface properties, C-MAC Days 2011, Liverpool, UK, 11-08 thru 09 **▶ ●**

**Breimesser, M./Ritter, S./
Seiffert, H.-P./Suter, T./Virtanen, S.** A new Approach towards the Characterization of IG SCC of Austenitic Stainless Steel by the Electrochemical Microcapillary Technique; 220th ECS Meeting, Boston, US, 10-24 thru 27 **▶**

**Breimesser, M./Ritter, S./
Seiffert, H.-P./Virtanen, S./Suter, T.** IG SCC of austenitic steel: Characteristic current signals measured by the electrochemical microcapillary technique / ECG-COMON Meeting 2011, Helsinki, FI, 07-19 thru 21 **▶**

**Brodacka, S./Antusek, A./
Passerone, D./Janczak-Rusch, J./
Kozubski R.** Simulation of nanostructure interfaces and segregation in nanostructured filler metals in a multilayer configuration, Action Meeting of COST MP0903, Limerick, IRL, 10-12 thru 14 **▶**

**Delsante, S./Ennas, G./
Borzone, G./Pigozzi G./
Pawelkiewicz Koebel, M./
Janczak-Rusch, J.** Synthesis and characterization of eutectic Ag-Cu alloy nanoparticles, Action Meeting of COST MP0903, Limerick, IRL, 10-12 thru 14 **◆**

**Derosé, J. A./Suter, T./
Balkowiec, A./Michalski, J./
Kurzydowski, K. J./De Graeve, I./
Terry, H./Schmutz, P.** Microscale Corrosion of an Aerospace Al 2024 Alloy with Low Mg and the Effect of Chromate and Cerium Based Conversion Coatings, AVS 58th International Symposium & Exhibition, Nashville, TN, US, 10-30 thru 11-04 **▶**

**Derosé, J. A./Suter, T./
Balkowiec, A./Michalski, J./
Kurzydowski, K. J./Schmutz, P.** Localized Corrosion Behavior of an Aerospace Aluminum Alloy (Al 2424) with Low Magnesium, 220th ECS Meeting, Boston, US, 10-09 thru 14 **▶**

**Derosé, J. A./Suter, T./Schmutz, P./
Balkowiec, A./Michalski, J./
Kurzydowski, K. J.** Al 2024 Alloy with low Mg (Higher Cu to Mg Ratio): Microstructural and Localized Corrosion Behavior Characterization for Model Input Data, Seminar at SURF (Electrochemical and Surface Engineering), Vrije Universiteit Brussel, Brussel, BE, 06-08 **▶**

**Derosé, J. A./Suter, T./Schmutz, P./
Balkowiec, A./Michalski, J./
Kurzydowski, K. J.** Al 2024 Alloy with low Mg (Higher Cu to Mg Ratio): Microstructural and Localized Corrosion Behavior Characterization for Model Input Data, Seminar at SIE (Surfaces and Interfaces Engineering), Technische Universiteit Delft, Delft, NL, 06-09 **▶**

Organisation **■**

Poster = **◆**

Lecture = **▶**

invited = **●**

Empa Activities 2011

Conferences

Joining Technology and Corrosion

- Duarte, L. I./Reichmann, T./Plevachuk, Y./Richter, K. W./Leinenbach, C.** Diffusion brazing of Nickel Aluminides using ternary Al-Ge-Ni alloys, Euromat 2011, Montpellier, FR, 09-12 thru 15 ▶
- Duarte, L. I./Viana, F./Simões, S./Vieira, M. F./Ramos, A. S./Vieira, M. T./Klotz, U. E./Leinenbach, C.** Diffusion bonding of TiAl intermetallics using Ti/Al nanometric multilayers, 18th International Symposium on Metastable, Amorphous and Nanostructured Materials (ISMANAM '11), Gijon, ES, 07-04 thru 09 ✦
- Faller, M.** Möglichkeiten des Korrosionsschutzes von Stahl im Betonbau, 3-Länder Korrosionstagung, Wien, A, 05-05 thru 05 ■
- Faller, M.** Einflüsse von Schadgasen und Verunreinigungen: Was sind sinnvolle Prüfungen? Tagung Elektrische Kontakte – Zuverlässigkeit und Ausfallmechanismen, Dübendorf, 06-20 ▶●
- Faller, M.** Betrachtungen zum Korrosionssystem bei Nichtrostenden Stählen, SGVC Tagung Werkstofftechnik, Muttenz, 06-22 ▶●
- Faller, M.** Zustandsuntersuchungen an metallischen Bauteilen in Hallenschwimmbädern – Atmosphärische Belastung und Werkstoffwahl, 37. VDI-Jahrestagung Schadensanalyse Produktverbesserung durch Schadensanalyse, Würzburg, DE, 10-19 thru 20 ▶●
- Guseva, O./Schmutz, P.** Modelling of localized anodic dissolution of aluminium alloys in sodium chloride, GUS Tagung, Stutensee, DE, 30-03 thru 31 ▶●
- Janczak-Rusch, J.** Nanotechnologische Konzepte für die Fügechnik und deren Innovationspotential im Leichtbau, Forum/Konferenz Leichtbau, Zukunftweisende Fügechnologie im Leichtbau, Wien, 10-06 ▶●
- Janczak-Rusch, J./Bissig, V./Parliska-Wojtan, M.** Scaling of melting point depression for brazing fillers in nano-multilayer configuration, THERMEC 2011, Québec City, CA, 08-01 thru 05 ▶●
- Janczak-Rusch, J./Bissig, V./Parliska-Wojtan, M./Sereda, O./Neels, A.** Melting point depression of brazing filler metals in a nanolayer system, EUROMAT 2011, Montpellier, F, 09-12 thru 15 ▶
- Janczak-Rusch, J./Garzel, G./Delsante, S./Borzzone, G./Pawelkiewicz Koebel, M.** Experimental and theoretical determination of the size dependent phase diagrams, Joint Working Group COST MP0903 Meeting, Barcelona, E, 04-14 thru 15 ▶
- Janczak-Rusch, J./Pawelkiewicz Koebel, M./Sobol Sosnowska, K. K.** Knowledge based design of lead free solder joints: theory-experiment coupling, COST MP0602 Working Group 2 Meeting, University of Applied Sciences, Augsburg, DE, 03-10 thru 11 ▶●
- Janczak-Rusch, J./Sobol Sosnowska, K. K./Pawelkiewicz Koebel, M.** Nanojoining as an alternative concept for high temperature solder joints for microelectronics, Final COST MP0602 Meeting, Brno, CZ, 06-22 thru 24 ▶●
- Janczak-Rusch, J./Türpe, M./Bissig, V.** Die Nutzung von Nanoeffekten zur Schmelzpunkterniedrigung von Lotwerkstoffen und deren Anwendung in der Löttechnologie, DVS-NAS-Kolloquium 2011 Nanotechnologie – Innovationspotenziale und Herausforderungen für die Fügechnik, Berlin, DE, 10-04 ▶
- Jin, S./Leinenbach, C./Wang, J./Duarte, L. I./Watson, A./Scott, A./Delsante, S./Borzzone, G./Rappaz, M.** Thermodynamic modelling of the Au-Ge-Ni and Au-Cu-Ge ternary systems, Workshop on Multiscale simulation of heterogeneous materials and coupling of thermodynamic models, Leuven, BE, 01-12 thru 14 ▶
- Jin, S./Leinenbach, C./Wang, J./Duarte, L. I./Watson, A./Scott, A./Delsante, S./Borzzone, G.** Experimental investigation and thermodynamic modelling of the Au-Ge-x (x = Cu, Ni, Ti) ternary systems, Euromat 2011, Montpellier, FR, 09-12 thru 15 ✦
- Koster, M./Leinenbach, C./Schindler, H. J.** Fatigue assessment of defect-free and defect containing brazed steel joints, Euromat 2011, Montpellier, FR, 09-12 thru 15 ▶
- Langecker J./Ritter H./Rupper P./Faller, M./Hanselmann B.** Protection of Silver Surfaces by Nanocoatings through covalent layer-by-layer techniques, PolyColl 2011, Genf, 04-29 ✦

Empa Activities 2011

Conferences

Joining Technology and Corrosion

- Leinenbach, C.** Schadensprävention bei hochbeanspruchten Bauteilen und Komponenten, Tagung, Dübendorf, 11-08 ■
- Leinenbach, C./Koster, M./Schindler, H. J.** Bewertung der Fehlertoleranz bei hochbeanspruchten gelöteten Bauteilen, Werkstoffprüfung 2011, Berlin, DE, 12-01 thru 02 ▶
- Leinenbach, C./Roth, M.** Integrity and Life-time Assessment of Joined Compressor Components, Forum of Technology – Turbine Forum 2011, Nizza, FR, 05-02 thru 05 ▶●
- Leinenbach, C./Vüllers, F./Buhl, S./Elsener, H. R./Eifler, D.** Influence of brazing parameters on the microstructure, residual stresses and mechanical properties of stainless steel-SiC and stainless steel-sapphire active braze joints, Euromat 2011, Montpellier, FR, 09-12 thru 15 ◆
- Leinenbach, C./Wang, J./Bo, H./Duarte, L. I.** Development of a thermodynamic and atomic mobility database for active brazing of ceramics to steel substrates, Euromat 2011, Montpellier, FR, 09-12 thru 15 ▶
- Leinenbach, C./Weyrich, N./Elsener, H. R./Eifler, D.** Influence of thermal pre-treatment on interface reactions and properties of soldered Ti-Al₂O₃ joints, Euromat 2011, Montpellier, FR, 09-12 thru 15 ▶
- Lipecka, J./Lewandowska, M./Janczak-Rusch, J./Kurzydowski, K. J.** Mechanical properties of ultrafine grained aluminium matrix composites reinforced with carbon nanotubes, E-MRS Fall Meeting 2011, Warsaw, PL, 09-19 thru 23 ▶
- Marker, M./Duarte, L. I./Leinenbach, C./Effenberger, K. W./Richter, K. W.** A characterization of the multicomponent system Al-Fe-Si-Ti, 14th Austrian Chemistry Days, Linz, AT, 09-26 thru 29 ▶
- Marker, M./Duarte, L. I./Leinenbach, C./Richter, K. W.** Phase equilibria and physical characterization in the system Al-Fe-Si-Ti, Euromat 2011, Montpellier, FR, 09-12 thru 15 ▶
- Moser, E. M./Rivest, V./Chappuis, S./Faller, M./Reller, A.** Production of DLC Layers doped with metallic nano particles using PVD and PE-MOCVD processes, International Colloquium on Plasma Processes, Nantes, FR, 07-04 thru 08 ▶
- Moser, E. M./Faller, M./Chappuis, S./Rivest, V./Röthlisberger, St.** Active Corrosion Protection for Aluminium Surfaces due to DLC Layers with Nano Contacts, 12th International Conference on Plasma Surface Engineering, Garmisch-Partenkirchen, DE, 09-13 thru 17 ◆
- Pawelkiewicz Koebel, M./Danielewski, M. J./Janczak-Rusch J.** Kinetic study and modelling of interfacial growth of the Cu₆Sn₅ and Cu₃Sn intermetallic phases, COST MP0602 Working Group 2 Meeting, University of Applied Sciences, Augsburg, DE, 03-10 thru 11 ▶
- Pawelkiewicz Koebel, M./Danielewski, M. J./Janczak-Rusch, J.** Electro-mechano-chemistry: new perspectives, AGH-Harvard University Workshop nanoscience and – technology: the role of chemistry, AGH University of Science and Technology, Krakow, PL, 01-15 ▶●
- Pawelkiewicz Koebel, M./Danielewski, M. J./Janczak-Rusch, J.** Modeling of multi-phase solid state reaction by example of intermetallic growth, EUROMAT 2011, Montpellier, F, 09-12 thru 15 ▶
- Pawelkiewicz Koebel, M./Danielewski, M. J./Janczak-Rusch, J./Wierzba, B.** Kinetic study and modelling of interfacial growth of the Cu-Sn intermetallic phases, Final COST MP0602 Meeting, Brno, CZ, 06-22 thru 24 ◆
- Pawelkiewicz Koebel, M./Danielewski, M. J./Janczak-Rusch, J./Wierzba, B.** Modeling of multi-phase solid state reaction by example of intermetallic growth, DIMAT, Dijon, F, 07-04 thru 09 ◆
- Pawelkiewicz Koebel, M./Janczak-Rusch, J./Danielewski, M. J.** Modeling of multi-phase solid state reactions by example of IMC growth, Workshop COST Action MP0602, Multiscale simulation of heterogeneous materials and coupling of thermodynamic models, Katholieke Universiteit Leuven, Leuven, BE, 01-12 thru 14 ◆
- Pawelkiewicz Koebel, M./Schmutz, P./Janczak-Rusch, J.** Surface oxidation process investigation of Cu/SnAgCu solder joints generated by controlled humidity/temperature exposure, Advanced Materials and Surfaces Day – Department 010 «Advanced Materials Characterisation», Empa Academy, Dübendorf, 03-31 ◆
- Pigozzi, G./Schmutz, P.** Electrochemical approach for the development of multifunctional intermetallic nanoparticles, Empa Particle Day, Dübendorf, 03-29 ▶

Empa Activities 2011

Conferences

Joining Technology

- Pigozzi, G./Mukherji, D./Schmutz, P.** Development and characterization of surface-tailored multifunctional intermetallic nanoparticles, Joint Working Group COST MP0903 Meeting, Barcelona, E, 04-14 thru 15 ◆
- Pigozzi, G./Mukherji, D./Schmutz, P.** Development and characterization of surface-tailored multifunctional intermetallic nanoparticles, Joint Working Group COST MP0903 Meeting, Barcelona, E, 04-14 thru 15 ◆
- Pigozzi, G./Mukherji, D./Schmutz, P.** The synthesis of intermetallic nanoparticles: COST research project plan and preliminary results, Action Meeting of COST MP0903, Limerick, IRL, 10-12 thru 14 ◆
- Pigozzi, G./Mukherji, D./Schmutz, P.** The synthesis of intermetallic nanoparticles: COST research project plan and preliminary results, Action Meeting of COST MP0904, Limerick, IRL, 10-12 thru 14 ◆
- Pigozzi, G./Parlinska-Wojtan, M./Bissig, V./Janczak-Rusch, J.** Tuning of melting point depression for nano-multilayer thin films for brazing applications, Advanced Materials and Surfaces Day – Department 010 «Advanced Materials Characterisation», Empa Academy, Dübendorf, 03-31 ◆
- Pigozzi, G./Schmutz, P.** Electrochemical approach for the development of multifunctional intermetallic nanoparticles, Empa Particle Day, Empa Academy, Dübendorf, 03-29 ▶
- Reichmann, T./Richter, K. W./Duarte, L. I./Leinenbach, C.** Phase relations in Al-Ge-Ni: a system relevant for brazing of nickel aluminides, Euromat 2011, Montpellier, FR, 09-12 thru 15 ◆
- Schmutz, P.** Klimatische Umwelteinflüsse auf Oberflächen und Modellierung lokaler Korrosionsangriffe, SVU-Fachtagung, Olten, 10-01 ▶●
- Schmutz, P./Cardilli, E./Berg, M.** Electrochemical interactions on metallic medical implant surfaces: from macroscopic to local characterization, BioTiNet Marie Curie Training Network, Ljubljana, SI, 10-25 thru 27 ▶●
- Schmutz, P./Liu, M./Suter, T./Uggowitzer, P. J.** Mg and Mg alloys: from Passivation to Biodegradation Mechanism; 220th Electrochemical Society Meeting, Boston, US, 10-09 thru 14 ▶●
- Schmutz, P./Luebben, J./Suter, T.** Electrochemical reactivity of materials microstructures studied by Scanning Kelvin Probe Force and Nanocapillary methods, NACE meeting, Research in Progress Symposium, Houston, US, 03-15 thru 17 ▶●
- Sereda, O./Janczak-Rusch, J./Bissig, V./Parlinska-Wojtan, M./Neels, A.** Melting point depression of brazing filler metals in a nanolayer system, Swiss Chemical Society Meeting, Lausanne, EPFL, 09-09 ◆
- Sereda, O./Janczak-Rusch, J./Pigozzi, G./Dommann, A./Neels, A.** High Temperature in-situ XRD Studies on New Solder Materials for MEMS Packaging Applications, Meeting of the Swiss Crystallographic Association, University of Bern, Bern, 09-15 thru 16 ▶
- Sobol Sosnowska, K. K.** The experiences of the 3rd year PhD Student, Welcome@Empa, Empa, Dübendorf, 02-14 ▶
- Sobol Sosnowska, K. K.** How to manage a PhD project, Workshop for PhD Students, Warsaw, PL, 06-14 ▶●
- Sobol Sosnowska, K. K.** The experiences of the 3rd year PhD Student, Welcome@Empa, Empa, Dübendorf, 08-25 ▶
- Sobol Sosnowska, K. K./Janczak-Rusch, J./Spolenak, R.** Sacrificial Passivation – an engineering concept to exploit fast diffusion in nanostructures for microelectronics assembly, EUROMAT 2011, Montpellier, F, 09-12 thru 15 ◆
- Sobol Sosnowska, K. K./Janczak-Rusch, J./Spolenak, R.** Sacrificial Passivation as a temporary barrier coating for joining, COST MP0602 Working Group 2 Meeting, University of Applied Sciences, Augsburg, DE, 03-10 thru 11 ▶
- Sobol Sosnowska, K. K./Janczak-Rusch, J./Spolenak, R.** Sacrificial Passivation as a novel concept for joining related processes, Advanced Materials and Surfaces Day – Department 010 «Advanced Materials Characterisation», Empa Academy, Dübendorf, 03-31 ◆
- Sobol Sosnowska, K. K./Janczak-Rusch, J./Spolenak, R.** Embracing diffusion for the rapid formation of interconnects, MRC Graduate Symposium, Zürich, 06-08 ◆
- Sobol Sosnowska, K. K./Janczak-Rusch, J./Spolenak, R.** Controlling diffusion in nanostructures for rapid formation of interconnects, Empa PhD Symposium 2011, St. Gallen, 10-18 ▶

Empa Activities 2011

Conferences

Joining Technology

- Sobol Sosnowska, K. K./
Pawelkiewicz Koebel, M./
Janczak-Rusch, J./Spolenak, R.** Exploiting diffusion for Transient Liquid Phase bonding,
Final COST MP0602 Meeting, Brno, CZ, 06-22 thru 24 ◆
- Sobool Sosnowska, K. K./
Janczak-Rusch, J./Spolenak, R.** An engineering concept to embrace diffusion in nanostructures for rapid formation of
interconnects, THERMEC 2011, Québec City, CA, 08-01 thru 05 ▶
- Suter, T.** Micro- and Nanocapillary Electrochemical Material Surface Characterization,
Departments Day Empa, Dübendorf, 04-31 ▶●
- Suter, T./Schmutz, P.** Electrochemical Studies on Noble Nanosacle Particles of Pure Magnesium,
ISE-Conference, Niigata, JP, 09-11 thru 16 ▶
- Tillmann, W./Wojarski, L./Liu, C./
Janczak-Rusch, J.** Herstellung von Glas-Metall-Verbunden unter Anwendung nanostrukturierter Zusatzwerkstoffe,
DVS-NAS-Kolloquium 2011 Nanotechnologie – Innovationspotenziale und Herausforderungen für
die Fügechnik, Berlin, DE, 10-04 ▶

Mechanics of Materials and Nanostructures

- Brodard, P./Bechelany, M./
Elias, J./Philippe, L./Michler, J.** Controlled metallic nanostructuring for the fabrication of efficient surface-enhanced Raman
spectroscopy substrates, International Conference on Materials for Advanced Technologies
(ICMAT), Singapore, SG, 06-29 ▶
- Brodard, P./Bechelany, M./
Elias, J./Philippe, L./Michler, J.** Metallic nanostructures for plasmon-enhanced Raman spectroscopy,
Nanoplasmonic sensors and spectroscopy, Göteborg, SE, 09-19 thru 22 ▶
- Brodard, P./Bechelany, M./
Philippe, L./Michler, J.** Functionalized atomic force microscopy cantilevers for tip-enhanced Raman spectroscopy,
Singapore, SG, 06-27 ▶
- Brodard, P./Michler, J.** Raman spectroscopy of nanostructures: mechanics and plasmonics,
Symposium on Confocal Raman Imaging, Ulm, DE, 10-05 thru 06 ◆
- Elias, J./Bechelany, M./Utke, I./
Michler, J./Philippe, L.** Electrochemical deposition of order urchin-like ZnO nanostructures and their application in
Extremely Thin Absorber Solar cells, Elec nano4 – 7th ECHEMS, Paris, FR, 05-23 thru 26
- Elias, J./Bechelany, M./Utke, I./
Michler, J./Philippe, L.** Electrochemical deposition of order urchin-like ZnO nanostructures and their application in
Extremely Thin Absorber Solar cells,
2nd International Conference on Semiconductor Sensitized Solar Cells, Mallorca, ES, 09-18 thru 20
- Elias, J./Lévy-Clément, C./
Bechelany, M./Michler, J./
Wang, G./Wang, Z./Philippe, L.** Hollow Urchin-like ZnO thin Films by Electrochemical Deposition,
2^{eme} Colloque, ZnO L'oxyde de zinc sous toutes ses formes!, Meudon, FR, 06-08 thru 09 ◆
- Elias, J./Michler, J./Philippe, L./
Lévy-Clément, C.** Hierarchically Organized ZnO Nanowires with 3^d Urchin-Like Morphology for Photovoltaic
Application, 3rd International Conference from Nanoparticles & Nanomaterials to Nanowires &
nanosystems (3rd IC4M), Kreta, GR, 06-25 thru 29 ▶●
- Elias, J./Philippe, L./Michler, J./
Lévy-Clément, C.** Synthesis of 3^d Urchin-Like ZnO Thin Films and Optical Properties,
26th European Photovoltaic Solar Energy Conference and Exhibition, Hamburg, DE, 09-04 thru 10 ◆
- Gamez, G./Frey, D./Michler, J.** GDOES elemental mapping with Push Broom Hyperspectral Imaging System,
European Winter Conference on Plasma Spectrochemistry, Zaragoza, ES, 01-30 thru 02-04 ▶
- Ghisleni, R./Michler, J.** In-situ SEM micropillar compression – Room temperature ductile to brittle transition in InP,
International Conference on Mechanical Behaviour of Materials, Como, IT, 06-05 thru 09 ▶
- Ghisleni, R./Michler, J.** Size dependent brittle to ductile transition in semiconductors,
E-MRS Spring Meeting, Nizza, FR, 05-09 thru 13 ◆
- Ghisleni, R./Nowag, K./
Kombaiah, B./Niederberger, C./
Michler, J.** Effect of crystal orientation on the active slip systems of BCC titanium alloy, transition in
semiconductors, Euromat, Montpellier, FR, 09-12 thru 15 ▶
- Ghisleni, R./Rabier, J./
Demenet, J. L./Michler, J.** Small scale plasticity of silicon as a function of electronic doping,
Nanomechanical Testing in Materials Research and Development, Lanzarote, ES, 10-09 thru 14 ▶
- Ghisleni, R./Rabier, J./
Demenet, J. L./Michler, J.** Stress-strain response of hard coating by in-situ SEM compression,
International Federation for Heat Treatment and Surface Engineering, Glasgow, UK, 10-17 thru 20 ▶

Empa Activities 2011

Conferences

Mechanics of Materials and Nanostructures

- Ghisleni, R./Rabier, J./
Demenet, J. L./Michler, J.** Small scale plasticity of silicon as a function of electronic doping, MRS Fall Meeting, Boston, US, 11-28 thru 12-02 ▶
- Jenke, M. G./Gabureac, M./
Utke, I./Fahlbusch, S./Rabe, R.** Gas injection systems for local three dimensional FEBID / FIBID at nanometer scale, Swiss Nano Convention 2011, Baden, DE, 05-19 ◆
- Michler, J.** Fracture Behavior of Hard Multilayered Thin Films on Soft Substrates, International Conference on Metallic Coatings and Thin Films, San Diego, US, 02-05 thru 06 ■▶
- Michler, J.** In-situ nanomechanical testing, TMS 2011 (The annual meeting of the Minerals, Metals & Materials Society), San Diego, US, 02-28 thru 03-04 ▶●
- Michler, J.** In-Situ SEM Mechanical Testing of Nanowires, E-MRS Spring Meeting, Nizza, FR, 05-09 thru 13 ▶●
- Michler, J.** In-situ SEM micropillar compression – temperature dependent ductile to brittle, transition in semiconductors, Euromat, Montpellier, FR, 09-12 thru 15 ▶●
- Michler, J.** Welcome and good-bye speeches as conference organiser, ECI Conference on Nanomechanical Testing in Materials Research and Development, Lanzarote, ES, 10-09 thru 14 ■
- Raghavan, R.** Deformation and fracture of amorphous alloys, Dresden, DE, 01-12 ▶●
- Raghavan, R./Hansen, S./
Zimmermann, T./Michler, J.** Mechanical behavior of reaction wood: A multiscale approach, Nanomechanical Testing in Materials Research and Development, Lanzarote, ES, 10-09 thru 14 ◆
- Szkudlarek, A./Gabureac, M./
Utke, I.** Determination of the Surface Diffusion Coefficient and the Residence Time via Focused Electron-Beam CVD, Euro CVD 18, Kinsale, IE, 09-04 thru 09 ◆
- Utke, I.** Smaller is softer: indentation response of Al₂O₃/ZnO nanolaminates grown by low temperature atomic layer deposition, EuroCVD 18, Kinsale, IE, 09-04 thru 09 ▶
- Utke, I.** From Thin Films to Individual Nanowires: Atomic Layer Deposition (ALD), Chemical Vapor Deposition (CVD), Vapor-Liquid-Solid (VLS) growth, and Focused Electron Beam Induced Deposition (FEBID), 3M-Nano International Conference, Changchun, CN, 08/09-29 thru 02 ▶●
- Utke, I./Gabureac, M./Bernau, L.** Nanosynthesis of Tunable Composite Materials by R.T. Focused Electron Beam CVD, EuroCVD 18, Kinsale, IE, 09-04 thru 09 ▶
- Utke, I./Gabureac, M./Bernau, L.** Nomination Best Conference Lecture: Composition Control of High Resolution Focused Electron Beam Induced Deposits, 3M-Nano 2011, Changchun, CN, 08/09-29 thru 02 ▶
- Utke, I./Jenke, M. G./Kapon, E.** Polarisation stabilisation of VCSELs by minimum invasive maskless lithography, European Semiconductor Laser Workshop (ESLW) 2011, Lausanne, 09-23 thru 24 ▶
- Utke, I./Jenke, M. G./Kapon, E.** Polarisation stabilisation of VCSELs by minimum invasive maskless lithography, European Semiconductor Laser Workshop (ESLW) 2011, NanoTech 2011, Boston, US, 06-13 thru 16 ▶
- Utke, I./Jenke, M. G./Gabureac, M.** Nanoscale Rapid Prototyping and Manufacturing with Focused Electron and Ion Beam Triggered Chemistry, 5th International Conference on Advanced Research in Virtual and Rapid Prototyping, Leiria, PT, 09/10- 28 thru 01 ▶
- Utke, I./Whitby, J./Gabureac, M./
Michler, J./Östlund, F./
Sedláček, L./Jiruše, J.** An Affordable, High Spatial Resolution FIB TOF-SIMS Instrument, FIB DACH Workshop, Zürich, 07-03 thru 05 ▶●
- Wheeler, J. M./Michler, J.** In situ, Elevated Temperature Nanoindentation: Best Practices and Case Studies, Nanomechanical Testing in Materials Research and Development, Lanzarote, ES, 10-11 ▶
- Wheeler, J. M./Ghisleni, R./
Michler, J.** In situ, Elevated Temperature Micro-compression of Silicon, International Conference on Metallurgical Coatings and Thin Film, San Diego, US, 05-02 ▶
- Whitby, J.** An Affordable, High Spatial Resolution FIB TOF-SIMS Instrument, 23rd Annual Workshop on Secondary Ion Mass Spectrometry, Baltimore, US, 05-17 thru 20 ▶

Empa Activities 2011

Conferences

Nanoscale Materials Science

- Bernard, L.** Seeing at the Nanoscale 2011, UCSB, Santa Barbara, CA, US, 19-22 ▶
- Crockett, R.** Adsorption and friction of self-assembled amphiphilic polymers, Hiroshima, JP, 10-31 thru 11-04 ▶
- Crockett, R.** International conference on biotribology, London, UK, 09-19 thru 22 ■
- Ernst, K.-H.** Modification of surfaces with buckybowl: tiling and phase transitions, Physikalisches Kolloquium der U Würzburg, Würzburg, DE, 01-18 ▶●
- Ernst, K.-H.** Molecular chirality at surfaces: 2D crystallization and manipulation of single adsorbates with inelastic electron tunneling, Physik-Kolloquium der U Duisburg-Essen, Duisburg, DE, 02-01 ▶●
- Ernst, K.-H.** Molecular chirality in two dimensions, FUNMOLS Workshop, Bern, 02-10 ▶●
- Ernst, K.-H.** Chiral conflict induces single-handed enantiomorphism, Chirality in Systems chemistry workshop, Toledo, ES, 04-08 ▶●
- Ernst, K.-H.** Modification of surfaces with buckybowl, International Workshop on Nanomaterials and Nanodevices, Beijing, CN, 07-02 ▶●
- Ernst, K.-H.** Linear propulsion of a molecular machine after fueling with electrons, International Workshop on Nanomaterials and Nanodevices, xiantan, CN, 07-05 ▶●
- Ernst, K.-H.** Sergeants and soldiers in two dimensions: Amplification of chirality in molecular monolayers at surfaces, International Union of Crystallography, Madrid, ES, 08-29 ▶●
- Ernst, K.-H.** Molecular chirality at surfaces: 2D crystallization and single molecule dynamics, OCI Colloquium U Geneve, Geneva, 10-13 ▶●
- Ernst, K.-H.** Single molecule dynamics at surfaces, Chemistry Seminar, New York University, New York City, US, 10-18 ▶●
- Ernst, K.-H.** Modification of surfaces with buckybowl, Materials Science Colloquium, Columbia University, New York City, US, 10-21 ▶●
- Ernst, K.-H.** Chirality in flatland, OCI Colloquium ETH, Zürich, 10-24 ▶●
- Fontani, G.** Mechanism of aqueous lubrication with amphiphilic polymers, Hoi An, VN, 05-23 thru 27 ▶
- Hauert, R.** ICMCTF, Symposium D, Coatings for biomedical applications, San Diego, US, 05-02 thru 06 ■
- Hauert, R./Müller, U./Falub, C. V./Thorwarth, G./Voisard, C./Tobler, M./Thorwarth, K./Weisse, B./Schmutz, P./Affolter, Ch./Parlinska, M./Stiefel, M.** Tribological Behavior of DLC Coated CoCrMo Alloys for Medical Joint Applications, IBM-Research, Rüschlikon, 05-26 thru 26 ▶●
- Hauert, R./Müller, U./Falub, C. V./Thorwarth, G./Voisard, C./Tobler, M./Thorwarth, K./Weisse, B./Schmutz, P./Affolter, Ch./Parlinska, M./Stiefel, M.** Tribological Behavior of DLC Coated CoCrMo Alloys for Medical Joint Applications, ICMCTF, San Diego, US, 05-02 thru 6 ▶
- Hauert, R./Müller, U./Falub, C. V./Thorwarth, G./Voisard, C./Tobler, M./Thorwarth, K./Weisse, B./Schmutz, P./Affolter, Ch./Parlinska, M./Stiefel, M.** Adhäsionsproblematik von tribologischen Kohlenstoff-Schichten, Solothurn, 11-05 thru 5 ▶●
- Hug, H. J.** Los Ander Univ, Bogota, CO, 08-11 ▶●
- Hug, H. J.** 56 Conference Magn Magn Mat, Scottsdale Arizona, US, 10-30 thru 11-03 ▶●
- Jaeger, D.** Shake-Ups at Titanium Nitride Interfaces using AR-xPS / SAOG 20xx, Fribourg, 01-28 ◆

Organisation ■
 Poster = ◆
 Lecture = ▶
 invited = ●

Empa Activities 2011

Conferences

Nanoscale Materials Science

- Jaeger, D.** Influence of Shake-Up Behaviour at Titanium Nitride Interfaces using AR-xPS. DPG 2011, Dresden, DE, 03-14 ▶
- Jaeger, D.** Quantification of titanium nitride shake-ups at different interfaces using AR-xPS, E-MRS 2011, Nice, F, 05-11 ▶
- Jaeger, D.** Investigations of the electronic structure of Titanium Nitride Interfaces using AR-xPS. ECASIA 2011, Cardiff, UK, 09-06 ◆
- Lorenzo Castaldi** Transition Metal Oxynitrides: Enhancing performance by adding oxygen, ICMCTF 20xx, San Diego CA, US, 05-04 ▶●
- Marioni, M** Nanotechnologie: Innovation für die Zukunft, Opening talk of the Summer School on Modeling and Virtual Reality, Waidhofen/Ybbs, AT, 07-24 thru 24 ▶●
- Marioni, M** 56 Conference Magn Magn Mat, Scottsdale Arizona, US, 10-30 thru 11-03 ▶
- Ozer, S.** 56 Conference Magn Magn Mat, Scottsdale Arizona, US, 10-30 thru 11-03 ▶
- Ozer, S./Joshi, N./Marionni M. A./ Romer S./Hug H. J.** Contrast formation and deconvolution of pinned UCS by MFM, DPG March 2011, Dresden, DE, 03-14 thru 18 ▶
- Patscheider, J.** Solid Solutions and Nanostructures in Al(Si)N Hard Coatings, ICMCTF 2011, San Diego CA, US, 05-05 ■▶●
- Patscheider, J.** Excursions in the Al-Si-N system: Solid solutions, Nanocomposites and Nanomultilayers, E-MRS 20xx, Nice (F), F, 05-12 ▶●
- Patscheider, J.** The Al-Si-N system: from solid solutions to nanomultilayers, 6th Symposium on Vacuum based Science and Technology, Kolobrzeg (PL), PL, 09-21 ▶●
- Patscheider, J.** Tuning the properties of chromium oxynitride coatings, 58th AVS Symposium, Nashville TN, US, 11-03 ■▶
- Thorwarth, K./Thorwarth, G./ Falub, C. V./Müller, U./Stiefel, M./ Weisse, B./Voisard, C./Tobler, M./ Hauert, R.** Failure Analysis of DLC Coatings on Metallic Joint Implants. Spiessl Symposium, Basel, 06-16 thru 18 ▶

nanotech@surfaces

- Adams, D.** Characterization of conformational changes in small molecules and polymers by means of ab initio MD and x-ray absorption spectroscopy, CECAM workshop: 1-ray Spectroscopy : Recent Advances in Modelling and New Challenges, 07-13 thru 15 ▶
- Cai, J.** Atomically Precise Bottom-up Fabrication of Graphene Nanoribbons. APS March Meeting 2011, Dalles Convention Center, Dallas, US, 03-23 ▶●
- Cai, J.** Bottom-up fabrication of porous graphene and graphene nanoribbons. Graphene 2011, Bilbao, ES, 04-11 ◆
- Cai, J.** Atomically Precise Bottom-up Fabrication of Graphene Nanoribbons. SNI-Empa Workshop on Molecular Electronics, Empa, Dübendorf, 06-24 ▶
- Fasel, R.** Bottom-up synthesis of graphene-related materials. Interdisciplinary Nanoscience Center (iNano), Aarhus, DK, 02-04 ▶●
- Fasel, R.** Bottom-up fabrication of graphene-related materials. PolyColl 2011, Annual conference of the Division of Polymers and Colloids of the Swiss Chemical Society, University of Geneva, Geneva, 04-29 ▶●
- Fasel, R.** On-surface chemistry for the fabrication of graphene-related materials. Institut für Physikalische Chemie, Johannes Gutenberg-Universität, Mainz, DE, 05-09 ▶●
- Fasel, R.** Graphene – an extraordinary nanomaterial. Swiss Nano Convention 2011, Baden, 05-18 ▶●
- Fasel, R.** Bottom-up synthesis of graphene-related materials. International Conference on the Formation of Semiconductor Interfaces ICFSI-13, Prague, CZ, 07-04 ▶●

Empa Activities 2011

Conferences

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- Fasel, R.** On-surface synthesis of molecular nanostructures, XVIII International Summer School «Nicolas Cabrera», Madrid, ES, 09-16 ▶●
- Fasel, R.** On-surface synthesis of molecular nanostructures. Beilstein Workshop NanoBIC 2011, Schloss, Rauischholzhausen, DE, 10-09 ▶●
- Gaspari, R.** Bulk structure of Al-Cr-Fe CMAs by neutron diffraction, STEM and ab initio calculations. Euroschool CMA., Toulouse, FR, 05-22 ◆
- Gaspari, R.** Selective adsorption of benzene on reconstructed Au(111) surfaces. SPS meeting, Lausanne, 06-15 ◆
- Gaspari, R.** Determination of the best Pd-Ga surfaces for catalysis by simulations and experiments. SimBioMa, Konstanz, DE, 09-27 ◆
- Gröning, O.** Nanostructured molecular materials: Synthesis and Characterization, Karlsruhe, DE, 01-11 thru 12 ▶
- Gröning, O.** From tip-induced chemical reactions to electron dynamics in carbon nanotubes, EMPA-NIMS-KIT Workshop, NCCR Nanoscience Winterschool, Les Diablerets, 01-19 thru 21 ▶●
- Gröning, O.** XPS and STM beyond single spectra and topographic imaging, EMPA Department day 2011, Dübendorf, 03-31 ▶
- Gröning, O.** STM/STS characterization of defects in carbon nanostructures, Meeting of the COST Action «Novel materials for nanodevices – from Theory to Practice» (NanoTP), Dübendorf, 04-07 ▶
- Gröning, O.** Surface potential modulation for templated molecules adsorption, Workshop on Statistical Physics and low dimensional Systems (SPLDS 2011), Nancy, FR, 05-18 thru 20 ▶
- Gröning, O.** Defects in CNT from band gap engineering to electron scattering, NFP 47 «Supramolecular Functional Materials» Summerschool, Lugano, 05-25 thru 28 ▶●
- Gröning, O.** Conformational switching and tip-induced cyclodehydrogenation in a surface supported binary supramolecular network, Meeting of the Swiss Physical Society 2011, Lausanne, 06-15 thru 17 ▶
- Gröning, O.** Artificial defects in single walled carbon nanotubes: From band gap engineering to pseudo spin dependent electron scattering, Dübendorf, 06-24 ▶
- Gröning, O.** Defects in nanocarbon structures: A possible route to engineer the electronic properties, SNI-EMPA Workshop on Molecular Electronics, Physics Department of the University of Zurich, Zürich, 09-21 ▶●
- Gröning, O.** Templated adsorption on the h-BN/Rh(111) nanomesh: The role of the surface potential, Physics Department of the Technical University of Munich, Munich, DE, 11-10 ▶●
- Gröning, O.** Nanotechnologie: Zwischen Werbeslogan und echter technischer Revolution, Pädagogische Hochschule Luzern, Luzern, 11-14 ▶●
- Manh Thuong N.** Understanding the formation of surface-supported molecular nanostructures: atomistic simulations, PhD E1am, ETHZ, Zürich, 08-24 ▶
- Passerone, D.** Materials science: Where atomistic simulations can help, EMPA-NIMS-KIT-MPIMF-workshop, DE, 01-11 thru 12 ▶
- Passerone, D.** A Supramolecular Engineering via Chemical modification of 2H-TPP: carbon de-hydrogenation and flat conformation, <S|P|S> Joint Annual Meeting 2011, 06-15 thru 17 ▶
- Pignedoli, C.** molecules @ surfaces: complex reactions simple mechanisms complex simulations, EMPA-NIMS-KIT-MPIMF-workshop, DE, 01-11 thru 12 ▶●
- Pignedoli, C.** Nanostructures and adsorption on metallic surfaces, 2nd CP2K Tutorial, ETH, Zürich, 02-07 thru 11 ▶●
- Pignedoli, C.** Surface-assisted synthesis of graphene nanoribbons and heterojunctions: an atomistic insight. <S|P|S> Joint Annual Meeting 2011, 06-15 thru 17 ▶
- Pignedoli, C.** Bottom-up design of molecular nanostructures: Experiments and simulations at Empa. CNR NANO – S3, Modena, IT, 07-04 thru 11 ▶●

Organisation ■
 Poster = ◆
 Lecture = ▶
 invited = ●

Empa Activities 2011

Conferences

nanotech@surfaces

- Pignedoli, C.** Storage of Methane by van der Waals confinement: Sumanene/Ag(111) a preliminary experimental/computational study, Nanoenergetics: theoretical and experimental approaches, Trieste, IT, ●●
- Prinz, J.** Surface termination of PdGa(111) and PdGa(-1-1-1), 12th Palladium day, Berlin, DE, 03-14 thru 15 ●
- Prinz, J.** Surface Science Investigations of Intermetallic Pd-Ga Catalysts, EPFL, Winter School 2011, Crans Montana, 03-28 thru 04-01 ◆
- Prinz, J.** Surface Structure Determination of PdGa Catalysts. <S|P|S> Joint Annual Meeting 2011, 06-15 thru 17 ◆
- Prinz, J.** Surface Structure Determination of PdGa Catalysts, 1st International Symposium on Intermetallic Compounds in Methanol Steam Reforming, DE, 09-19 ◆
- Prinz, J.** CO adsorption on PdGa(111) and (-1-1-1) and first insights into PdGa(110) surfaces, 13th Palladium Day, Obergurgl, AT, 10-04 ●
- Ruffieux, P.** Bottom-up fabrication of graphene-related materials. Fachbereich Physik. Universität, Konstanz, DE, 01-27 ●●
- Ruffieux, P.** Bottom-up fabrication of graphene-related materials, IBM, Rüschlikon, 04-05 ●●
- Ruffieux, P.** Bottom-up fabrication of graphene-related materials. COST action NanoTP, Empa Akademie, Dübendorf, 04-07 ●
- Ruffieux, P.** On-surface synthesis and characterization of graphene nanostructures. Graphene week 2011, Obergurgl, AT, 03-27 ◆
- Ruffieux, P.** Bottom-up fabrication of graphene nanostructures. Swiss-Swedish meeting on quantum materials, Stenungsbaden, SE, 08-25 ●●
- Ruffieux, P.** Atomically precise bottom-up fabrication of graphene nanoribbons. NanoteC11, International conference on Carbon Nanoscience and Nanotechnology, Nantes, FR, 08-31 ●●
- Ruffieux, P.** Carbon Nanostructures with manifold applications. FSRM, Empa Akademie, Dübendorf, ●●
- Ruffieux, P.** Micro- und Nanotechnology. Euregio Bodensee, DE, ●●
- Widmer, R.** Investigations of the catalytically active intermetallic PdGa(111) surface. ISSC-18, Warwick University, UK, 04-04 ◆
- Widmer, R.** Fundamentals of Complex Metallic Alloys. Tecos – appliCMA, Celje, SI, 05-04 thru 07 ●
- Widmer, R.** Investigations of the catalytically active intermetallic PdGa(111) surfaces. Cost Action MSR, FHI, Berlin, DE, 09-19 thru 20 ◆

Thin Films and Photovoltaics

- Blösch P./Chirila A./Pianezzi F./Seyrling S./Rosbach P./Buecheler S./Nishiwaki S./Tiwari A. N.** Comparative Study of Different Back Contact Designs for High Efficiency CIGS Solar Cells on Stainless Steel Foils, 37th IEEE PVSC 2011, Seattle, US, 06-19 thru 24 ●
- Buecheler S./Chirila A./Perrenoud J./Kranz L./Gretener C./Blösch P./Pianezzi F./Seyrling S./Tiwari A. N.** Flexible and Lightweight Solar Modules for New Concepts in Building Integrated Photovoltaics, CISBAT11 2011, Lausanne, 09-14 thru 16 ●
- Buecheler S./Tiwari A. N.** Flexible CIGS and CdTe Thin Film Solar Cells, 3rd Thin Film PV Summit 2011, Berlin, DE, 03-03 thru 04 ●●
- Chirila A./Blösch P./Pianezzi F./Seyrling S./Nishiwaki S./Buecheler S./Tiwari A. N.** Efficiency Improvement of Flexible Cu(In,Ga)Se₂ Solar Cells from 14.1% to 18.7%, Hamburg, DE, 09-5 thru 9 ●

Empa Activities 2011

Conferences

Thin Films and Photovoltaics

- Chirilă, A./Bloesch, P./Buecheler S./Pianezzi, F./Seyrling, S./Nishiwaki, S./Uhl, A. R./Fella, C./Verma, R./Romanyuk, Y. E/Bilger, G./Brémaud, D./Tiware, A. N.** High Efficiency Cu(In,Ga)Se₂ Solar Cells and Mini-Modules on Flexible Substrates, E-MRS Spring meeting, 2011, Nice, FR, 05-09 thru 13 ▶
- Chirilă, A./Bloesch, P./Pianezzi, F./Nishiwaki, S./Rossbach, P./Tiware, A. N.** Influence of Composition Modifications on Properties of High Efficiency Cu(In,Ga)Se₂ Solar Cells Grown at Low Temperature on Flexible Substrates, MRS 2011 Spring Meeting, San Francisco, US, 04-25 thru 29 ▶
- Fella C./Ilari G./Uhl A. R./Romanyuk Y./Seyrling S./Chirila A./Tiware A. N.** Non-Vacuum Deposition of Cu₂ZnSnSe₄ Absorber Layers for Thin Film Solar Cells, Hamburg, DE, 09-5 thru 9 ◆
- Fella C. M./Uhl A. R./Romanyuk Y./Tiware A. N.** Solution based deposition of CZTS absorber materials. International Workshop on Kesterites 2011, Barcelona, SP, 11-24 thru 25 ▶
- Gretener C./Schmitt R./Kranz L./Perrenoud J./Buecheler S./Tiware A. N.** CdTe/CdS Thin Film Solar Cells Grown in Substrate Configuration, Hamburg, DE, 09-5 thru 9 ◆
- Ilari, G./Fella, C./Uhl, R. A./Romanyuk, Y. E./Tiware A. N.** Spin-coated Cu₂ZnSnSe₄ absorbers for thin film solar cells. E-MRS Spring meeting, 2011, Nice, FR, 05-09 thru 13 ◆
- Kranz L./Perrenoud J./Buecheler S./Tiware A. N.** Low Temperature Growth of CdTe and Electrical Back Contacts for Alternative Device Configurations, Hamburg, DE, 09-5 thru 9 ▶ ●
- Kranz L./Perrenoud J./Gretener C./Buecheler S./Tiware A. N.** Reduction of Absorber Deposition Temperature in Evaporated CdTe Solar Cells, Aix en Provence, FR, 05-25 thru 27 ▶
- Kranz, L./Perrenoud, J./Pianezzi, F./Buecheler, S./Tiware, A.N.** Influence of sodium on recrystallization of CdTe solar cells during CdCl₂ treatment/MRS 2011 Spring Meeting, San Francisco, US, 04-25 thru 29 ◆
- Perrenoud J./Gretener C./Kranz L./Buecheler S./Tiware A. N.** Flexible CdTe Solar Cells on Polyimide Film with 13.8% Conversion Efficiency, Hamburg, DE, 09-5 thru 9 ◆
- Pianezzi F./Blösch P./Chirila A./Seyrling S./Buecheler S./Tiware A. N.** Investigation of Electrical Properties of Cu(In,Ga)Se₂ Thin Film Solar Cells on Stainless Steel Substrates with Different Mo Back Contact Thicknesses, Hamburg, DE, 09-5 thru 9 ◆
- Seyrling, S./Chirila, A./Güttler, D./Blösch, P./Pianezzi, F./Buecheler, S./Uhl A. R./Rossbach, P./Tiware, A. N.** Na Distribution in CIGS Solar Cells Grown with modified Three-Stage Process. 37th IEEE PVSC 2011, Seattle, US, 06-19 thru 24 ▶
- Tiware, A. N.** Development and potentials of high efficiency flexible solar cells. DPG Plastic Electronics 2011, Dresden, DE, 03-13 thru 15 ▶ ●
- Tiware, A. N.** High efficiency flexible CIGS and CdTe thin film solar cells and modules for roll-to-roll manufacturing. 1. Society of Vacuum Coaters, Chicago, April 2011, Chicago, US, 04-17 thru 20 ▶ ●
- Tiware, A. N.** Flexible thin film solar cells: Potential of high efficiency cells for cost effective solar electricity. 3. Solarplaza: The Future of Solar Module Technology, Munich, 3 June 2011, Munich, DE, 06-03 ▶ ●
- Tiware, A. N.** Prospects of flexible CIGS solar cells on polyimide film with efficiency exceeding 19%. MRS-ICMAT Conference 2011, Singapore, SG, 06-26 thru 30 ▶ ●
- Tiware, A. N.** Solar cells based on non-vacuum grown chalcogenide absorber layers. HZB Workshop on Chalcogenide Thin Film Solar Cells 2011, Berlin, DE, 09-10 ▶ ●
- Tiware, A. N.** Prospects of high efficiency flexible solar cells. Conference Royal Society Can Solar Power Deliver, London, UK, 11-14 thru 15 ▶ ●
- Tiware, A. N.** Flexible CIGS solar cells on different substrates/9. 21st International Photovoltaic Science and Engineering Conference (PVSEC-21), Fukuoka, Japan, 2011, Fukuoka, JP, 11-27 thru 30 ▶ ●

Empa Activities 2011

Conferences

Thin Films and Photovoltaics

- Tiwari, A. N./Chirila, A./Blösch, P./Perrenoud, J./Kranz, L./Seyrling, S./Buecheler, S./Nishiwaki, S.** Flexible Cu(In,Ga)Se₂ and CdTe Solar Cells: Current Status and Future Prospects, Hamburg, DE, 09-5 thru 9 ▶ ●
- Tiwari, A. N./Chirilă, A./Blösch, P./Perrenoud, J./Kranz, L./Seyrling, S./Pianezzi, F./Buecheler S./Verma, R./Nishiwaki, S./Romanyuk, Y. E./Ziltener, R./Brémaud, D.** Flexible Cu(In,Ga)Se₂ and CdTe solar cells and roll-to-roll manufacturing. MRS 2011 Spring Meeting, San Francisco, US, 04-25 thru 29 ▶ ●
- Uhl, A. R./Romanyuk, Y./Chirila, A./Fella, C. M./Blösch, P./Pianezzi, F./Tiwari, A. N.** Non-Vacuum Deposition of Cu(In,Ga)Se₂ Absorbers for Thin Film Solar Cells from True Solutions Using Alcoholic Solvents, Hamburg, DE, 09-5 thru 9 ◆
- Uhl, A. R./Tiwari, A. N.** Solar cells based on non-vacuum grown CIGS layers. 2nd International Workshop on CIGS Solar Cell Technology, Berlin, DE, 04-12 thru 14 ▶ ●
- Uhl, R. A./Romanyuk, Y. E./Tiwari, A. N.** Cu(In,Ga)Se₂ absorber formation from nanoparticle dispersions for thin film solar cells. E-MRS Spring meeting, 2011, Nice, FR, 05-09 thru 13 ◆

Civil and Mechanical Engineering

- Meier, U.** Structural Health Monitoring Made CFRP Components in Civil Structures Feasible, Seminar University of Illinois at Chicago. University of Illinois at Chicago, UIC, Chicago, US, 03-18 ▶ ●
- Meier, U.** Advanced Composite Materials, Material Beyond Materials: A Composite Tectonics Conference on Advanced Materials and Digital Manufacturing. The Southern California Institute of Architecture, SCI-Arc., Los Angeles, US, 03-26 ▶ ●
- Meier, U.** Carbon Fiber Reinforced Polymer Cables for Suspended Bridges: Why? Why Not? What If?, Seminar Department of Civil Engineering and Engineering Mechanics, Columbia University., Ney York, US, 03-29 ▶ ●
- Meier, U.** 20 Years of Experience with SHM of Objects with CFRP Components, International Symposium on Nondestructive Testing of Materials and Structures, NDTMS-20xx. Istanbul Technical University ITÜ, Istanbul, TR, 05-15 thru 18 ▶ ●
- Meier, U.** How carbon fiber reinforced polymers will challenge the construction of suspended bridges and contribute to their safety and long term reliability, 4th World Materials Research Institutes Forum on Materials Challenges for Safety and Reliability. Institute of Metal Research (IMR), Chinese Academy of Sciences (CAS), Shenyang, CN, 05-22 thru 26 ▶ ●
- Meier, U.** CFRP cables for suspended bridges and post-tensioning, Department of Civil Engineering, Tsinghua University, Beijing, CN, 05-26 ▶ ●
- Meier, U.** Kohlenstofffasern: Von der Glühlampe zum Lift in den Weltraum, Mitgliedertreffen VKB-Sektion Zürich. Empa, Erismann-Auditorium, Dübendorf, 06-28 ▶ ●
- Meier, U.** CFK im Bauwesen: Woher? Wohin?, SGL Symposium «The Carbon Company». SGL GROUP The Carbon Company, Meitingen, DE, 07-05 ▶ ●
- Meier, U.** Kohlenstofffasern: Woher, wozu, wohin?, Rotary Club Luzern Wasserturm. Grand Hotel National, Luzern, 09-27 ▶ ●
- Meier, U.** Sustainable Pedestrian Bridge Construction with Materials by Combination, International Symposium on Innovation and Sustainability of Structures in Civil Engineering, ISISS 2011. Conference Center, Xiamen University, Xiamen, CN, 10-28 thru 30 ▶ ●
- Meier, U.** Two Decades of Experience with Structural Health Monitoring of Structures with CFRP Components, The 7th National Workshop on Nondestructive Evaluation of Civil Infrastructure System (NDECIS 20xx). Central Taiwan Science Park, Taichung, TW, 11-04 ▶ ●
- Meier, U.** CFRP Cables: An Enabling Technology for Very Long-Span Bridges, Seminar Department of Civil engineering, xiamen University. Xiamen University, Xiamen, CN, 11-09 ▶ ●

Empa Activities 2011

Conferences

Acoustics/Noise Control

- Meier, U.** Leichtbau Szenarien, Empa Technology Briefing Herausforderung Leichtbau. Empa, Dübendorf, 11-21 ▶●
- Meier, U.** CFRP Cables: An Enabling Technology for Very Long-Span Bridges, International Institute for Urban Systems Engineering, College of Civil Engineering, Southeast University, Nanjing, CN, 11-28 ▶●
- Meier, U.** Structural health monitoring is supporting a successful implementation of carbon fiber composites in bridge construction, BridgeTech Conference 2011. InterContinental Shanghai Pudong Hotel, Shanghai, CN, 11-29 thru 12-02 ▶●
- Meier, U.** 20 Years of Practical Experience with Carbon Fiber Reinforced Polymers in Structural Engineering, Seminars at Department of Civil Engineering, Universidad Nacional Autónoma de México, UNAM, Mexico City, MX, 12-05 thru 10 ▶●
- Meier, U.** Long-Term Behavior of Carbon Fiber Reinforced Polymers Recorded with SHM, 5th International Conference on Structural Health Monitoring of Intelligent Infrastructure (SHMII-5) 2011, The Ritz-Carlton, Cancún, MX, 12-11 thru 15 ▶
- Richner, P.** Baukunst Schweiz – Quo Vadis? Einstürze und schwere Mängel: Ursachen und Folgerungen für die Zukunft, Tagung Bau und Wissen, Wildeg, 26-01 ▶●
- Richner, P.** Neue Materialien als Triebfeder für Innovationen im Bau, Tagung Material Kreativ Nutzen, Neuhausen, 30-08 ▶●
- Richner, P.** Analysis of catastrophic failures in Switzerland, 53° Congresso Brasileiro do Concreto, Florianopolis, BR, 01-11 thru 04 ▶●
- Brink, M./Schäffer, B./Schreckenber, D./Basner, M.** Aircraft noise indexes – recent developments and current applications, IC BEN 2011, London, UK, 07-24 thru 28 ▶
- Bütikofer, R.** Geschall: Hammerwerk mit leisem Antrieb, DAGA 2011, Düsseldorf, DE, 03-21 thru 24 ▶
- Bütikofer, R./Geyer, C./Krajči, L./Müller, A./Schuppisser, B./Weber H.** Der Leichtbauprüfstand in Dübendorf: ein neuartiger Prüfstand zur Messung der Schallübertragung im Holzbau, DAGA 2011, Düsseldorf, DE, 03-21 thru 24 ▶
- Churchill C./Hopkins C./Krajči L.** Modelling airborne sound transmission across a hybrid heavyweight-lightweight floor using Statistical Energy Analysis, Forum Acusticum 2011, Aalborg, DK, 06-27 thru 07-01
- Heutschi, K.** Vergleich StL86 + – Sonroad, Herbsttagung Schweiz. Gesellschaft für Akustik und Cercle Bruit, Murten, 11-03 thru 04 ▶
- Heutschi, K./Wschiansky, S.** Windkraftanlagen : Stand des Wissens et application de l'OPB, Herbsttagung Schweiz. Gesellschaft für Akustik und Cercle Bruit, Murten, 11-03 thru 04 ▶
- Hopkins, C./Krajči L.** Modelling sound transmission across heavyweight-lightweight floors, Symposium Cost Actions FP0702 and TU0901, Dübendorf, 11-29 ▶
- Krajči, L.** Schallschutzproblematik im Tieftonbereich im Holzbau, HolzBauSpezial Internationale Schall- und Akustiktage (ISA 2011), Bad Wörishofen, DE, 03-16 thru 17 ▶●
- Krajči, L.** Workshop COST Action FP0702, Net-Acoustics for Timber based Lightweight Buildings and Elements, Dübendorf, 11-28 thru 29 ■
- Krajči, L.** Workshop COST Action TU0901: Integrating and Harmonizing Sound Insulation Aspects in Sustainable Urban Housing Constructions, Dübendorf, 11-29 thru 30 ■
- Omlin, S./Schäffer, B./Brink, M.** Sleep disturbing effects of nightly church bell ringing in Switzerland – an impact analysis, IC BEN 2011, London, UK, 07-24 thru 28 ◆
- Pieren, R.** Soundscape im Grossraumbüro (Open Plan Office), HolzBauSpezial Internationale Schall- und Akustiktage (ISA 2011), Bad Wörishofen, DE, 03-16 thru 17 ▶●
- Pieren, R./Wunderli J. M.** Sound Reflections from Cliffs and Reverberation in an Alpine Valley, Forum Acusticum 2011, Aalborg, DK, 06-27 thru 07-01 ▶

Empa Activities 2011

Conferences

Acoustics/Noise Control

- Pietrzko, S.** Control of sound transmission through a double wall structure, MARDXH, 10th International Conference on Active Noise and Vibration Control Methods, Wojanow, PL, 06-06 thru 08 ▶ ●
- Pietrzko, S.** Vibration identification of triple pane insulating glazing, The Institute of Noise Control Engineering's Annual Conference, Noise-Con 2011, Portland, US, 07-25 thru 28 ▶
- Schäffer, B./Brink, M./Thomann, G./Huber, P./Plüss, S./Hofmann, R.** Zurich Aircraft Noise Index ZFI – basics, application, and special aspects, Forum Acusticum 2011, Aalborg, DK, 06-27 thru 07-01 ▶
- Schäffer, B.** Zürcher Fluglärm-Index ZFI – Erfahrungen, Acoustics Colloquium ETHZ, Zürich, 11-30 ▶ ●
- Wunderli, J. M.** MeteoSchweiz, Seminar, Noise-mapping on the basis of COSMO-2 data, Zürich, 06-11 ▶ ●

Applied Wood Materials

- Carmeliet J./Derome D./Guyer R. A./Kim H. A.** A new insight in porous materials by understanding hysteresis in mechanical, sorption and swelling processes, 3rd International Conference on Porous Media, Université Bordeaux, Bordeaux, FR, 03-29 thru 31 ▶
- Derome, D./Patera, A./Rafsanjani, A./Griffa, M./Carmeliet, J.** Hygromorphic behavior hysteretic swelling and shrinkage of latewood and earlywood probed by phase contrast x-ray tomography, Conference Instabilities across the scale, Cairns, AU, 06-7 thru 10 ▶
- Derome, D./Patera, A./Griffa, M./Carmeliet, J.** Hysteretic swelling and shrinkage of latewood and earlywood probed by phase contrast x-ray tomography, 3rd International Conference on Porous Media, Université Bordeaux x, Bordeaux, FR, 03-29 thru 31 ▶
- Fuhr, M.** Visualisierung, Biomassenentwicklung, Befallsmuster des Bioincising Pilzes Physisporinus vitreus, SAH Statusseminar, Bad Säckingen, DE, 04-27 ▶ ●
- Gebald, Ch.** CO₂ Capture from Air, Low-temperature system: energy, efficiency, performance, 5th Internat. Symposium Hydrogen and Energy, Stoos, 01-25 thru 27 ▶ ●
- Ho, T. T. T./Zimmermann, T./Caseri, W./Smith, P.** Barrier properties of Functional Nanofibrillated Cellulose, Clay films for packaging applications, Arlington, US, 06-06 thru 09 ▶ ●
- Jockwer, R.** Revision SIA 265: Schraubenverbindungen, Holzbautag 2011, Biel, 05-05 ▶
- Jockwer, R./Steiger, R./Frangi, A.** Design of notched beams: Requirements and recommendations for their application in structures, SAH-Statusseminar, Bad Säckingen, DE, 04-27 ▶ ●
- Jockwer, R./Steiger, R./Frangi, A.** Impact of material properties on the fracture mechanics design approach for notched beams in Eurocode 5, CIB-W18 Meeting 44, Alghero, IT, 08-29 ▶ ●
- Köhler, J./Steiger, R.** The reassessment of existing load bearing structures – Implementation into the Swiss standards, International Conference on Structural Health Assessment of Timber Structures SHATIS, Lissabon, PT, 06-16 + 17 ▶ ●
- Lehringer, C./Schubert, M./Arnold, M./Schwarze, F.W.M.R./Militz, H./Richter, K.** Bioincising von Fichtenholz und Effekte für den Oberflächenschutz, 7. Internationales Symposium 'Holz Innovativ' Rosenheim, D, Rosenheim, DE, 04-06 thru 07 ▶ ●
- Schwarze, F.** The Use of Wood Decay Fungi for Beneficial Purposes, 2011 ISA Annual International Conference & Tradeshow, Sydney, AU, 07-23 ▶ ●
- Schwarze, F.** Biological control of wood decay fungi. Innovation in Urban Ecological Management Conference, Brisbane, AU, 02-27 ▶ ●
- Sedighi-Gilani, M./Griffa, M./Carmeliet, J./Mannes, D./Lehmann, E./Derome, D.** Quantitative analysis of liquid water uptake in softwoods by thermal neutron radiography. 3rd International Conference on Porous Media, Université Bordeaux x, Bordeaux, FR, 03-29 thru 31 ▶ ◆
- Steiger, R.** Holzbau / Empa-Technology Briefing «Herausforderungen im Leichtbau», Dübendorf, 11-21 ▶
- Steiger, R./Gehri, E.** Interaction of shear stresses and stresses perpendicular to the grain, CIB-W18 Meeting 44, Alghero, IT, 08-29 ▶ ●

Empa Activities 2011

Conferences

Applied Wood Materials

- Stührk, C.** Visualisierung, Quantifizierung und Modellierung des Bioincising Pilzes *Physisporinus vitreus*, SAH Statusseminar, Bad Säckingen, DE, 04-27 ▶●
- Tannert, R./Vogel, M./Widmann, R.** Long-term moisture content and deformation measurement of block-laminated timber. Wood NDT 2011, Sopron, HU, 09-14 thru 16 ▶●
- Tingaut, P./Zimmermann, T.** Elaboration of bionanocomposite materials from Poly(lactic acid) and functionalized Microfibrillated Cellulose, 5th International Wood Fiber Polymer Composites Symposium, Biarritz, F, 09-26 thru 27 ▶●
- Widmann, R.** Grading of thermally modified beech timber, Wood NDT 2011, Sopron, HU, 09-14 thru 16 ▶●
- Widmann, R./Brönnimann, R.** Monitoring of a CFRP-GFRP-timber bowstring arch bridge using novel sensing systems. International Conference on Structural Health Assessment of Timber Structures SHATIS, Lissabon, PT, 06-16 + 17 ▶●
- Widmann, R./Steiger, R.** Eingeklebte profilierte Stahlstäbe/Holzbahtag 2011, Biel, 05-05 ▶●
- Zhang, Z./Tingaut, P./Zimmermann, T./Sèbe, G.** Novel silicone nanocomposites reinforced with functionalised nanofibrillated cellulose. 3rd Internat. Conference on Biodegradable and Biobased Polymers BIOPOL, Strassburg, F, 08-29 thru 31 ▶
- Zimmermann, T./Eyholzer, Ch./Ho, T. T. T./Gebald, Ch./Tingaut, P./Bourban, P.-E.** Nanofibrillated Cellulose for niche applications, IAWS 2011-conference, Stockholm, Se, 08-31 thru 09-02 ▶●
- Zimmermann, T./Eyholzer, Ch./Ho, T. T. T./Gebald, Ch./Tingaut, P./Bourban P.-E.** Nanofibrillated cellulose for hydrogel, aerogel, and membrane applications. 19th BEPS BioEnvironmental Polymer Society Annual Meeting, Vienna, AU, 09-18 thru 30 ▶●

Building Science and technology

- Allegrini, J./Dorer, V./Carmeliet, J.** Influence of the urban micro climate on the energy demand of buildings, «CleanTech for Sustainable Buildings – From Nano to Urban Scale» CISBAT 2011, Lausanne, 09-14 thru 16 ▶
- Allegrini, J./Dorer, V./Carmeliet, J.** Analysis of convective heat transfer at building façades in cities and its influence on the energy demand in buildings, ICWE13, Amsterdam, NL, 07-10 thru 15 ▶
- Allegrini, J./Dorer, V./Carmeliet, J.** Buoyant flow in a street canyon: Comparison of CFD simulations and wind tunnel measurements, PHYSMOD2011, Hamburg, DE, 08-22 thru 24 ▶
- Brunner, S./Stahl, T./Ghazi Wakili, K.** Double layered vacuum insulation panels, IVIS 2011, Ottawa, CA, 09-15 thru 16 ▶
- Brunner, S./Stahl, T./Zimmermann, M./Koebel, M.** Aerogel based insulation for building application IVIS 2011, Ottawa, CA, 09-15 thru 16 ▶
- Derluyn, H./Carmeliet, J.** A combined neutron – X-ray imaging study characterizing salt crystallization damage in porous limestone, Interpore 2011, Bordeaux, FR, 03-29 thru 31 ▶
- Derluyn, H./Griffa, M./Mannes, D./Jerjen, I./Dewanckele, J./Vontobel, P./Derome, D./Cnudde, V./Lehmann, E./Carmeliet, J.** Quantitative analysis of saline transport and crystallization damage in porous limestone visualized by neutron and X-ray imaging, SWBSS 2011, Limmassol, CY, 10-19 thru 22 ▶
- Goto, Y./Frank, Th./Ghazi Wakili, K./Ostermeyer, Y./Stahl, Th./Wallbaum, H.** A study on heat and moisture balance of sustainable building envelope for subtropical regions, «CleanTech for Sustainable Buildings – From Nano to Urban Scale» CISBAT 2011, Lausanne, 09-14 thru 16 ▶
- Gurav, J. L./Jung, I-K./Ha, T-J./Nadargi, D. Y./Park, H-H.** Multi-Wall Carbon Nanotubes Hosted Silica Aerogel Films, ICTF-15, Kyoto, JP, 11-8 thru 11 ▶
- Hugi, E./Ludwig, C./Lattimer, B./Mathys, Z./Mouritz, A./Feih, S./Case, S./Gibson, G.** Large-scale structural fire investigation of composite panels under compressive load. Proceedings of the 6th International Conference on Composites in fire (CIF'6), Newcastle upon Tyne, UK, 06-9 thru 10 ▶●
- Koebel, M. M.** Liquid phase anodic bonding as a novel, hermetic glass metal sealing technique, European Coatings Conference, Berlin, DE, 11-22 thru 23 ▶

Empa Activities 2011

Conferences

Building Science and

- Griffa, M./Ferdowsi, B./ Carmeliet, J./Daub, E. G./ Guyer, R. A./Johnson, P. A./ Marone, C.** Granular stick-slip and the micromechanics of dynamic earthquake triggering, Instabilities Across the Scales IAS III, Palm Cove, AU, 06-06 thru 10 ▶
- Moonen, P./Dorer, V./Carmeliet, J.** On the relevance of incorporating flow unsteadiness in simulations of wind flow in the urban environment, Amsterdam, NL, 07-10 thru 15 ▶
- Moonen, P./Gromke, Ch./ Dorer, V./Carmeliet, J.** LES of dispersion in a street canyon with tree planting, PHYSMOD2011, Hamburg, DE, 08-22 thru 24 ▶
- Nadargi, D.Y./Koebel, M. M.** Preparation of transparent conducting ATO thin films via epoxide-initiated sol-gel chemistry, Kyoto, JP, 11-8 thru 11 ▶
- Patera, A./Griffa, M./Derome, D./ Carmeliet, J.** Analysis of latewood/earlywood coupling effects on swelling/shrinkage by srPCxTM and 3D image analysis; Workshop «Mixed numerical and experimental methods applied to the mechanical characterization of bio-based materials», Villa Real, PT, 04-27 thru 28 ▶
- Paterna, E./Moonen, P./Dorer, V./ Carmeliet, J.** Turbulent flow around a surface-mounted cube; time resolved and time-averaged PIV measurements and comparison with numerical simulations, PHYSMOD2011, Hamburg, DE, 08-22 thru 24 ▶
- Saneinejad, S./Moonen, P./ Carmeliet, J.** Analysis of convective heat and mass transfer at the vertical walls of a street canyon: drying behavior after a rain event, ICWE13, Amsterdam, NL, 07-10 thru 15 ▶
- Saneinejad, S./Moonen, P./ Carmeliet, J.** Introducing a coupled model to simulate drying of a porous wall in a street canyon and the resulting evaporative cooling, PHYSMOD 2011, Hamburg, DE, 08-22 thru 24 ▶
- Sedighi-Gilani, M./Griffa, M./ Carmeliet J./Derome, D.** Visualization and quantification of liquid water transport in softwood by means of neutron radiography. Users' meeting at Paul Scherrer Institut, Villigen, 09-15 thru 16 ▶ ●
- Sedighi-Gilani, M./Griffa, M./ Mannes, D./Lehmann, E./ Carmeliet, J./Derome, D.** Quantitative analysis of water uptake in softwood by thermal neutron radiography, Interpore 2011, Bordeaux, FR, 03-29 thru 31 ▶
- Wangler, T.** Mathematical modeling of biocide release from architectural coatings, Esslingen, DE, 02-21 thru 22 ▶ ●
- Wangler, T.** Modeling biocide release from architectural coatings, Berlin, DE, 04-12 thru 13 ▶ ●
- Zimmermann, M./Brunner, S.** VIP market development recommendations based on the SELF experimental building, IVIS 2011, Ottawa, CA, 09-15 thru 16 ▶

Center for Synergetic Structures

- Galliot, C./Luchsinger, R./ Luchsinger, R.** Determination of the response of coated fabrics under biaxial stress: Comparison between different test procedures. Structural Membranes 2011, Barcelona, ES, 10-05 thru 07 ▶
- Luchsinger, R.** Bioinspired self-repairing membranes for inflatable structures. International Industrial Convention on Biomimetics, Berlin, DE, 03-16 thru 17 ▶ ●
- Luchsinger, R.** Tension, Air & Integrity. Structural Membranes 2011, Barcelona, ES, 10-05 thru 07 ▶ ●
- Luchsinger, R. et al.** Towards the design of twings. AWEC 2011, Leuven, BE, 05-24 thru 25 ▶
- Luchsinger, R./Galliot, C.** Effect of fabric webs on the static response of spindle-shaped Tensairity girders. IABSE-IASS 2011, London, GB, 09-20 thru 23 ▶

Concrete/ Construction Chemistry

- Aimoz, L./Wieland, E./Kulik, D. A./ Glaus, M. A./ Curti, E./ Lothenbach, B.** 1st International Symposium on Cement-Based Materials for Nuclear Wastes (NUWCEM 2011). Characterization and solubility determination of the solid solution between AFm-I2 and AFm-SO4Hydration of blended cements, Avignon, FR, 10-11 thru 14 ▶
- Ben Haha, M./Le Saoût, G./ Lothenbach, B./Winnefeld, F.** 13th International Congress on the Chemistry of Cement (XIII ICC 2011). The hydration mechanisms of alkali activated slag systems (AAS) with different MgO content., Madrid, ES, 07-03 thru 08 ▶
- De Weerd, K./Justnes, H./ Lothenbach, B./Ben Haha, M.** 13th International Congress on the Chemistry of Cement (XIII ICC 2011). The effect of limestone powder additions on strength and microstructure of fly ash blended cements., Madrid, ES, 07-03 thru 08 ▶

Empa Activities 2011

Conferences

Concrete/ Construction Chemistry

- Deschner, F.** 4. Cemnet Workshop: Blended and Alternative Cements.
Hydration of fly ash in blended Portlandcement, Akademie, Dübendorf, 05-16 ▶
- Deschner, F./Lothenbach, B./
Winnefeld, F./Schwesig, P./
Seufert, S./Dittrich, S./
Neubauer, J.** 13. Tagung Bauchemie : GDCh-Fachtagung. Investigation of a model system to characterize the pozzolanic reactivity of two low Ca fly ashes and a quartz powder., Hamburg, DE, 10-06 thru 07 ◆
- Deschner, F./Winnefeld, F./
Lothenbach, B./Dittrich, S./
Goetz-Neunhoeffer, F./
Neubauer, J.** 13th International Congress on the Chemistry of Cement (XIII ICC 2011).
Contribution of class F fly ash to the hydration reactions in blended Portland cements., Madrid, ES, 07-03 thru 08 ▶
- Diaz, A./Trtik, P./
Guizar-Sicairos, M./Münch, B./
Menzel, A./Bunk, O.** MRS Fall Meeting 2011, Symposium PP. Quantitative X-Ray Phase Nanotomography: Applications in Materials Science, Boston, MA, US, 11-28 thru 12-2 ▶
- Dilnesa, B.** CEMNET meeting. Fe-containing phases in hydrated cement., Bern, 10-19 ▶
- Dilnesa, B.** EPFL Lab seminar. Ferrite reactions, Leysin, 01-25 thru 27 ▶
- Dilnesa, B. Z./Lothenbach, B./
Le Saoût, G./Wieland, E./
Scrivener, K. L.** 13th International Congress on the Chemistry of Cement (XIII ICC 2011).
Fe-containing hydrates in cementitious system., Madrid, ES, 07-03 thru 08 ▶
- Ferrari, L./Kaufmann, J. P./
Winnefeld, F./Plank, J.** Swiss Soft Days 5, Lausanne, 02-03 ◆
- Ferrari, L./Kaufmann, J. P./
Winnefeld, F./Plank, J.** Colloids and Materials 2011,
The 1st International Symposium on Colloids and Materials, Amsterdam, NL, 05- 08 thru 11 ◆
- Ferrari, L./Kaufmann, J. P./
Winnefeld, F./Plank, J.** 13th International Congress on the Chemistry of Cement (XIII ICC 2011).
Effect of filler on early hydration., Madrid, ES, 07-03 thru 08 ▶
- Ferrari, L./Kaufmann, J. P./
Winnefeld, F./Plank, J.** 13th International Congress on the Chemistry of Cement (XIII ICC 2011).
Multi-method approach for the characterization of the behavior of superplasticizer in cement suspensions., Madrid, ES, 07-03 thru 08 ▶
- Ferrari, L./Kaufmann, J. P./
Winnefeld, F./Plank, J.** Swiss Soft Days 6, Lausanne, 10 -28 ◆
- Guizar-Sicairos, M./Diaz, A./
Trtik, P./Holler, M./Menzel, A./
Bunk, O.** JUM@P 11, Joint Users' Meeting at PSI 2011. Quantitativeness and Projection Processing for X-ray Ptychographic Nanotomography, Villigen, 09-14 through 15 ◆
- Iñiguez Sánchez, C. A./
Gómez Zamorano, L. Y./
Lothenbach, B.** 13th International Congress on the Chemistry of Cement (XIII ICC 2011).
Microstructure and mechanical properties of composite cements with ultra fine silica waste additions., Madrid, ES, 07-03 thru 08 ▶
- Kaufmann, J.** Sixth International Smposium on Sprayed Concrete, Tromsø, NO, 09-12 thru 15 ▶
- Kaufmann, J.** 20 Jahre CT an der Empa, Dübendorf, Akademie, 11-17 ▶ ●
- Kaufmann, J./Winnefeld, F.** IRES 2011, Berlin, DE, 11-28 thru 30 ◆
- Kunther, W./Lothenbach, B./
Ben Haha, M./Scrivener, K. L.** 13th International Congress on the Chemistry of Cement (XIII ICC 2011).
Thermodynamic modeling of compositional variations of an ordinary Portland cement and their effect on the phase changes under sulfate attack., Madrid, ES, 07-03 thru 08 ▶
- Le Saoût, G./Ben Haha, M.** 13th International Congress on the Chemistry of Cement (XIII ICC 2011).
Effect of filler on early hydration., Madrid, ES, 07-03 thru 08 ▶
- Leemann, A.** Alkali-Aggregat-Reaktion bei Betonbauten, Wildeg, 01-28 ▶ ●
- Leemann, A.** Massnahmen gegen die Alkali-Kieselsäure-Reaktion, Köln, DE, 06-01 ▶ ●
- Leemann, A.** Risse im Beton, Wildeg, 11-18 ▶ ●

Empa Activities 2011

Conferences

Concrete/ Construction Chemistry

- Leemann, A.** Workshop Zementqualität, Zürich, 11-25 ●●
- Leemann, A./Loser, R./Trtik, P./Münch, B.** First Middle East Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures (SMAR 2011). Blending of cements: influence on porosity and chloride resistance., Dubai, UAE, 02-08 thru 10 ●
- L'Hôpital, E.** EPFL Lab seminar. Aluminum uptake in C-S-H and the influence of alkali, Leysin, 01-25 thru 27 ●
- L'Hôpital, E.** ATHIL: physic, chemistry and mechanic of cement. Aluminum uptake in C-S-H in presence and absence of potassium, La Grande-Motte, FR, 09-25 thru 30 ◆
- Lothenbach, B.** EPFL Lab seminar. Thermodynamics and Hydration of Blended Cements, Leysin, 01-25 thru 27 ●
- Lothenbach, B.** Mont Terri Project. Hydration of blended cements, St. Ursanne, 02-17 ●●
- Lothenbach, B.** Thermodynamics of cementitious materials with mineral additions, Knowledge Transfer workshop, Nanocem, EPFL, Lausanne, 02-18 ●●
- Lothenbach, B.** vdz Fachtagung Zementchemie. Thermodynamische Modellierung der Zementhydratation, Düsseldorf, DE, 04-05 ●●
- Lothenbach, B.** 3rd CODICE Workshop on multiscale modelling and experiments for cementitious materials. Thermodynamic modelling of cements, Florence, IT, 04-11 thru 12 ●●
- Lothenbach, B.** NANOCEM. Workshop on leaching of construction materials, Barcelona, ES, 05-02 ●●
- Lothenbach, B.** 4. Cemnet Workshop: Blended and Alternative Cements. Chemistry of Blended Cements, Akademie, Dübendorf, 05-16 ●
- Lothenbach, B.** COIN Seminar. Thermodynamic modelling of cement hydration, Trondheim, NO, 05-24 ●●
- Lothenbach, B.** 22nd NIST Computer Modeling Workshop. Thermodynamic modelling of cement hydration, Gaithersburg, MD, US, 07-20 thru 22 ●●
- Lothenbach, B.** 2nd annual ACerS Cements Division/ACBM meeting. Thermodynamic modelling of cement hydration, Nashville, TN, US, 07-24 thru 26 ●●
- Lothenbach, B.** 13. Tagung Bauchemie : GDCh-Fachtagung, Hamburg, Germany. Thermodynamische Modellierung der Zementhydratation, Hamburg, DE, 10-06 thru 07 ●●
- Lothenbach, B.** 1st International Symposium on Cement-Based Materials for Nuclear Wastes (NUWCEM 2011). Hydration of blended cements, Avignon, FR, 10-11 thru 14 ●
- Lothenbach, B.** Specialized iNANO lecture. Thermodynamic modeling of cements, Aarhus, DK, 12-01 ●●
- Lothenbach, B./Kunther, W./Scrivener, K.** Expansive Reactions in Cement-Based Materials. Influence of different sulphate solutions., Corvallis, OR, US, 07-27 thru 29 ●●
- Lothenbach, B./Winnefeld, F.** 4. Cemnet Workshop: Blended and Alternative Cements, Akademie, Dübendorf, 05-16 ■
- Lothenbach, B./Damidot, B./Herfort, D./Glasser, F. P.** 13th International Congress on the Chemistry of Cement (XIII ICCM 2011). Thermodynamics and cement science., Madrid, ES, 07-03 thru 08 ●●
- Lura, P./Stang, H.** Nanocem Workshop "Early age dimensional changes and cracking", Paris, FR, 10-25 ■
- Lura, P./Di Bella, C./Fontana, P./Trindler, W./Münch, B./Leemann, A.** First Middle East Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures (SMAR 2011). An advanced experimental setup to study plastic shrinkage cracking of concrete., Dubai, UAE, 02-08 thru 10 ●
- Lura, P./Trtik, P./Münch, B.** Conference on Advances in Construction Materials through Science and Engineering, Hong Kong, PRC, 09-05 thru 07 ●
- Lura, P./Wyrzykowski, M.** Research Trends in Construction Materials Workshop, Tongji University, Shanghai, PRC, 09-02 ●●
- Lura, P./Wyrzykowski, M.** Nanocem Workshop "Early age dimensional changes and cracking". Autogenous and thermal deformations at early ages: measuring techniques and poromechanical modelling, Paris, FR, 10-25 ●●

Organisation ■
Poster = ◆
Lecture = ●
invited = ●

Empa Activities 2011

Conferences

Concrete/ Construction Chemistry

- Pelletier-Chaignat, L./** 13th International Congress on the Chemistry of Cement (XIII ICC 2011). Hydration mechanism
Winnefeld, F./Lothenbach, B./ of Portland cement – calcium sulfoaluminate clinker – calcium sulphate binders:
Le Saoût, G./Müller, C. J./Famy, C. characterization of the 1-ray amorphous hydrate assemblage., Madrid, ES, 07-03 thru 08 ▶
- Stampanoni, M./Marone, F./** UM@P 11, Joint Users' Meeting at PSI 2011.
Irvine, S./Quaroni, L. /Trtik, P./ Nanotomographic Imaging at TOMCAT, Villigen, J09-14 through 15 ♦
Mokso, R.
- Trapote-Barreira, A./Soler, J. M./** 13th International Congress on the Chemistry of Cement (XIII ICC 2011).
Cama, J./Gali, S./Lothenbach, B. C-S-H gel dissolution kinetics: first results., Madrid, ES, 07-03 thru 08 ▶
- Trtik P./Kaufmann J./Volz U./** Nanocem Spring Meeting, Workshop «Mechanical Properties». Local elastic modulus in cement
Lura, P. paste measured by peak-force tapping atomic force microscopy, Florence, IT, 04-12 ▶
- Trtik, P.** 4th International Conference on Non-traditional Cement & Concrete.
Member of the international scientific committee, Brno, CZ, 06-27 through 30 ■
- Trtik, P./Diaz, A./** JUM@P 11, Joint Users' Meeting at PSI 2011. Density mapping of hardened cement paste using
Guizar-Sicairos, M./Menzel, A./ ptychographic X-ray computed nanotomography, Villigen, 09-14 through 15 ♦
Bunk, O.
- Trtik, P./ Kaufmann, J./ Volz, U.** 4th International Conference on Non-traditional Cement & Concrete. Elastic modulus mapping of
hardened cement pastes with about 100 nm lateral resolution, Brno, CZ, 06-27 through 30 ▶●
- Trtik, P./Patapy, C./Bazzoni, A./** CCMX Annual Meeting.
Juilland, P./Stampanoni, M./ Synchrotron phase-contrast nanotomography of hardened cementitious materials, Bern, 05-05 ♦
Scrivener, K./Lura, P
- Wieland, E./Dähn, R./** 13th International Congress on the Chemistry of Cement (XIII ICC 2011).
Dilnesa, B. Z./Lothenbach, B. micro-spectroscopic investigations on Al, S, and Fe speciation in Synchrotron-based
cementitious materials., Madrid, ES, 07-03 thru 08 ▶
- Winnefeld, F.** 4. Cemnet Workshop: Blended and Alternative Cements. Calcium sulfoaluminate cements – a low
CO₂-alternative to Portland cement? Empa-Akaedmie, Dübendorf, 05-16 ▶
- Winnefeld, F./Ben Haha, M./** 13th International Congress on the Chemistry of Cement (XIII ICC 2011).
Lothenbach, B. Hydration mechanisms of calcium sulfoaluminate cements assessed by scanning electron
microscopy and thermodynamic modelling., Madrid, ES, 07-03 thru 08 ▶
- Winnefeld, F./Kaufmann, J. P.** First Middle East Conference on Smart Monitoring, Assessment and Rehabilitation of Civil
Structures (SMAR 2011). Concrete produced with calcium sulfoaluminate cement: a potential
system for energy and heat storage., Dubai, UAE, 02-08 thru 10 ▶
- Winnefeld, F./** 13. Tagung Bauchemie : GDCh-Fachtagung, Hamburg, Germany. Hydratationsmechanismus von
Pelletier-Chaignat, L./ ternären Bindemittelsystemen auf Basis Portlandzement, Calciumsulfoaluminatzement und
Lothenbach, B./Le Saoût, G./ Calciumsulfat., Hamburg, DE, 10-06 thru 07 ▶
Müller, C./Famy, C.

Mechanical Systems Engineering

- Brunner, A. J.** Schallemissionsanalyse – Einführung, Institut für Werkstoffkunde und Prüfung der Kunststoffe,
Montanuniversität Leoben, Leoben, AT, 04-01 ▶●
- Brunner, A. J.** From materials and components to structural health monitoring systems and smart structures:
Examples from research on advanced composites, International Conference on Advanced
Technology in Experimental Mechanics, Kobe, JP, 09-20 ▶●
- Brunner, A. J.** Piezoceramic Composites for Structural Health Monitoring,
Department of Engineering Sciences, Tokyo Institute of Technology, Tokyo, JP, 09-22 ▶●
- Brunner, A. J./Bachmann, F.** Schallemissionsanalyse von Zugversuchen an Piezoplättchen mit unterschiedlicher Vorspannung,
18. Kolloquium Schallemission, Wetzlar, DE, 10-27 thru 28 ▶
- Brunner, A. J./Major, Z.** Fracture Mechanics Test Methods for Polymers and Composites, 28th Danubia-Adria Symposium on
Advances in Experimental Mechanics, Siófok, HU, 10-01 ▶●
- Brunner, A. J./Piskoty, G./** Schadensprävention hochbeanspruchter Bauteile und Komponenten, Empa, Dübendorf, 11-08 ■
Weisse, B.

Organisation ■
Poster = ♦
Lecture = ▶
invited = ●

Empa Activities 2011

Conferences

Mechanical Systems Engineering

- Brunner, A. J./Ritschel, F./Niemz, P.** Analyse der Wellenformen ausgewählter Zugversuche an Holzwerkstoffen, 51. Sitzung Fachausschuss Schallemissionsprüfverfahren der DGZfP, Starnberg, DE, 04-07 ▶
- Brunner, A. J./Stelzer, S.** Mode-I Ermüdungsrisswachstum in Faserverbund-Laminaten, 35. Sitzung Fachgruppe Strukturintegrität des SVM, SR Technics, Kloten, 04-27
- Brunner, A. J./Stelzer, S./Dell'Anno, G./Pinter, G./Terrasi, G. P.** Delamination resistance of advanced fiber-reinforced polymer-matrix laminates under fatigue loading: Approaches for Mode II and Mixed Mode I/II testing, 6th International Conference on Fracture of Polymers, Composites and Adhesives, Les Diablerets, 09-12 ▶
- Dürager, C./Heinzelmann, A./Riedener, D.** Wireless sensor network for guided wave propagation with piezoelectric transducers, 8th International Workshop on Structural Health Monitoring, Stanford, US, 09-13 thru 15 ▶
- Dürager, C./Heinzelmann, A./Riedener, D.** Strukturüberwachung an Composite Bauteile mittels Piezo-Sensoren, 26. International H.F. Mark-Symposium, Vienna, AT, 10-06 ▶●
- Koller, R.** DGM-Seminar «Systemische Beurteilung technischer Schadenfälle», Ermatingen, 03-10 ▶●
- Ritschel, F./Brunner, A. J./Niemz, P.** Nondestructive evaluation of damage accumulation in tensile test specimens made from solid wood, plywood and laminated veneer lumber (LVL), 16th International Conference on Composite Structures, FEUP, Porto, PT, 06-28 thru 30 ▶
- Ritschel, F./Brunner, A. J./Niemz, P.** Combining Image Correlation from Optical Methods and Acoustic Analysis for Investigating Damage Evolution in Plywood, 17th International Nondestructive Testing and Evaluation of Wood Symposium, Sopron, HU, 09-14 thru 26 ▶
- Ritschel, F./Brunner, A. J./Niemz, P.** Wellenformanalyse von Schallemissionssignalen ausgewählter Zugversuche an Vollholz- und Sperrholz/LVL-Prüfkörpern, 18. Kolloquium Schallemission, Wetzlar, DE, 10-27 thru 28 ▶
- Stelzer, S./Brunner, A. J./Argüelles, A./Murphy, N./Pinter, G.** Mode I delamination fatigue crack growth in unidirectional fibre reinforced composites: Development of a standardized test procedure, Deformation and Fracture of Composites (DFCF11), Cambridge, GB, 04-15 ▶
- Stelzer, S./Brunner, A. J./Argüelles, A./Murphy, N./Pinter, G./Cano, G. M.** Mode I Delamination Fatigue Crack Growth In Unidirectional Fibre Reinforced Composites: Results from ESIS TC4 round-robins, 6th International Conference on Fracture of Polymers, Composites and Adhesives, Les Diablerets, 09-12 ▶
- Terrasi, G./Brönnimann, R./Bättig, G.** CFRP Tendon Prestress Monitoring by Resistance Measurement in a Spun Concrete Powerline Pylon, SMAR 2011, Dubai, UAE, 02-11 ▶
- Terrasi, G./Brönnimann, R./Bättig, G.** Prefabricated thin-walled structural elements made from HPC prestressed with pultruded carbon tendons, University of Edinburgh, Civil Engineering Seminary, Edinburgh, UK, 09-28 ▶●

Mechanics for Modelling and Simulation

- Campanile, F./Hasse, A./Ermanni, P.** Compliant mechanism as a key technology for morphing, ICAST 2011 International Conference on Adaptive Structures and Technologies, Corfu, GR, 10-10 thru 12 ▶
- Delpero, T./Bergamini, A./Ermanni, P.** Shunted Piezoelectric Damping: Identification of the Electromechanical Parameters and Prediction of the Dissipated Energy, ICAST 2011 International Conference on Adaptive Structures and Technologies, Corfu, GR, 10-10 thru 12 ▶
- Delpero, T./Di Lillo, L./Bergamini, A./Ermanni, P.** Piezoelectric Vibration Damping Using Autonomous Synchronized Switching on Inductance, SMASIS 2011, Conference on Smart Materials, Adaptive Structures and Intelligent Systems, Scottsdale, Az, US, 09-18 thru 21 ▶
- Di Lillo, L./Carnelli, D. A./Bergamini, A./Ermanni, P.** Multilayered Structures for Electrobonded Laminates, SMASIS 2011 Conference on Smart Materials, Adaptive Structures and Intelligent Systems, Scottsdale, Az, US, 09-18 thru 21 ▶
- Di Lillo, L./Schmidt, A./Bergamini, A./Ermanni, P./Mazza, E.** Dielectric and insulating properties of an acrylic DEA material at high near-DC electric fields, SPIE 7976 Conference on Smart Structures, San Diego, CA, US, 03-06 thru 10 ▶
- Holdsworth, S. R.** Workshop on Materials Science for Energy Technologies, Empa – NIMS – KIT – MPIMF, Karlsruher Institut für Technologie, Karlsruhe, DE, 01-11 thru 12 ■
- Holdsworth, S. R.** Werkstoffkolloquium Sommersemester 2011, Karlsruher Institut für Technologie, Seminarvortrag Creep-fatigue interaction in steels, Karlsruhe, DE, 05-17 ▶●

Empa Activities 2011

Conferences

Organisation	Activity	Location	Date	Poster	Lecture	Invited
Mechanics for Modelling and Simulation	Holdsworth, S. R.	Small Punch Test Workshop – Testing and Processing of Data, University of Nottingham, Empa small punch testing capability, Nottingham, UK,	06-27 thru 28			
	Holdsworth, S. R.	Sulzer Turbo Machinery Technology Day, Developments in the assessment of creep-fatigue interaction in power plant materials, Winterthur,	09-15			
	Holdsworth, S. R.	EPRI Creep – Fatigue Experts Workshop, CFI Datasheet development and creep-fatigue microstructural characterisation, Buson, KR,	10-17 thru 19			
	Jähne, R./Mazza, E./Campanile, F.	Modelling of textured superelastic sheets and numerical simulations, ICCM2, International Conference on Material Modelling, Paris, F,	08-31 thru 09-02			
	Mazza, E.	Mechanical characterization of soft human tissues, IUTAM Symposium on Biomechanics, Stanford, CA, US,	28-08-02-09			
	Mazza, E.	Mechanical modeling of biological membranes, Kolloquium on Regenerative Medicine, USZ, Zurich,	12-10			
	Pham, M. S./Holdsworth, S. R.	Conference of Mechanical Behaviour of Materials (ICM11), Change of stress-strain hysteresis loop and its links with microstructural evolution in AISI 316L during cycling loading, Como, I,	06-5 thru 9			
	Raither, W./Bergamini, A./Ermanni, P.	Profile Beams with Adaptive Bending-Twist Coupling by Adjustable Shear Center Location, ICAST 2011 International Conference on Adaptive Structures and Technologies, Corfu, GR,	10-10 thru 12			
	Schmidt, A./Bergamini, A./Jordi, C./Kovacs, G./Mazza, E.	Electro-mechanical modeling of dielectric elastomer transducers with micro-structured electrodes, SPIE 7976 Conference on Smart Structures, San Diego, CA, US,	03-06 thru 10			
	Road Engineering/ Sealing Components	Arraigada, M./Partl, M. N.	Vorhandene Ergebnisse und zukünftige Projekte-Mobile Load Simulator MLS10, DACH Bemessungsausschüsse, Zürich,	5-19		
Bavusi, M./Loperte, A./Soldovieri, F./Di Napoli, R./Dumoulin, J./Hugenschmidt, J./Fürholz, P.		Impact shock damage assessment on a beam and its foundation soil by using Ground Penetrating Radar and Electrical Resistivity Tomography, EGU General Assembly 2011, Vienna, AT,	4-8			
Fürholz, P./Hugenschmidt, J.		Towards an automated mobile GPR acquisition system for road and bridge monitoring, EGU General Assembly 2011, Vienna, AT,	4-8			
Hailesilassie, B. W./Partl, M. N.		Mechanisms of Short-Term Blistering Affecting Deterioration of Concrete Structures with Asphalt Pavements, 4 th in Symposium on Durability of BUilding and Construction Sealants and Adhesives, Anaheim, US,	6-16			
Hean, S.		Swiss Experience and Research on Flexible Plug Expansion Joints for Road Bridges, Conference «Themabijeenkomst 4 ; Bitumineuze Voegovergangen», in CUR Bouw & Infra, Gouda, NL,	6-21			
Hugenschmidt, J.		GPR for bridge inspections, Workshop: Innovative tools and techniques for the control and monitoring of infrastructure and buildings in urban areas – The Project ISTIMES, Sasso di Castalda, IT,	7-21			
Kalogeropoulos, A./van der Kruk, J./Hugenschmidt, J.		Monitoring the evolution of water and chloride in concrete using GPR full-waveform inversion, IWAGPR 2011, Aachen, DE,	6-24			
Partl, M. N.		Testing with Swiss MLS10 in 2010/ 90 th Annual Meeting of TRB, MLS User Group Workshop, Washington DC, US,	1-23			
Partl, M. N.		Accelerated Pavement Testing, Public Highway and Railway Engineering Seminary, KTH, Stockholm, SE,	2-18			
Partl, M. N.		Flexible Bituminous Plug Expansion Joints for Concrete Bridges, 11 th intern. RMPD Symposium, Changsha, Hunan, CN,	03-03			
Partl, M. N.	Activities of RILEM Technical Committee SIB, International Forum, AAPT annual meeting, Tampa, US,	3-28				

Organisation ■
 Poster = ◆
 Lecture = ▶
 invited = ●

Empa Activities 2011

Conferences

Road Engineering/ Sealing Components

- Partl, M. N.** Special Aspects Regarding Aging/Healing in Asphalt, Annual KTH Highway and Railway Engineering Workshop, Stockholm, SE, 8-16 ▶ ●
- Partl, M. N.** Experimental Investigation of Moisture damage in Asphalt, Annual KTH Highway and Railway Engineering Workshop, Stockholm, SE, 08-17 ▶ ●
- Partl, M. N.** Erfahrungen mit mobilen Verkehrslastsimulatoren, 7th Internat Verkehrstage, Wuppertal, DE, 10-7 ▶ ●
- van der Kruk, J./
Kalogeropoulos, A./
Hugenschmidt, J./Busch, S./
Merz, K.** Full-waveform inversion of ground penetrating radar data to assess chloride and moisture content in concrete, EGU General Assembly 2011, Vienna, AT, 4-8 ▶ ●

Structural Engineering

- Feltrin, G.** Akustik und Schwingungen, Herausforderungen im Leichtbau, Empa Akademie, Dübendorf, 11-21 ▶
- Feltrin, G./Saukh, O./
Bischoff, R./Meyer, J.** Long-term Data Intensive Wireless Structural Monitoring: Three Years of Experiences on the Stork Bridge, Conference NDTMS-2011, Istanbul, Istanbul, TR, 05-15 thru 18 ▶
- Feltrin, G./Saukh, O./Bischoff, R./
Meyer, J./Motavalli, M.** Structural monitoring with wireless sensor networks: Experiences from field deployments, SMAR 2011, Dubai, Dubai, UAE, 02-08 thru 11 ▶ ●
- Feltrin, G./Schubert, S./Steiger, R.** Temperature effects on the natural frequencies and modal dampings of timber footbridges with asphalt pavement, EVACES 2011, Milano, Milano, IT, 10-03 thru 05 ▶
- Feltrin, G./Weber, B.** Temperatur- und Langzeitverhalten von Schwingungstilgern bei Fussgängerbrücken, Empa Akademie, Dübendorf, 06-18 ▶
- Ginés, R.** Static Permittivity of Polyer Foils determined through Friction Experiments, Empa PhD Student's Symposium 2011, St. Gallen, 10-18 ▶
- Herwig, A./Brühwiler, E.** In-situ dynamic behavior of a railway bridge girder under fatigue causing traffic loading, ICASP-Zurich2011, ETHZ, Zürich, 08-01 thru 04 ▶
- Michels, J./Czaderski, C./
Motavalli, M.** Prestressed CFRP for structural engineering, SMAR 2011 Dubai, Dubai, UAE, 02-08 thru 11 ▶
- Rizos, D./Fassois, S. D.** A-Posteriori Identifiability of the Maxwell Slip Model of Hysteresis, 18th IFAC 2011 World Congress, Milano, Milano, IT, 08-28 thru 09-02 ▶
- Rizos, D./Feltrin, G./Motavalli, M.** Structural Control of Slender Structure based on a tuned Mass damper with adaptable Stiffness, ICAST 2011: 22nd Int. Conference on Adaptive Structures and Technologies, Corfu, Corfu, GR, 10-10 thru 12 ▶
- Sadeghi, A.** Experimental investigation of the in-plane response of post-tensioned masonry walls using image measurement, Empa PhD Student's Symposium 2011, St. Gallen, 10-18 ▶
- Weber, B.** Heat and Mass Transfer in a Gypsum Board subjected to Fire, COMSOL Conference Stuttgart, Stuttgart, DE, 10-26 thru 28 ▶
- Weber, B./Feltrin, G.** Identifikation von Physikalischen Parametern von Fussgängerbrücken mit Tilgern, D-A-CH-Tagung, Hannover, Hannover, DE, 09-15 thru 16 ▶
- Weber, F./Boston, C.** Measured tracking of negative stiffness with MR damper, SMART'11 Fraunhofer, Univ. des Saarlands, Saarland, DE, 07-06 thru 08 ▶
- Weber, F./Boston, C.** Clipped viscous damping with negative stiffness for cable damping with MR damper, SMART'11 Fraunhofer, Univ. des Saarlands, Saarland, DE, 07-06 thru 08 ▶
- Weber, F./Maslanka, M.** Adaptive TMD concept based on controlled stiffness and energy dissipation emulated by MR damper, SMART'11 Faunhofer, Uni. Des Saarlands, Saarland, DE, 07-06 thru 08 ▶
- Czaderski, C./Martinelli, E./
Michels, J./Motavalli, M.** Effect of partly cured adhesive on bond-slip relationship of FRP-concrete infertace, SMAR 2011 Dubai, Dubai, UAE, 02-08 thru 11 ▶

Empa Activities 2011

Conferences

Materials meet Life

Krug, H. F.	Nanotoxicology – Quo Vadis, 50 th SOT Conference, Washington, US, 03-06 thru 12 ♦
Krug, H. F.	Nanotoxicology – Quo Vadis, 50 th SOT Conference, Washington, US, 03-06 thru 12 ♦
Krug, H. F.	Kosmetische Mittel und Nanotechnologie Prinzipien der Nanotoxikologie, BDIH Fachtagung, Mannheim, DE, 05-26 ▶●
Krug, H. F.	Toxikologische Prinzipien von Nanoobjekten, SUVA Fachtagung, Luzern, 06-06 ▶●
Krug, H. F.	Swiss NanoConvention, Baden, 05-18 thru 19 ■
Krug, H. F.	Nanomaterials in medical applications New Materials – new Problems? NanoBioMed, Triest, IT, 10-14 ▶●
Krug, H. F.	Nanotoxicology – Quo vadis?, XERR Jahrestagung, Zürich, 12-08 ▶●
Krug, H. F.	Textile Anwendungen der Nanotechnologie: Sicher auf der Haut? Hohensteiner Textiltage, Hohenstein, DE, 12-14 ▶●
Amberg, M.	Optische Spektroskopie, Workshop-Analytik und Forschung für Ihre Produktentwicklung, Empa, St. Gallen, 06-16 ▶
Chatterjee, S.	Crystalline and Tensile Properties of Carbon Nanotube-filled Polyamide-12 Fibers Meltspun by Industry-related Processes, Charleston, US, 11-10 ▶
Fortunato, G.	Advanced Synthetic fibers, Seminar at the Institute of Fundamental Technological Research of the Polish Academy of Sciences, Warsaw, PL, 04-26 ▶●
Fortunato, G.	Advanced Synthetic fibers, Seminar at the Institute of Fundamental Technological Research of the Polish Academy of Sciences, Warsaw, PL, 04-26 ▶●
Fortunato, G.	Electrostatic Spinning, FORUM für die textile Kette, Pfäffikon, 11-01 ▶●
Géraldine, G.	Towards the design of an artificial muscle construct, PhD Symposium, Graduate School for Cellular and Biomedical Sciences, Bern, 01-28 ♦
Géraldine, G.	Oxygen coating and oriented topography of fibrous matrices favour muscle-graft design, International Local Drug Delivery Meeting (LDDR), Genf, 02-07 ♦
Géraldine, G.	Implantation of a cell-polymer biograft for cardiac function stabilisation, Annual Meeting, Tissue Engineering and Regenerative Medicine International Society (TERMIS), Granada, ES, 06-07 ♦
Géraldine, G.	Muscle-graft optimisation prior to implantation: scaffold architecture and functionalisation influence cell differentiation, Annual Meeting, Tissue Engineering and Regenerative Medicine International Society (TERMIS), Granada, ES, 06-07 ▶
Géraldine, G.	Muscle-graft optimisation prior to implantation: scaffold architecture and functionalisation influence cell differentiation, Jahrestagung der Schweizerischen Gesellschaft für Kardiologie (SGK), Basel, 06-09 ♦
Géraldine, G.	Stabilisation of cardiac function after epicardial biograft implantation, Congress of the European Society of Artificial Organs (ESAO), Porto, PT, 10-09 ♦
Géraldine, G.	Plasma coated electrospun substrates for muscle tissue development, Congress of the European Society of Artificial Organs (ESAO), Porto, PT, 10-09 ♦
Guex, G.	Implantation of a novel biograft maintains cardiac function after myocardial infarction, European Students Conference (ESC), Berlin, DE, 09-21 ▶
Guex, G.	Implantation of a cell-polymer biograft for cardiac function, PhD-symposium EMPA St. Gallen, St. Gallen, 10-18 ▶
Guex, G.	A Bandage for the Heart, Day of Clinical Research, Berne, Berne, 11-02 ♦
Guex, G./Fortunato, G./Körner, E./Teveaarai, H./Giraud, M.-N.	Engineering a Muscle Graft for Myocardial Regeneration, Swiss Experimental Surgery Symposium 2011, Fribourg, 01-20 ♦

Advanced Fibers

Organisation ■
 Poster = ♦
 Lecture = ▶
 invited = ●

Empa Activities 2011

Conferences

Advanced Fibers

- Guimond, S.** Plasma als saubere Technologie für die Funktionalisierung von Textilmaterialien, Swiss Texnet Innovation Day, Dübendorf, 08-23 ▶●
- Guimond, S.** Surface functionalization of textiles with plasma processes, Man-Made Fibers Congress, Dornbirn, AT, 09-15 ▶●
- Halbeisen, M.** Wie die Nanotechnologie unsere Kleider perfektioniert (3x gehalten), Tec-Day Kantonschule Trogen, Trogen, 05-25 ▶
- Halbeisen, M.** Nanotechnologie, Weiterbildung Berufsschullehrer, Gossau, 11-03 ▶●
- Halbeisen, M./Hufenus, R.** Bikomponenten-Kunstrasenfasern für zukünftige Sportbeläge, Textilsymposium armasuisse 2011, Bern, 03-16 ▶●
- Hegemann, D.** Materialfunktionen der Zukunft, Workshop – Zukünftige Entwicklungen bei Armbanduhren, Biel, 03-30 ▶●
- Hegemann, D.** Deposition of functional plasma polymers by control of film growth conditions, 54th Annual Technical Conference Society of Vacuum Coaters (SVC), Chicago / IL, US, 04-19 ▶●
- Hegemann, D.** Plasmafunktionalisierung von Oberflächen: Möglichkeiten und Besonderheit, Anwenderkreis Atmosphärendruckplasma – Workshop, Konstanz, DE, 05-12 ▶●
- Hegemann, D.** Potential of plasma technologies for the textile industry, AUTEX Conference 2011, Mulhouse, FR, 06-09 ▶
- Hegemann, D.** Perspectives of functional plasma polymers, 18th International Colloquium on Plasma Processes, Nantes, FR, 07-06 ▶
- Hegemann, D.** Gas phase and surface processes influencing the deposition of a-C:H films, 20th International Symposium on Plasma Chemistry (ISPC), Philadelphia, US, 07-26 ◆
- Hegemann, D.** Functionalization of Fibres Using Plasma Technology, 1st Int. Biomimetic Fibre Composites Workshop, Bremen, DE, 08-30 ▶●
- Hegemann, D.** Funktionale Plasmapolymerschichten für die Textilindustrie, 7. Thüringer Grenz- und Oberflächentage, Zeulenroda-Triebes / DE, DE, 09-13 ▶
- Hegemann, D.** Resource Saving Functionalization of Textiles Using Plasma Technology, TIFE – Textile International Forum and Exhibition 2011, Taipei, TW, 10-05 ▶●
- Hegemann, D.** Plasma Chemical and Physical Aspects of Functional Plasma Polymers, WELTPP, Kerkrade, NL, 12-01 ▶●
- Heuberger, M.** Materials Research for Functional Textile Integration, Asian Textile Conference – ATC-11, Daegu, KR, 11-03 ▶●
- Heuberger, M.** Measurement of Pressure Distribution in Model-Mechanical Contacts, Nano Tribology Forum, Hoi An, VN, 05-01 ▶●
- Hufenus, R.** Advanced synthetic fibers, 3rd International R&D Project Brokerage Event, Bursa, TK, 02-10 ▶●
- Hufenus, R.** Multi-component synthetic fibers and Empa's respective research and development results, Seminar at the Taiwan Textile Research Institute, Taipei, TW, 05-20 ▶●
- Hufenus, R.** Thin flexible insulating coatings for conductive textile fibers, The Fiber Society 2011 Spring Conference, Hong Kong, HK, 05-24 ▶●
- Hufenus, R.** Multicomponent synthetic fibers, Seminar at the Hong Kong Polytechnic University, Hong Kong, HK, 05-27 ▶●
- Hufenus, R.** Fiber Development by Multicomponent Melt-Spinning, AUTEX Conference 2011, Mulhouse, F, 06-08 ▶
- Hufenus, R.** Developing the base technology for tomorrow's «smart textiles», 18th International Conference on Composite Materials (ICCM18), Jeju, KR, 08-22 ▶●

Empa Activities 2011

Conferences

Advanced Fibers

- Hufenus, R.** Design and Development of Fibers with Flexure Rate-dependent Viscoelastic Properties, International Symposium on New Frontiers in Fiber Materials Science, Charleston, US, 11-10 ▶ ●
- Hufenus, R./Gottardo, L.** Desing and development of fibers with flexure rate dependent viscoelastic properties, 50th Dornbirn Man-Made Fibers Congress, Dornbirn, AT, 09-14 ▶ ●
- Hufenus, R./Halbeisen, M.** Kunststoffverarbeitung und Charakterisierung, Analytik und Forschung für Ihre Produktentwicklung, Empa St. Gallen, 06-16 ▶
- Hufenus, R./Tischhauser, A.** Kunstrasen der neusten Generation, Analytik und Forschung für Ihre Produktentwicklung, Empa St. Gallen, 06-16 ▶
- Körner, E.** Antibakteriell und zellfreundlich durch konzeptionelles Schichtdesign, 15. Fachtagung Plasmatechnologie, Stuttgart, DE, 01-03 ▶▶ ●
- Körner, E.** Antibakteriell und zellfreundlich durch konzeptionelles Schichtdesign, 15. Fachtagung Plasmatechnologie, Stuttgart, DE, 03-01 ▶
- Körner, E.** Controlling the bioavailability of silver ions with a nanocomposite gradient coating produced in a continuous low-pressure plasma process, International Conference on Metallurgical Coatings & Thin Films, San Diego, US, 05-02 ▶
- Körner, E.** Multifunktionelle, antibakterielle Plasmapolymerschichten, Workshop: Antibakterielle Textilien, St. Gallen, 05-12 ▶ ●
- Körner, E.** Plasma treated Ag nanocomposite coatings for producing antibacterial and cytocompatible textiles, Techtexil Symposium, Frankfurt, DE, 05-25 ▶
- Körner, E.** Design of silver containing plasma polymer films for a controlled response to bacteria and mammalian cells, eCells & Materials Conferenc XII Implant Infection, Davos, 06-23 ▶
- Körner, E.** Design of silver containing plasma polymer films for a controlled response to bacteria and mammalian cells, eCells & Materials Conference XII Implant Infection, Davos, 06-23 ▶
- Körner, E.** Antibakterielle und zytokompatible Plasmapolymerschichten mit eingelagerten Silbernanopartikeln, 7. Thüringer Grenz- und Oberflächentage, Zeulenroda, DE, 09-13 ▶
- Körner, E.** Eco-friendly and high performance plasma treatments: novel perspectives for fibers and textiles, 5. Aachen-Dresden International Textile Conference, Aachen, DE, 11-24 ▶
- Reifler, F. A./Ganu, S./Hufenus, R./Gaan, S.** Conductive fibers: e-fibers – Thin flexible insulating coatings for conductive fibers, Techtexil Symposium, Frankfurt, DE, 05-25 ▶
- Rupper, P.** Oberflächenanalytik (REM, ED1, XPS, optisch, AFM), Workshop: Analytik und Forschung für Ihre Produktentwicklung, Empa St. Gallen, 06-16 ▶■
- Sabyasachi, G.** Developments of flame retardants for textiles, 45th International Detergency Conference, Düsseldorf, DE, 05-03 ▶ ●
- Sabyasachi, G.** Flame Retardation of Flexible Polyurethane Foams: Recent Developments Research in EMPA, FPA Technical Confrence, Baltimore, MD, US, 05-18 ▶ ●
- Sabyasachi, G.** Thermal Decomposition and Flame Retardancy of Flexible Polyurethane Foams, BCC 22nd Annual Recent Advances in Flame Retardancy of Polymeric Materials, Stamford Connecticut, US, 05-23 ▶ ●
- Schurtenberger, E./Heuberger, M.** PROPERTIES OF CONDENSED INTERFACIAL CARBON DIOXIDE, SAOG Meeting, Fribourg, 01-28 ▶
- Schurtenberger, E./Heuberger, M.** STRUCTURAL FORCES IN LIQUID CARBON DIOXIDE, D-MATL Kolloquium, Zürich, 03-30 ▶
- Schurtenberger, E./Heuberger, M.** CARBON DIOXIDE AS NANO-CONFINED FLUID, International Nanotribology Forum: The Hoi An Discussions II, Hoi An, VN, 05-23 ▶

Empa Activities 2011

Conferences

Advanced Fibers

- Schurtenberger, E./Heuberger, M.** THE LIQUID STRUCTURE OF INTERFACIAL CARBON DIOXIDE,
Joint Annual Meeting of the SPS, ÖPG, SGAA and ÖGAA, Lausanne, 06-15 ▶
- Schurtenberger, E./Heuberger, M.** Two-density state in supercritical carbon dioxide causes long-range attractive forces,
PhD Symposium, St. Gallen, 10-18 ◆
- Teveaarai, H./Guex, G.** Implantation of a cell-polymer biograft for cardiac function stabilisation,
Jahrestagung der Schweizerischen Gesellschaft für Kardiologie (SGK), Basel, 06-09 ▶

Biomaterials

- Boesel, L.** Biomimetic nanocomposites for improving barrier properties of biopolymers,
Biopol 2011, 3rd International Conference on Biodegradable and Biobased polymers,
Strasbourg, FR, 08-29 thru 31 ◆
- de Geus, M.** Thermoplastische Stärke – Modification of properties by additives,
Hochschule für Technik, Rapperswil, 02-10 ■▶●
- de Geus, M.** Casein-based coating: rheological behaviour of concentrated casein dispersions,
Biopol 2011, 3rd International Conference on Biodegradable and Biobased polymers,
Strasbourg, FR, 08-29 thru 31 ▶
- de Geus, M.** Biomimetic nanocomposites for improving barrier properties of biopolymers,
19th Annual BEPS Meeting: Bio-Environmental Polymer Society Conference,
Wien, AT, 09-28 thru 30 ▶
- Ihsen, J.** Efficient production of Al(OH)₃-immobilised laccase with a heterobasidion annosum strain selected by microplate screening,
1st European Congress of Applied Biotechnology, Berlin, DE, 09-25 thru 29 ▶
- Le Meur, S.** Attempt to produce medium-chain-length polyhydroxyalkanoates from xylose by engineered pseudomonas putida,
4th Congress of European Microbiologists, FEMS 2011, Genf, 06-26 thru 30 ◆
- Reiss, R.** L-lactate oxidase from Aerococcus viridans for biosensor application,
NanoTera Annual Meeting 2011, Bern, 05-13 ◆
- Reiss, R.** Characterisation of a Versatile Bacterial Laccase and its Potential Biotechnological Application,
Biotrans 2011, Sicily, IT, 10-02 thru 7 ◆
- Ren, Q.** High level production of a novel bacterial tyrosinase for biomaterials,
Dalian, CN, 04-25 thru 30 ▶●
- Richter, M.** Empa activities in Biotechnology, Zwingenberg, Zwingenberg, DE, 01-18 ▶●
- Richter, M.** L-Lactate Oxidase from Aerococcus viridans for biosensor applications,
2nd International Conference on Bio-Sensing Technology 2011, Amsterdam, NE, 10-10 thru 12 ◆
- Richter, M.** Biocatalysis at Empa – Thdp-dependent enzymes,
Forschergruppentreffen, Diversity of asymmetric thiamin catalysis, Stuttgart, DE, 11-16 thru 17 ▶
- Schmidt-Emrich, S.** Biofilm importance and applications,
6th Summer School on Advanced Biotechnology, Berlin, DE, 09-04 thru 08 ▶●
- Thöny-Meyer, L.** Production of a molecular weight protein standard for immunoblot analysis composed of artificial heme proteins,
RPP6 A comparative view on host physiology, Wien, AU, 02-16 thru 19 ◆
- Thöny-Meyer, L.** Engineered bacterial tyrosinase for protein cross-linking and immobilization, RRB7,
7th International Conference on renewable resources and biorefineries, Brügge, BE, 06-08 thru 10 ▶
- Thöny-Meyer, L.** Multi-copper wxidases – back to the future,
ETH Zürich, Institut für Mikrobiologie, Zürich, 09-11 ▶●
- Zinn, M.** Poly(3-hydroxyalkanoates): From biosynthesis towards medical applications,
7th International Conference on Polymer and Textile Biotechnology and Final Workshop of COST Action 868, Mailand, IT, 03-02 thru 4 ▶●

Empa Activities 2011

Conferences

Biomaterials	Zinn, M.	Tailor-made Biopolyester for Medical Applications Produced by Bacteria, European Biotechnology Day, Düsseldorf, DE, 05-10 thru 11 ▶●
	Zinn, M.	Aspects of production of medium-chain-length polyhydroxyalkanoates with pseudomonas putida strains, International Conference on Materials for Advanced Technologies, Singapore, SG, 06-26 thru 07-01 ▶●
	Zinn, M.	Biopolymer and biodegradable polymer production from waste, renewables, and petrochemicals, ESBP, European Symposium on Biopolymers, Trinity College, Dublin, NE, 09-27 thru 29 ▶●
	Zinn, M.	Medium-chain-length polyhydroxyalkanoate production under elevated hydrodynamic pressure, ESBP, European Symposium on Biopolymers, Trinity College, Dublin, NE, 09-27 thru 29 ▶●
Electronics/ Metrology/Reliability	Anderegg, P.	Zuverlässigkeit von Messdaten bei der Langzeitüberwachung von Infrastrukturen, 6. Symposium Experimentelle Untersuchungen von Baukonstruktionen, Dresden, DE, 09-09 ▶
	Flisch, A.	20 Jahre industrielle Computer-Tomographie an der Empa, Fraunhofer IPA Eventforum, Control 2011, Stuttgart, DE, 05-03 thru 06 ▶
	Flisch, A.	Der Blick ins Innere, 20 Jahre Industrielle Computer-tomographie an der Empa, Dübendorf, 11-17 ■
	Grossmann, G.	Nanotechnologie in der Elektronik, 14. Europäisches Elektroniktechnologie- Kolleg, Mallorca, ES, 03- 17 thru 03-18 ▶●
	Hack, E.	Advanced Dynamic Validation using Integrated Simulation and Experimentation, Fachtagung Modelling and Simulation – Challenge and Benefit, Zürich, 02-02 ▶●
	Hack, E.	Using Full-field Measurement Techniques to Validate Simulations of Dynamic Events, Photomechanics, Brüssel, BE, 02-07 thru 09 ▶●
	Hack, E.	Goal-Line Technology / IFAB-Meeting, Cardiff, UK, 03-04 thru 5 ▶●
	Hack, E.	Using Full-field Measurement Techniques to Validate Simulations of Dynamic Events, ICAIM, Ulm, DE, 03-22 thru 23 ▶
	Hack, E.	Standards and Traceability to international standards, Int. Workshop on Validation of Computational Solid Mechanics Models, Shanghai, CN, 10-18 thru 20 ▶●
	Hack, E.	Uncertainty and its role in calibration and validation, Int. Workshop on Validation of Computational Solid Mechanics Models, Shanghai, CN, 10-18 thru 20 ▶●
	Hack, E./Feligiotti, M.	Use of integrated simulation and experimentation to quantify impact damage, ISEV, Edinburgh, UK, 09-07 thru 09 ▶●
	Jacob, P.	Vom Baustein über die Komponente zum Subsystem-Neue Denkansätze in der Ausfallanalyse, ITG Tagung, Grainau, DE, 06-01 ▶●
	Jacob, P.	From Component to System Failure Analysis-the future challenge within work-sharing supply chains, ESREF 2011, Bordeaux, FR, 10-04 thru 07 ▶●
	Jacob, P.	Mechanical vibration resonance measurements and concerns for plastic encapsulated control modules and powe modules in traction applications, EUFANET 2011, Bordeaux, FR, 10-06 ▶●
	Jacob, P.	A new roadmap for the analysis if power semiconductors, EUFANET 2011, Bordeaux, FR, 10-06 ▶●
Jacob, P.	«Verborgene» Sperrspannungen-Instabilität bei Scheibenthyristoren, Freiburg i. Breisgau, DE, 10-24 thru 25 ▶	
Jacob, P.	Power electronic device failure analysis roadmap, ISTFA 2011, San Jose, US, 11-13 thru 17 ◆	

Organisation ■
 Poster = ◆
 Lecture = ▶
 invited = ●

Empa Activities 2011

Conferences

Electronics/ Metrology/Reliability

- Jacob, P.** Ausfälle und Fehleranalyse in optoelektronischen Bauelementen, Electro Suisse Fehraltor «Lebensdauer von LED-Beleuchtungssystemen», Dübendorf, 11-04 ●●
- Jacob, P.** Eine neue Richtlinie des ESD-Forum e.V. für die Vorgehensweise bei der ESD-Risikobewertung für ESD-gerechte Maschinen und Anlagen (ESD-Forum Arbeitsgruppe) und ESD-Risiken in der Elektronikfertigung: ESD-/EOS-Fehlerursachen analysieren, identifizieren und nachhaltig beseitigen, 12. ESD-Forum München, München, DE, 12-06 thru 7 ▶
- Jerjen, I.** The Benefits and Challenges of Differential Phase Contrast Imaging for Material Science, International Symposium on Digital Industrial Radiology and Computed Tomography, Berlin, DE, 06-20 thru 22 ●
- Jerjen, I.** Ausfallanalyse an elektronischen Komponenten, Der Blick ins Innere – 20 Jahre Industrielle Computertomographie an der Empa, Dübendorf, 11-17 ▶
- Lotito, V.** Numerical analysis of novel asymmetric SNOM tips, PIERS, Marrakech, M, 03-19 thru 23 ●
- Lotito, V.** Finite element properties of SNOM probes with asymmetries, Seminar in Electromagnetics, Zurich, 04-13 ●●
- Lotito, V.** Focusing properties of SNOM probes with adirectiona asymmetries, 7th Workshop on Numerical Methods for Optical Nanostructures, Zurich, 07-04 thru 06 ▶
- Lotito, V.** Scanning near field optical microscopy probes with adirectional asymmetries, EOS 2011, Capri, It, 09-24 thru 29 ▶
- Lüthi, T.** 20 Jahre industrielle CT an der Empa, Der Blick ins Innere – 20 Jahre Industrielle Computertomographie an der Empa, Dübendorf, 11-17 ▶
- Sanabria, S.** Monitored assessment of structural integrity of multilayered glued laminated timber beams with air-coupled ultrasound and contact ultrasound imaging, 17th Int. Nondestructive Testing and Evaluation of Wood Symposium NDT, Sopron, HU, 09-12 thru 17 ▶
- Schütz, P.** Anwendungen der CT in Geometriebestimmung und dimensionaler Messtechnik, Der Blick ins Innere – 20 Jahre Industrielle Computer-tomographie an der Empa, Dübendorf, 11-17 ▶
- Schütz, P.** Failure analysis with x-ray CT: state-of-the-art, limitations and future developments, Challenges for three-dimensional ICS and systems, Toulouse, FR, 11-28 thru 29 ▶

Materials-Biology Interactions

- Born, A.-K.** Nano- und micro- engineered substrates that influence (stem) cell fate, Workshop «Wechselwirkung Material/Zelle-Oberflächeneigenschaften beeinflussen die Zelldifferenzierung», Hanau, DE, 02-24 ●●
- Born, A.-K.** Cells sense and response to their environment, European Summer School of Biological Chemistry & Advanced Biotechnology «Synthetic Biology», Berlin, DE, 09-05 thru 08 ●●
- Bruinink, A.** Strategies to evaluate biocompatibility using in vitro methods, IPF Dresden, Dresden, DE, 12-14 ●●
- Bruinink, A.** MedTech & Adv Therapeutics an der Empa, Wissenschaft trifft Wirtschaft, Biologo, 12-16 ▶
- Bruinink, A./Wein, F.** An in vitro set-up mimicking the bone niche to evaluate biomaterials, 24th European Conference on Biomaterials, Dublin, IE, 09-04 thru 08 ▶
- Bruinink, A./Wein, F./
Moczulska, M./Zell, V./
Obarzanek-Fojt, M./Rottmar, M./
Maeder-Althaus, X.** Evaluation of biomaterials using an in vitro test battery, Meet the Expert, Interlaken, 04-11 thru 12 ▶

Empa Activities 2011

Conferences

Materials-Biology Interactions

- Buerki-Thurnherr, T./Diener, L./ Arslan, O./Xiao, L./Hirsch, C./ Maeder-Althaus, X./ Wampfler, B./Wick, P./Mathur, S./ Krug, H. F.** ZnO toxicity is not a nanoparticle specific effect but largely due to a substantial release of toxic zinc ions, New developments in Cell-Based In-Vitro Testing & 3rd Annual Quasi-vivo User Group meeting, Saarbrücken, DE, 05-18 thru 20 ◆
- Bürki, T.** Nanotechnologie im Alltag: Fluch oder Segen?, Alte Garde Ascom/Hotel Bern, Bern, 09-12 ▶●
- Bürki, T.** In vitro mechanistic study towards a better understanding of ZnO nanoparticle toxicity, 6th Annual Meeting of the Swiss Aerosol Group (SAG), Bern, 11-02 ▶●
- Bürki-Thurnherr, T./Wick, P./ Krug, H. F./Diener, L./ Mäder-Althaus, X.** In vitro mechanistic study on the toxicity of commercial ZnO nanoparticles, Society of Toxicology Annual Meeting, Washington, US, 03-06 thru 10 ◆
- Friederici, V./Imgrund, Ph./ Zell, V./Brose, C./Bitar, M./ Bruinink, A.** Interdisciplinary Investigation of Metal Injection Moulded Regular Implant Surface Patterns, Euro BioMat Conference, Jena, DE, 04-13 thru 14 ◆
- Gasser, M./Wick, P./Krug, H. F.** Investigating the lipid and protein coatings of different functionalized multi-walled carbon nanotubes – can these affect their potential adverse effects?, 3rd NanoImpactNet Conference «Building a bridge from NanoImpactNet to nanomedical research», Lausanne, 02-14 thru 17 ◆
- Hirsch, C.** Kurzer Überblick über Aspekte der Forschung, Technologie, Gesundheit und Sicherheit von «Carbon nanotubes» (CNTs), 9. Nanovision am Karlsruher Institut für Technologie, Karlsruhe, DE, 11-21 thru 22 ▶●
- Hirsch, C./Rösslein, M./ Wick, P./Krug, H. F.** A novel comprehensive evaluation platform to assess nanoparticle toxicity in vitro, Society of Toxicology Annual Meeting, Washington, US, 03-06 thru 10 ◆
- Kaiser, J.-P.** Nanotoxikologie: wie toxisch sind nanoskalige Partikel wirklich?, Abfallverbrennung und Luftqualität, Bozen, IT, 10-24 ▶●
- Kolbuk, D./Lischer, S./ Maniura, K./Sajkiewicz, P./ Fortunato, G.** Mechanical and surface properties of Polycaprolactone, Gelatin scaffolds in the creation of ECM analogues, Eupoc2011 – Biobased Polymers and Related Biomaterials, Gargnano, IT, 05-29 thru 06-03 ◆
- Lischer, S.** Antibakterielle Textilien Wirkung auf Bakterien und Zellen, Workshop antibakterielle Textilien/Empa, St. Gallen, 05-12 ▶●
- Lischer, S./Bradbury, C. R./ Wampfler, B./Ren, Q./ Gruner, Ph./Maniura, K.** Antibacterial Hydroxyapatite Coatings for Implant Application, Meet the Expert, Interlaken, 04-11 thru 12 ◆
- Lischer, S./Bradbury, C. R./ Wampfler, B./Ren, Q./ Gruner, Ph./Maniura, K.** Antibacterial HA coatings with defined crystallinity to tune Ag release, eCM XII Implant Infection, Davos, 06-22 thru 24 ▶
- Lischer, S./Körner, E./Balazs, D. J./ Shen, D./Wick, P./Grieder, K./ Haas, D./Heuberger, M./ Hegemann, D.** Ag-containing plasma polymer coatings with antibacterial and cytocompatible properties, SSB Annual Meeting, Yverdon les Bains, 05-04 ◆
- Maniura, K.** High throughput screening of biomaterials – shaping a new research area, Materiomics Conference, Amsterdam, NL, 04-14 thru 15 ▶●
- Maniura, K.** The implant/bone interface, NFP62, CCM1 Interdisciplinary training for young scientists in material sciences, Lugano, 05-25 thru 28 ▶●
- Maniura, K.** ESF-EMBO Symposium: Biological Surfaces and Interfaces, Sant Feliu de Guíxols, ES, 06-26 thru 07-01 ◆
- Maniura, K.** Biologische Verträglichkeit von Partikeln: mögliche Risiken von Implantaten, Biomaterialien – Beschichtungen und Schichtsysteme für medizinische Anwendungen, eine Weiterbildungsveranstaltung der SVMt, Olten, 10-25 ▶●

Empa Activities 2011

Conferences

Materials-Biology Interactions

- Maniura, K.** Genetic reporter assays in the area of tissue engineering of bone, Cell-Based Assays, London, UK, 11-21 thru 22 ▶●
- Mhanna, R. F./Millan, C./Vörös, J./Maniura, K./Zenobi-Wong, M.** Multilayered engineered constructs for cartilage engineering, The symposium of AO Exploratory Research, Davos, 09-02 thru 03 ◆
- Rösslein, M.** GUM, Supplement 1 – Numerical Implementation, Eurachem, CITAC, Recent development in measurement uncertainty, Lissabon, PT, 06-06 thru 7 ▶●
- Rösslein, M./Hirsch, C./Wick, P./Krug, H. F.** The basic requirement for comparable results between laboratories from in vitro tests remains a significant challenge, NanoImpactNet, Lausanne, 02-14 thru 17 ◆
- Rottmar, M./Wong, M./Vogel, V./Maniura-Weber, K.** Probing the Role of Cell Shape and Actin Cytoskeleton Integrity During Chondrocyte Re-differentiation, 24th European Conference on Biomaterials, Dublin, IE, 09-04 thru 08 ▶
- Studer, D.** Housekeeping Gene Stability in Human Bone Marrow-derived Mesenchymal Stromal Cells during Adipo-, Chondro- and Osteogenesis, TokyoTech, ETH, EPFL Symposium, Lausanne, 06-10 ◆
- Studer, D./Lischer, S./Wong, M./Maniura, K.** RPL13A represents a stable reference gene for reverse transcription PCR of mesenchymal stem cells, PhD symposium 2011 «Students at the Scientific Frontier»/Empa, St. Gallen, 09-12 ▶
- Studer, D./Vörös, J./Wong, M./Maniura, K.** Joint Regeneration – Novel 2D Patterned Co-Culture System for Investigating Chondrogenesis, International Summer Science School, Heidelberg, DE, 08-24 thru 30 ▶
- Studer, D./Wong, M./Maniura, K.** RPL13a represents a stable reference gene for reverse transcription PCR of mesenchymal stem cells, World Conference of Regenerative Medicine, Leipzig, DE, 11-02 thru 04 ◆
- Wick, P.** New Advanced Cellular Models for Elaborating Chances or Risks for new Nano-Materials, NIST, Washington, US, 03-04 ▶●
- Wick, P.** Schneewittchen hat schon viele Zwerge – Nanotechnologeeanwendungen heute, Vortrag Ostschweizerische Gesellschaft für Innere Medizin, St. Gallen, 06-09 ▶●
- Wick, P.** Nanomaterialien in Textilien: eine interdisziplinäre Herausforderung, Te1tail-Days 2011/Empa Akademie, Dübendorf, 10-05 ▶●
- Wick, P.** Health Aspects of Nanomaterials: An Interdisciplinary Challenge, Adolphe Merkle Institute, Fribourg, 11-08 ▶●
- Wick, P.** Risiken der Nanotechnologie: eine interdisziplinäre Herausforderung, 4. LGL Kongress für den Öffentlichen Gesundheitsdienst «Gesunde Umwelt – Gesunde Bevölkerung», München, DE, 11-09 thru 11 ▶●
- Wick, P.** Health Aspects of Nanoparticles: An Interdisciplinary Challenge, NanoTechItaly 2011, Promoting Responsible Innovation, Venice, IT, 11-23 thru 25 ▶●
- Wick, P.** Titel noch nicht bekannt, Workshop «The role of proteins in nanoparticle access to the brain», Dublin, IE, 12-6 thru 7 ▶●
- Wick, P./Manser, P./Mäder-Althaus, X./Diener, L./Krug, H. F.** Barrier capacity of human placenta for nanosized materials, Society of Toxicology Annual Meeting, Washington, US, 03-06 thru 10 ◆

Empa Activities 2011

Conferences

Protection and Physiology

- Aslan-Gürel, E./Celebi, S./Scherer, L. J./Toppare L./Rossi, R. M.** Polymeric Optical Fibers Produced with Different Acrylates via Atom Transfer Radical Polymerization Reactions; 2nd International Symposium Frontiers in Polymer Science, Centre de Congrès, Lyon, FR, 05-29 thru 31 ♦
- Aslan-Gürel, E./Scherer, L. J./Rossi, R. M.** Synthesis and Characterization of Laponite-Polymer Core-Shell Microspheres, 2nd International Symposium Frontiers in Polymer Science, Centre de Congrès, Lyon, FR, 05-29 thru 31 ♦
- Baumann, L./Aslan-Gürel, E./de Courten, D./Wolf, M./Rossi, R. M./Scherer, L. J.** Development of light responsive membranes for controlled drug release, ICOM 2011, Amsterdam, NL, 07-23 ♦
- Bogerd, C. P./Niedermann, R./Brühwiler, P./Rossi, R. M.** The effect of sock fabric on skin hydration and perception of the foot after 1 Day of military use, International Conference for Environmental Ergonomics (ICEE), Nafplio, GR, 07-13 ●●
- Derler, S./Süess, J.** Influence of variations in the pressure distribution on the friction of the finger pad, ICObT 2011, The International Conference on Bio Tribology, Imperial College, London, GB, 09-18 thru 21 ▶
- Frackiewicz-Kaczmarek, J./Psikuta, A./Rossi, R. M./Bueno, M. A.** Distribution of the air gap thickness in casual clothing, XIV International Conference on Environmental Ergonomics (ICEE), Nafplio, GR, 07-11 thru 15 ●●
- Meyer, Chr./Seiler, P./Meyer, V. R.** HPLC Peak Area Precision Improves with Increasing Signal to Noise Ratios, 36th International Symposium on High-Performance Liquid Phase Separations and Related Techniques, Budapest, HU, 06-19 thru 23 ♦
- Meyer, V. R.** Precision of peak area and height determination, 36th International Symposium on High-Performance Liquid Phase Separations and Related Techniques, Budapest, HU, 06-19 thru 23 ♦
- Niedermann, R./Psikuta, A./Rossi, R. M.** Evaluation of different heat flux sensors for the use in human subject studies, International Conference for Environmental Ergonomics (ICEE), Nafplio, GR, 07-12 ●●
- Popa, A.-M.** Nanocomposite membranes for biomedical applications, European Polymer Congress, Granada, Spain, ES, 06-01 ▶
- Popa, A.-M.** Nanocomposite functional membranes – increasing the QI of intelligent teItiles, ICOM2011 – International Congress on Membranes and Membrane Processing, Amsterdam, NL, NL, 07-23 ▶
- Psikuta, A./Niedermann, R./Rossi, R. M.** Effect of ambient temperature on surface temperature measurements, International Conference for Environmental Ergonomics (ICEE), Nafplio, GR, 07-15 ♦
- Rossi, R.** Une armée de mauviettes, Temps présent, magazine de reportages, tsr télévision suisse, 03-17 ●●
- Rossi, R.** Analysis of the 3-dimensional water transport in fabrics under pressure, Fiber Society Conference, Hong Kong, CN, 05-23 ●●
- Rossi, R.** Smart Textiles with Skin-Simulating Functions, Hong Kong Polytechnical University, CN, 05-27 ●●
- Rossi, R.** Predicting body core temperature using non-invasive sensors, Smart textiles, Empa, Dübendorf, 09-30 ●●
- Scherer, L.** Textile-based optical sensor, Smart Textiles Event, Empa Dübendorf, 09-30 ▶●
- Scherer, L.** Elektrisch und optisch leitfähige Fasern und ihre Anwendungen in der medizinischen Sensorik; Textil und Sensorik, Bayern innovativ, Regensburg, DE, 10-25 ●
- Teixeira, F.** Membranes with a temperature triggered Gating Mechanism Based on Thermoresponsive Copolymers, «Hybrid Materials 2011», Strassbourg, FR, 03-06 thru 11 ▶
- Weder, M.** Optimale Kältekleidung, Servus TV, AT, 03-01 ●●
- Weder, M./Haag, A.** Vergleichsuntersuchung verschiedener Zelte, Sendung «Kassensturz», SRF Schweizer Radio und Fernsehen, 06-07 ▶●

Empa Activities 2011

Conferences

Mobility, Energy and Environment

Air Pollution/
Environmental Technology

- Brunner, D./Henne, S./Knote, C./Keller, C.** Estimation of air pollutant and GHG sources by means of Eulerian and Lagrangian modeling, JRC Colloquium, Ispra, IT, 01-21 ▶●
- Brunner, D./Hiller, R./Neininger, B./Künzle, T./Eugster, W./Buchmann, N./Buchmann, B.** Regional methane sources observed from a research aircraft, AGU Chapman Conference Lagrangian Modeling of the Atmosphere, Grindelwald, 10-09 thru 14 ▶
- Brunner, D./Hiller, R./Neininger, B./Künzle, T./Eugster, W./Buchmann, N./Buchmann, B.** Regional methane sources observed from a research aircraft, NCGG6 Non-CO2 Greenhouse Gases, Amsterdam, NL, 11-02 thru 04 ▶
- Brunner, D./Kaufmann, P./Neininger, B./Hiller, R.** The new COSMO version of the Lagrangian Particle Dispersion Model FLE1PART, COSMO User Seminar, Langen, DE, 02-01 thru 03 ▶
- Brunner, D./Keller, C./Reimann, S./Vollmer, M.** Country-specific European halocarbon emissions estimated with FLEXPART and a new Kalman filter inversion scheme, AGAGE workshop, Bristol, GB, 05-25 thru 26 ▶
- Brunner, D./Knote, C./Buchmann, B.** Luftqualitätsmodellierung mit COSMO-ART, Treffen OSTLUFT Kantonale Umweltämter, Au, 10-19 ▶●
- Brunner, D./Lin, J. C./Gerbig, C.** AGU Chapman Conference Lagrangian Modeling of the Atmosphere, Grindelwald, 10-09 thru 14 ■
- Buchmann, B.** Greenhouse gases and reactive gases: trends and top down emission estimates, GAW-CH Conference, Zürich, 01-18 thru 19 ▶●
- Emmenegger, E./Manninen A./Tuzson, B./Köster, J. R./Wunderlin, P./Mohn, J.** Analysis of microbial processes in soil and waste water by continuous N2O isotopomer measurements with QCLAS, FLAIR, Murnau, DE, 09-13 thru 17 ▶
- Emmenegger, E./Tuzson B./Mohn J./Brunner D./Henne S./Kammer A./Zeeman M. J.** Measurement of stable CO₂ isotopic species using mid IR laser spectroscopy – development and environmental applications, Anakon, Zürich, 03-22 thru 25 ◆
- Emmenegger, L.** Methane isotopes: getting ready for atmospheric monitoring, Ingos Kick-off meeting, Amsterdam, NL, 11-20 thru 21 ▶
- Emmenegger, L./Wunderlin, P./Köster, J. R., Manninen, A./Mohn, J.** CO₂ and N₂O isotopic ratio measurements by QCL spectroscopy -recent developments and environmental applications, TDLS, Zermatt, 07-11 thru 15 ▶●
- Emmenegger, L./Zeyer, K./Schrade, S./Keck, M.** A dual tracer gas ratio method for the determination of ammonia emissions from naturally ventilated dairy housing, CEM2011, Prague, CZ, 09-05 thru 7 ▶●
- Emmenegger, L./Zeyer, K./Zahniser, M. S./McManus, J. B./Tuzson, B.** Development, deployment and validation of a QCL spectrometer for NO₂ measurements at mountain sites, FLAIR, Murnau, DE, 09-13 thru 17 ◆
- Gehrig, R.** Measurements of ambient air in Switzerland (NABEL) and Europe (EMEP)/HS-Course Oeschgerzentrum, Medizinische Fakultät Uni Bern, Bern, 01-17 thru 20 ▶●
- Gehrig, R.** Empa Particle Day, Dübendorf, 03-29 ■
- Gehrig, R.** Ultrafine particles in ambient air: Sources and measurement, Empa Particle Day, Dübendorf, 03-29 ▶
- Gehrig, R.** EMEP, Task Force Meeting on Measurement and Modelling, Dübendorf, 05-11 thru 13 ■
- Gehrig, R.** Swiss approach linking air quality monitoring inventories and source apportionment to policy development, Workshop on Air Pollution Legislation, Monitoring and Modeling for Policy and Enforcement, Beijing, CN, 11-15 thru 16 ▶●

Empa Activities 2011

Conferences

Air Pollution/ Environmental Technology

- Gehrig, R./Bukowiecki, N.** Emission factors and source apportionment for wear and resuspension particles produced by road traffic, The policy relevance of wear emissions from road transport, now and in the future, Amsterdam, NL, 06-22 **◆●**
- Gehrig, R./Hüglin, C./Buchmann, B.** Long Term Measurements of Selected PAH at Representative Sites in Switzerland, ICCPA, Vienna, AT, 06-26 thru 29 **◆**
- Gehrig, R./Schwarzenbach, B./Hüglin, C.** NO2 Measurements with Different Converters; Molybdenum Converters vs. Specific NO2 Converters, EMEP Task Force Meeting on Measurement and Modelling, Dübendorf, 05-11 thru 13 **◆**
- Gianini, M./Gehrig, R./Fischer, A./Wichser, A./Ulrich, A./Cozic, J./Jaffrezo, J. L./Hueglin, C.** Chemical composition and source apportionment of PM10 at different Swiss locations 2008/2009 compared to 1998/1999, EGU2011, Vienna, AT, 04-03 thru 08 **◆**
- Gianini, M./Gehrig, R./Fischer, A./Wichser, A./Ulrich, A./Cozic, J./Jaffrezo, J. L./Hueglin, C.** Chemical composition and source apportionment of PM10 at different Swiss locations 2008/2009 compared to 1998/1999, 16th ETH-Conference on Combustion Generated Nanoparticles, Zurich, 06-27 thru 29 **◆**
- Gianini, M./Gehrig, R./Fischer, A./Wichser, A./Ulrich, A./Cozic, J./Jaffrezo, J. L./Hueglin, C.** Chemical composition and source apportionment of PM10 at different Swiss locations 2008/2009 compared to 1998/1999, European Aerosol Conference 2011, Manchester, UK, 09-04 thru 09 **◆**
- Henne, S./Brunner, D./Zellweger, C./Hüglin, C./Wilson, R./Monks, P./Buchmann, B.** European trends of surface O3 and O1 evaluated with Generalised Additive Models, Toulouse, FR, 04-11 thru 13 **◆**
- Henne, S./Shallcross, D. E./Reimann, S./Xiao, P./Brunner, D./O'Doherty, S./Buchmann, B.** Deposition of trifluoroacetic acid (TFA) resulting from future emissions of HFC-1234yf from mobile air conditioners (MAC) in Europe/AGU Chapman Conference Lagrangian Modeling of the Atmosphere, Grindelwald, 10-09 thru 14 **◆**
- Hüglin, C.** Air Quality Monitoring Technologies for Urban Areas: The AirMonTech Project, EMEP Task Force Meeting on Measurement and Modelling, Dübendorf, 05-11 thru 13 **◆**
- Hüglin, C.** AirMonTech: Existing Technologies for regulated metrics/AAMG Conference, London, UK, 12-12 thru 13 **◆●**
- Hüglin, C./Gianini, M. F. D./Fischer, A./Ulrich, A./Wichser, A./Zellweger, C./Gehrig, R.** Chemical characterisation and source apportionment of ambient PM10 at different Swiss locations: comparative analysis of data collected during 1998-1999 and 2008-2009, ICCE, Zurich, 09-12 thru 15 **◆**
- Hüglin, C./Herich, H./Buchmann, B.** Long-term study of the contributions of wood burning and road traffic to black carbon at urban and rural sites in Switzerland, ICCPA, Vienna, AT, 06-26 thru 29 **◆**
- Keller, C. A./Brunner, D./Henne, S./Maione, M./O'Doherty, S./Haszpra, L./Reimann, S.** Inverse modelling of European halogenated greenhouse gas emissions using FLEXPART, AGU Chapman Conference Lagrangian Modeling of the Atmosphere, Grindelwald, 10-09 thru 14 **◆**
- Keller, C. A./Hill, M./Ferenczi, Z./Haszpra, L./Conen, F./Brunner, D./Reimann, S.** First measurements of a suite of halogenated greenhouse gases over Eastern Europe, EGU2011, Vienna, AT, 04-03 thru 08 **◆**
- Knote, C./Brunner, D.** Cloud processes in COSMO-ART, GLOREAM-EURASAP Workshop, Copenhagen, DK, 01-26 thru 28 **◆**
- Knote, C./Brunner, D.** Interactions of aerosols and gases with clouds and precipitation in the online-coupled regional chemistry transport model COSMO-ART, CMAS annual conference, Chapel Hill, US, 10-24 **◆**
- Knote, C./Brunner, D./Lohmann, U.** Aqueous-phase chemistry and its interactions with gases and aerosols in COSMO-ART, European Aerosol Conference 2011, Manchester, UK, 09-09 **◆**

Empa Activities 2011

Conferences

Air Pollution/ Environmental Technology

- Manninen, A./Tuzson, B./Looser, H./Bonetti, Y./Emmenegger, L./Faist, J.** Versatile multipass cell for spectroscopic trace gas analysis based on quantum cascade laser, NanoTera Annual Meeting, Bern, 05-12 thru 13 ♦
- Manninen, A./Tuzson, B./Looser, H./Emmenegger, L.** Quantum cascade laser based compact multipass cell for medical and industrial applications, Freiburg IR Colloquium 2011, Freiburg, DE, 02-16 thru 17 ▶
- Manninen, A./Tuzson, B./Looser, H./Emmenegger, L.** Design of a compact and versatile multipass cell for QCL-based trace gas analysis, TDLS 2011, Zermatt, 07-11 thru 15 ♦
- Mohn, J./Tuzson, B./Wunderlin, P./Köster, J. R./Manninen, A./Emmenegger, L.** Laser spectroscopic analysis of ambient N₂O isotopomers for source identification, EGU 2011, Vienna, AT, 04-03 thru 08 ▶
- Mohn, J./Tuzson, B./Wunderlin, P./Köster, J. R./Manninen, A./Emmenegger, L.** Laser spectroscopic analysis of ambient N₂O isotopomers for source identification, 15N Workshop COST Action SIBAE, Gothenburg, SE, 05-9 thru 11 ▶
- Mohn, J./Wunderlin, P./Tuzson, B./Siegrist, H./Joss, A./Manninen, A./Emmenegger, L.** Laser based N₂O isotopomer analysis to identify source processes in wastewater treatment, GASIR 2011, Villigen, 10-10 thru 12 ♦
- Mohn, J./Wunderlin, P./Tuzson, B./Siegrist, H./Joss, A./Manninen, A./Emmenegger, L.** Identification of N₂O source processes in biological wastewater treatment by QCLAS based isotopomer analysis, NCGG6 Non-CO₂ Greenhouse Gases, Amsterdam, NL, 11-02 thru 04 ♦
- Reimann, S.** Ground-based Networks for Measuring Ozone- and Climate-Related Trace Gases, Ozone Research Managers' Meeting, Geneva, 05-2 thru 4 ▶●
- Reimann, S./Brunner, D./Keller, C.** F-gases emissions through inverse modelling/EEA, Copenhagen, DK, 10-13 ▶●
- Reimann, S./Vollmer, M./Brunner, D./Henne, S.** Replacement of ozone-depleting methyl bromide (CH₃Br) with the radiatively active sulfuryl fluoride (SO₂F₂) for pest control/NCGG6 Non-CO₂ Greenhouse Gases, Amsterdam, NL, 11-02 thru 04 ▶
- Reimann, S./Vollmer, M./Velders, G./Rigby, M./O'Doherty, S.** Comparison of measurement-based global emission estimates of halocarbons with emission scenarios used in international assessments, NCGG6 Non-CO₂ Greenhouse Gases, Amsterdam, NL, 11-02 thru 04 ▶
- Schnadt Poberaj, C./Henne, S./Brunner, D.** Understanding Recent Methane growth rate variability using a global Lagrangian transport model – first results, AGU Chapman Conference Lagrangian Modeling of the Atmosphere, Grindelwald, 10-09 thru 14 ♦
- Steinbacher, M.** CO₂ und weitere GHGs auf dem Jungfrauoch, GCOS-Meeting, Zürich, 02-02 ▶
- Steinbacher, M.** Qualitätssicherung und Qualitätsverbesserung im Rahmen des GAW-Programms, 10 Jahre GAWTEC, Schneefernerhaus, DE, 10-18 ▶●
- Steinbacher, M./Zellweger, C./Buchmann, B.** Long-term CH₄ Observations at the GAW site Jungfrauoch with Gas Chromatography and Cavity Ringdown Spectroscopy, NOAA ESRL Global Monitoring Annual ConferenceConference, Boulder, US, 05-17 thru 18 ▶
- Steinbacher, M./Zellweger, C./Buchmann, B.** Continuous in-situ CO₂ and CH₄ observations at Jungfrauoch with Cavity Ringdown Spectroscopy–long-term stability and sample drying issues, 16th WMO/IAEA Meeting on Carbon Dioxide, Other Greenhouse Gases, and Related Measurement Techniques (GGMT-2011), Wellington, NZ, 10-25 thru 28 ▶
- Sturm, P./Tuzson, B./Henne, S./Brunner, D./Mohn, J./Steinbacher, M./Buchmann, B./Emmenegger, L.** Continuous isotope ratio measurements of tropospheric CO₂ at Jungfrauoch, Switzerland/GEO-Carbon Conference, Rom, IT, 10-24 thru 26 ♦
- Tuzson, B./Hiller, R. V./Zeyer, K./Eugster, W./Neftel, A./Ammann, C./Emmenegger, L.** Field inter-comparison of QCLAS and ICOS for CH₄ eddy covariance flux measurements, FLAIR, Murnau, DE, 09-13 thru 17 ▶

Empa Activities 2011

Conferences

Air Pollution/ Environmental Technology	Tuzson, B./Kammer, A./ Emmenegger, L./Knohl, A./ Mohn, A./Hagedorn, F.	Application of a QCL-based spectrometer for real-time $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ measurements of soil-respired CO_2 /FLAIR, Murnau, DE, 09-13 thru 17 ♦	
	Tuzson, B./Mohn, J./ Emmenegger, L.	The road towards high-precision isotope ratio measurements by QCLAS, EGU 2011, Vienna, 04-05 thru 07 ▶●	
	Tuzson, B./Mohn, J./ Steinbacher, M./Henne, S./ Brunner, D./Buchmann, B./ Emmenegger, L.	Continuous and in situ isotopic composition measurements of tropospheric CO_2 at Jungfraujoch: real-time observation of regional pollution events ISOTOPES 2011, Gréou1-Les-Bains, FR, 06-19 thru 24 ▶	
	Vollmer, M./AGAGE team	Atmospheric Observations and emission patterns of the foam blowing compounds CFC-11, HCFC-141b, HFC-365mfc, and HFC-245fa, CAWCR 5 th annual workshop, Atmospheric Composition Observation and Modelling and the Cape Grim Annual Science Meeting, Melbourne, AU, 11-15 thru 17 ▶●	
	Zellweger, C./Brunke, E. G./ Labuschagne, C./S Schwarzenbach, B./ Steinbacher, M./Buchmann, B.	On-site comparison of CO , CH_4 and CO_2 using a travelling analyser during a WCC-Empa field audit at Cape Point 16 th WMO/IAEA Meeting on Carbon Dioxide, Other Greenhouse Gases, and Related Measurement Techniques (GGMT-2011), Wellington, NZ, 10-25 thru 28 ▶	
	Zellweger, C./Henne, S./ Steinbacher, M./Klausen, J./ Mimouni, M./Ferroudj, M. S./ Herizal, H./Ilahi, A. F./Okuku, C/ Aseyo, J. O./Buchmann, B.	Surface Ozone Variability and Trends at the Global GAW Stations Assekrem (Algeria), Bukit Koto Tabang (Indonesia) and Mt. Kenya (Kenya), Tropospheric Ozone Workshop, Toulouse, FR, 04-11 thru 13 ♦	
	Zellweger, C./Ilahi, A. F./ Nahas, A. C./Herizal, H./ Steinbacher, M./Henne, S./ Klausen, J./Mimouni, M./ Ferroudj, M. S./Okuku, C/ Aseyo, J. O./Buchmann, B.	Surface Ozone Measured at the Tropical GAW Station Bukit Kototabang, Indonesia, Tropospheric Ozone Workshop, Toulouse, FR, 04-11 thru 13 ▶	
	Zellweger, C./Steinbacher, M./ Buchmann, B.	Better GAW data quality with new analytical techniques, GAW-CH Conference, Zürich, 01-18 thru 19 ▶●	
	Zellweger, C./Steinbacher, M./ Buchmann, B.	Summing-up audit results of the World Calibration Centre for Surface Ozone (WCC-Empa) obtained during the past 15 years, Tropospheric Ozone Workshop, Toulouse, FR, 04-11 thru 13 ♦	
	Zellweger, C./Steinbacher, M./ Buchmann, B.	Evaluation of new measurement techniques for carbon monoxide, 16 th WMO/IAEA Meeting on Carbon Dioxide, Other Greenhouse Gases, and Related Measurement Techniques (GGMT-2011), Wellington, NZ, 10-25 thru 28 ♦	
	Analytical Chemistry	Bahk, Y. K./Buha, J./Liu, Z./ Pui, D. Y. H./Wang, J.	Relationship between the geometrical length and mobility diameter of airborne CNTs, European Aerosol Conference, Manchester, UK, 09-04 thru 09 ♦
		Figli, R.	Der sichere Umgang mit Cadmiumverbindungen, Von Roll Solar, Tägerwil, 05-17 ▶●
		Figli, R.	Mobile Röntgenfluoreszenz vs. Nasschemie, vergleichende Verfahren bei der Untersuchung von Bremsbelägen hinsichtlich Schwermetallen Plattform Marktkontrolle Bafu/BAG Bern, Bern, 09-01 ▶●
Fissan, H./Kaminski, H./ Pui, D. Y. H./Liu, Z./Wang, J.		Characterization of Agglomerates and Aggregates in Gases along the Exposure Pathway, European Aerosol Conference, Manchester, UK, 09-04 thru 09 ♦	
Gerecke, A. C.		ICCE 2011, 13 th EuCheMS International Conference on Chemistry and the Environment, ETH Zürich, 09-11 thru 15 ■	
Gianini M./Gehrig, R./Fischer, A./ Wichser, A./Ulrich, A./Piot, C./ Jaffrezo, J.-L./Hueglin, C.	Chemical Composition and Source Apportionment of PM_{10} at Different Swiss Locations 2008/2009 Compared to 1998/1999, 15 th ETH Conference on Combustion Generated Nanoparticles, ETH Zürich, 06-26 thru 29 ♦		

Organisation ■
Poster = ♦
Lecture = ▶
invited = ●

Empa Activities 2011

Conferences

Analytical Chemistry

- Gianini, M. F. D./Hueglin, C./Gehrig, R./Fischer, A./Wichser, A./Ulrich, A.** Chemical composition and source apportionment of PM10 at different Swiss location 2008/2009, EGU-European Geosciences Union General Assembly 2011, Vienna, AT, 04-03 thru 08 ◆
- Hagendorfer, H./Parlinska-Wojtan, M./Kaegi, R./Sinnert, B./Wandlowski, T./Liu, X./Ludwig, C./Ulrich, A.** Asymmetric Flow Field Flow Fractionation (AF4) Coupled to ICPMS, UV/VIS and Light Scattering for the Characterization of Engineered Nanoparticles, European Winter Conference On Plasma Spectrochemistry, Zaragoza, E, 01-30 thru 02-04 ▶
- Hagendorfer, H./Parlinska-Wojtan, M./Kaegi, R./Sinnert, B./Ludwig, C./Ulrich, A.** Asymmetric Flow Field Flow Fractionation (AF4) Coupled to ICPMS, UV/VIS and Light Scattering for the Characterization of Nanoparticles, GDCh Anakon 2011, Zürich, 03-22 thru 25 ◆
- Hagendorfer, H./Parlinska-Wojtan, M./Kaegi, R./Sinnert, B./Wandlowski, T./Liu, X./Ludwig, C./Ulrich, A.** Engineered Nanoparticles: Methods for quantitative, and elementspecific characterisation in the atmospheric and aquatic environment, Analytical Seminar at the Karl Franzens University Graz, Graz, AT, 03-18 ▶●
- Hagendorfer, H./Sinnert, B./Kaegi, R./Traber, J./Parlinska, M./Ludwig, C./Ulrich, A.** Development of analytical methods for the characterisation of engineered nanoparticles, Seminar of the Department of Environmental Geosciences at the University Vienna, Vienna, AT, 05-02 ▶●
- Heeb, N.** VERT dePN: Reactive Nitrogen Compounds (RNCs) after SCR- and combined SCR/DPF Systems, 7th Swiss VERT dePN Meeting, Empa Dübendorf, 03-24 ▶■
- Heeb, N.** Parameters affecting Dioxin Formation in DPF, 2. VERT Forum Diesel Particle Filter Technologies – Opportunities and Future Challenges, Empa Akademie, Dübendorf, 03-25 ▶
- Heeb, N.** Diesel Particle Filter Technologies – Opportunities and Future Challenges, 2. VERT Forum, Empa Akademie, Dübendorf, 03-25 ■
- Heeb, N.** Combustion-Generated Particles, 1st Empa Particle Day, Empa Dübendorf, 03-29 ▶
- Heeb, N.** Wirkungen und Wirksamkeit von Dieselpartikelfiltern, Toxikologen-Kurs Universität Tübingen, Empa Dübendorf, 03-31 ▶
- Heeb, N.** Parameters affecting the PCDD/F Formation in Diesel Particle Filters, 15th ETH Conference on Combustion Generated Nanoparticles, ETH Zürich, 06-26 thru 29 ▶
- Heeb, N.** Transformation Products of Hexabromocyclododecanes in Technical HBCD Mixtures and Flame-Proofed Polystyrenes, 13th EuCheMS International Conference on Chemistry and the Environment ICCE 2011, ETH Zürich, 09-11 thru 15 ▶
- Heeb, N.** VERT Filter Testing: A versatile Approach also for combined DPF-deNOx Systems, VERT Association Meeting, Empa Dübendorf, 09-22 ■▶
- Heeb, N./Schweizer, B. W./Graf, H./Zennegg, M./Gerecke, A. C./Lienemann, P.** Bromierte Flammschutzmittel: Eine neue Generation von persistenten organischen Schadstoffen in der Umwelt, GDCh Anakon 2011, Zürich, 03-22 thru 25 ▶
- Müller, C. E./Gerecke, A. C./Bogdal, C./Wang, Z./Scheringer, M./Hungerbühler, K.** Urban Source Strength of Polyfluorinated Compounds to the Atmosphere, 13th EuCheMS International Conference on Chemistry and the Environment ICCE 2011, ETH Zürich, 09-11 thru 15 ▶
- Müller, C. E./Gerecke, A. C./Hungerbühler, K.** Analyse von perfluorierten Verbindungen in Schweizer Gewässer, GDCh Anakon 2011, Zürich, 03-22 thru 25 ◆
- Ott, N./Homazava, N./Schmutz, P./Ludwig, C./Ulrich, A.** An online microflow capillary mass-spectrometer set-up for local, time and element resolved investigations of corrosion processes, EuroCorr – The European Corrosion Congress 2011, Stockholm, SE, 09-04 thru 08 ▶
- Ott, N./Schmutz, P./Ludwig, C./Ulrich, A.** Local, time- and element-resolved dissolution processes of biodegradable magnesium alloys using online micro-capillary plasma mass spectrometer, ENAC Research Day 2011, EPFL Lausanne, 06-08 ◆

Empa Activities 2011

Conferences

Analytical Chemistry

- Ott, N./Schmutz, P./Ludwig, C./Ulrich, A.** Local, time and element resolved analysis of biodegradable Mg alloy corrosion, Empa PhD Students' Symposium 2011, Empa St Gallen, 10-18 ▶
- Ott, N./Tournier Fillon, A./Homazava, N./Schmutz, P./Ludwig, C./Ulrich, A.** Investigation of local corrosion processes on magnesium alloy using a novel online microflow capillary FI-ICP-MS set-up with electrochemical control, European Winter Conference on Plasma Spectrochemistry, Zaragoza, E, 01-30 thru 02-04 ◆
- Ott, N./Tournier Fillon, A./Schmutz, P./Ludwig, C./Ulrich, A.** Local, time- and element-resolved releases from biodegradable Mg alloys, EuroCorr – The European Corrosion Congress 2011, Stockholm, SE, 09-04 thru 08 ▶
- Schmid, P./Zennegg, M.** Belastung von Schweizer Gewässern und Fischen mit PCB (polychlorierten Biphenylen) – die Suche nach den Quellen, Workshop Altlasten in Zusammenarbeit SAPP Schweizerische Arbeitsgemeinschaft Perinatale Pharmakologie und GREENTO1, Universitätsspital Zürich, 03-24 ▶
- Senn, M.** Le travail des éponges de fer dans les forges haut Médiévales du Jura central, Suisse, LAMOP Histoire et archéologie des techniques au Moyen Age et à l'Epoque moderne, Université Paris, FR, 01-22 ▶
- Ulrich, A.** NanoResearch at Empa and Laboratory for Analytical Chemistry, Seminar at RIVM National Institute for Public Health and the Environment, Bilhoven, NL, 10-12 ▶●
- Ulrich, A.** Hyphenated Techniques with Plasma Mass Spectrometry for analysis of Nanoparticles or Local Corrosion Processes in the Material Science Field, The Analytical Challenge 2011, Den Bosch, NL, 10-13 ▶●
- Ulrich, A./Gianini, M. F. D./Wichser, A./Fischer, A./Gehrig, R./Hueglin, C.** Changes in chemical composition of particulate matter (PM10) as a basis for the assessment of a long-term trend, Workshop Abfallverbrennung und Luftqualität, Bozen, IT, 10-24 ▶●
- Ulrich, A./Hagendorfer, H./Kaegi, R./Ludwig, Ch.** Size fractionated analysis of engineered nanoparticles in liquids using field flow fractionation coupled to plasma mass spectrometry, INRS Occupational Health Research Conference 2011 – Risks associated with nanoparticles and nanopartiels, Nancy, FR, 04-05 thru 07 ◆
- Ulrich, A./Hagendorfer, H./Lorenz, C./v. Götz, N./Hungerbühler, K.** Assessment of spray products containing engineered nanoparticles, INRS Occupational Health Research Conference 2011 – Risks associated with nanoparticles and nanopartiels, Nancy, FR, 04-05 thru 07 ▶
- Ulrich, A./Hagendorfer, H./Lui, B./Wandlowski, T.** Investigation of surface coating properties of au@sio2 nanoparticles using asymmetric flow field flow fractionation (AF4) coupled to UV/VIS, light scattering and ICP-MS, European Winter Conference On Plasma Spectrochemistry, Zaragoza, E, 01-30 thru 02-04 ◆
- Ulrich, A./Lattuada, M./Hagendorfer, H./Losert, S./Lorenz, C./v. Götz, N./Hungerbühler, K.** Assessment of spray products containing engineered nanoparticles, SAG Meeting 2011, Bern, 11-02 ▶
- Ulrich, A./Mayer, A./Wichser, A./Heeb, N. V./Emmenegger, L./Compte, P./Czerwinski, J./Hess, A./Kasper, M./Mooney, J.** Nanosized Metal Oxide Emissions from IC-Engines, 15th ETH Conference on Combustion Generated Nanoparticles, ETH Zürich, 06-26 thru 29 ■◆
- Ulrich, A./Utke, I./Ferri, D./Erni, R./Hug, H./Wang, J./Michler, J.** Analysis of Nanoparticles, 1st Empa Particle Day, Empa Dübendorf, 03-29 ■▶●
- Ulrich, A./Walazek, D./Wichser, A./Senn, M./Faller, M./Phillips, L./Wagner, B./Bulska, E.** Chemical analysis of ancient metal objects – Prospects and limitations of trace metal investigation using plasma mass spectrometry, AChOZ'11 – analiza Chemiczna w Ochronie Zabytków 2011 (Analytical Chemistry in Protection of Cultural Heritage) at University of Warsaw and Archaeological Museum in Warsaw, Warsaw, PL, 11-08 thru 09 ▶●
- Ulrich, A./Wang, J./Roessner, M.** Breakout Session: Nanoparticle Analysis – Measurement & Uncertainties, 1st Empa Particle Day, Empa Dübendorf, 03-29 ■▶●

Empa Activities 2011

Conferences

Analytical Chemistry

- Walaszek, D./Sehn, M./Philippe, L./Faller, M./Wagner, B./Bulska, E./Ulrich, A.** Method development for a minimal invasive investigation of ancient copper alloys and formed corrosion layers using Laser Ablation Plasma Mass Spectrometry, Empa PhD Day 2011, St. Gallen, 10-18 ♦
- Walaszek, D./Sehn, M./Philippe, L./Faller, M./Wagner, B./Bulska, E./Ulrich, A.** Minimal invasive investigation of ancient copper alloys and corrosion layers using Laser Ablation Plasma Mass Spectrometry, AChOZ'11 – analiza Chemiczna w Ochronie Zabytków 2011 (Analytical Chemistry in Protection of Cultural Heritage) at University of Warsaw and Archaeological Museum in Warsaw, Warsaw, PL, 11-08 thru 09 ♦
- Walaszek, D./Sehn, M./Philippe, L./Faller, M./Wagner, B./Bulska, E./Ulrich, A.** Method development of Laser Ablation Plasma Mass Spectrometry for the investigation of bulk material and corrosion layers of ancient copper alloys, AChOZ'11 – analiza Chemiczna w Ochronie Zabytków 2011 (Analytical Chemistry in Protection of Cultural Heritage) at University of Warsaw and Archaeological Museum in Warsaw, Warsaw, PL, 11-08 thru 09 ▶
- Wang, J.** International Colloquium and Opening Ceremony of the Windtunnel in the Air Quality & Particle Research Group at Empa/ETH Zürich, Empa Dübendorf, 11-07 ■
- Wang, J.** Aerosol Technology in Nanomaterial Environmental, Health and Safety Studies, Einführungsvorlesung, ETH Zürich, 03-30 ▶●
- Wang, J./Asbach, Ch./Hülser, T./Fissan, H./Kuhlbusch, Th./Pui, D. Y. H.** Evaluation of the Safety Measures against Nanoparticle Release in a Pilot Scale Manufacturing Facility, 5th International Symposium on Nanotechnology – Occupational and Environmental Health, Boston, US, 08-09 thru 12 ▶
- Wang, J./Liu, Z./Kim, S. C./Swanson, J./Pui, D. Y. H.** Characterization of Diesel Particulates and Metal Nano-agglomerates using the Universal Nanoparticle Analyzer, 7th Asian Aerosol Conference, Li'an, CN, 08-17 thru 20 ▶
- Wang, J./Pui, D. Y. H./Haep, S./Fissan, H.** Data Analysis of Agglomerate Filtration Measurements for Polydisperse Diesel Challenging Aerosols, Filtech 2011, Wiesbaden, DE, 03-22 thru 24 ▶
- Wang, J./Thompson, D./Li, L./Pui, D. Y. H.** Exposure Measurement during Production of CNT-Embedded Composite and CNT Dispersion Techniques for Toxicity Studies, 5th International Symposium on Nanotechnology – Occupational and Environmental Health, Boston, US, 08-09 thru 12 ♦
- Wang, J./Thompson, D./Li, L./Pui, D. Y. H.** Exposure Measurement in an Industrial Production Facility for CNT-embedded Nanocomposites, European Aerosol Conference, Manchester, UK, 09-04 thru 09 ♦
- Zennegg, M.** Belastung von Fischen in Schweizer Gewässern mit PCB und Dioxinen. Fachtagung der Ärzte/Ärztinnen für Umweltschutz (AfU), Nahrungsmittel umweltverträglich von A-Z?, Olten, 04-14 ▶●
- Zennegg, M.** Identification of Novel Brominated Flame Retardants in New products of the Swiss market, 31st International Conference on halogenated Persistent Organic Pollutants (POPs). Dioxin 2011 Brüssel, Brüssel, BE, 08-21 thru 25 ▶
- Zennegg, M.** Novel Brominated Flame Retardants in New products of the Swiss market, 13th EuCheMS International Conference on Chemistry and the Environment ICCE 2011, ETH Zürich, 09-11 thru 15 ▶
- Zennegg, M.** PDMS passive samplers – an excellent tool for the identification of PCB point sources in Swiss rivers, Conference on Chemistry and the Environment ICCE 2011, ETH Zürich, 09-11 thru 15 ♦
- Zennegg, M.** Old Sins Throw Long Shadows: PCBs – almost 40 years after restrictions in Switzerland – still an environmental problem?, Sicherheit und Umweltschutz in der Chemie, Seminarreihe Herbstsemester, ETH Zürich, 11-11 ▶●

Empa Activities 2011

Conferences

Hydrogen & Energy

- Bielmann, M.** Hydrogen for Off-Grid Power Systems, 5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■▶
- Bielmann, M.** Off-grid renewable energy: technical and economic potential of hydrogen hybrid systems, LCES (Low Carbon Earth Summit) 2011, Dalian, CN, 10-25 ▶
- Borgschulte, A.** Gaseous decomposition products of complex hydrides by Infrared Spectroscopy, Empa – KIST Workshop, Dübendorf, 01-21 ■▶
- Borgschulte, A.** Building Blocks of the Pseudo-Ternary System $\text{LiBH}_4\text{-LiNH}_2\text{-LiI}$, 5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■▶
- Borgschulte, A.** Structure and dynamics of complex hydrides, ESRF user meeting 2011, ESRF, Grenoble, FR, 02-07 thru 10 ▶●
- Borgschulte, A.** Hydrogen sorption kinetics, reaction dynamics, and spectroscopy, Workshop «x-Rays and Neutrons in Energy-Related Materials Science», Universität Genf, 03-29 ▶●
- Borgschulte, A.** Mobility and dynamics in the complex hydrides LiAlH_4 and LiBH_4 , Faraday Discussion 151: Hydrogen Storage Materials, Rutherford Lab, Didcot, UK, 04-18 thru 20 ▶●
- Callini, E.** Combined FTIR and gravimetric measurements of evolved gas from complex hydrides, Gordon Research Conference, Hydrogen-Metal Systems, Stonehill College, 320 Washington St, North Easton, MA 02356, US, 07-17 thru 22 ◆
- Callini, E.** Combined FTIR and gravimetric measurements of evolved gas from complex hydrides and nanoconfinement effect, 1 Congresso Nazionale sui Materiali Nanofasici, University Bologna, IT, 09-05 thru 09 ▶
- Callini, E.** SOLID STATE HYDROGEN STORAGE, World Materials Summit and Student Congress 2011, Washington D.C., US, 10-08 thru 12 ◆
- Gorbar, M.** Characterization of Commercial Metal-Oxide Ceramic Diaphragms for Hydrogen Production by Alkaline Electrolysis, 5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■◆
- Gorbar, M.** Advanced gas separation diaphragms for alkaline electrolysis, PSI, Electromobility Day, PSI, Villigen, 05-11 ◆
- Gorbar, M.** COMPOSITE CERAMIC DIAPHRAGMS FOR ALKALINE ELECTROLYSIS, EUROPEAN FUEL CELL FORUM 2011, Kultur- und Kongresszentrum Luzern, 06-28 thru 07-01 ◆
- Gorbar, M.** ESEM and Raman mapping of Polyphenylene Sulphide/Polysulfone/Olivine Diaphragms, PhD Symposium, Empa St. Gallen, 10-18 ◆
- Kato, S.** Surface properties of hydrides and reactions, Empa – KIST Workshop, Dübendorf, 01-21 ■▶
- Kato, S.** Surface Oxidation of Hydrides, 5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■▶
- Kato, S.** Catalyst preparation from hydride, Workshop on «Capture and conversion of CO_2 into sustainable hydrocarbon fuels», Roskilde, DK, 04-14 thru 15 ◆
- Kato, S.** Hydrogenation of CO_2 and CO on the hydride surface of Mg_2NiH_4 , 1st Swiss Heterogeneous Catalysis Meeting, Grindelwald, 06-16 thru 17 ◆
- Kato, S.** Hydrogen desorption mechanisms at hydride surfaces, Gordon Research Conferences, Hydrogen-Metal Systems, Gordon-Kenan Research Seminar, Easton, MA, US, 07-16 thru 17 ▶●
- Kato, S.** CO_2 hydrogenation on a metal hydride surface, Gordon Research Conference, Hydrogen-Metal Systems, Stonehill College, 320 Washington St, North Easton, MA 02356, US, 07-17 thru 22 ◆

Empa Activities 2011

Conferences

Hydrogen & Energy

- Martelli, P.** Iodine Stabilized HT Phase of LiBH₄,
5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■▶
- Martelli, P.** Dynamical Properties of LiBH₄ and SELF-Hydrogen for Off-Grid Power System,
International Conference for Sustainable Energy Storage, Belfast, GB, 02-21 thru 24 ▶
- Martelli, P.** BH₄- Self-Diffusion in Liquid LiBH₄ using Quasielastic neutron scattering,
Faraday Discussion 151: Hydrogen Storage Materials, Rutherford Lab, Didcot, UK, 04-18 thru 20 ◆
- Martelli, P.** Rotational motion in LiBH₄/LiI, PSI, Electromobility Day, PSI, Villigen, 05-11 ◆
- Martelli, P.** LiBH₄/Li as solid electrolyte to increase the safety in lithium-ion batteries,
ICHS – 4th International Conference on Hydrogen Safety, San Francisco, CA, US, 09-12 thru 14 ◆
- Martelli, P.** Rotational motion in LiBH₄/LiI solid solution, PhD Symposium, Empa St. Gallen, 10-18 ▶
- Martelli, P.** Hydrogen dynamics in complex hydrides, PhD defense, Universität Fribourg, 10-28 ▶
- Martelli, P.** Hydrogen dynamics in complex hydrides, Public PhD defense, Universität Fribourg, 11-16 ▶
- Mauron, Ph.** Hydrogen Adsorption in Advanced Carbon Materials,
5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■▶
- Mauron, Ph.** Stability of the LiBH₄/CeH₂ Composite System Determined by Dynamic pcT Measurements,
Gordon Research Conference, Hydrogen-Metal Systems, Stonehill College,
320 Washington St, North Easton, MA 02356, US, 07-17 thru 22 ◆
- Probst, B.** Photocatalytic Hydrogen Production from Homogenous Solution,
Workshop on «Capture and conversion of CO₂ into sustainable hydrocarbon fuels»,
Roskilde, DK, 04-14 thru 15 ◆
- Remhof, A.** The role of Li₂B₁₂H₁₂ in the sorption cycle of LiBH₄,
Empa – KIST Workshop, Dübendorf, 01-21 ■▶
- Remhof, A.** The Role of Li₂B₁₂H₁₂ in the sorption Cycle of LiBH₄,
5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■▶
- Remhof, A.** Dynamics in complex hydrides,
481. WE-Heraeus-Seminar on Energy Materials Research by Neutrons and Synchrotron Radiation,
Physikzentrum Bad Honnef, DE, 05-08 thru 11 ▶
- Remhof, A.** Rotational motion in LiBH₄/LiI solid solutions,
Gordon Research Conference, Hydrogen-Metal Systems,
Stonehill College, 320 Washington St, North Easton, MA 02356, US, 07-17 thru 22 ◆
- Remhof, A.** In-situ neutron diffraction of the direct synthesis of LiBD₄,
5th European Conference on Neutron Scattering, Prague, CZ, 07-17 thru 22 ◆
- Remhof, A.** Localized Hydrogen dynamics in complex borohydrides,
5th European Conference on Neutron Scattering, Prague, CZ, 07-17 thru 22 ▶
- Remhof, A.** Synthese und Charakterisierung von Borhydriden,
Fraunhofer-Institut für Solare Energiesysteme (ISE), Freiburg im Breisgau, DE, 08-12 ▶
- Remhof, A.** Ion Dynamics in Lightweight Borohydrides,
Kick-off meeting, PSRP EU Project, Institute of Nuclear Physics,
Polish Academy of Sciences, Kraków, PL, 10-14 ▶
- Stojadinovic, J.** Electrochemical Investigation of Advanced Materials Used for Development of Alkaline
Electrolyzer's Diaphragms,
5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■▶
- Vogt, U.** Catalytic Combustion of Hydrogen on Platinum Coated Porous SiC Ceramics,
5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■▶

Empa Activities 2011

Conferences

Hydrogen & Energy

- Vogt, U.** Development of Advanced Gas Separation Diaphragms for Alkaline Electrolysis, Capture and conversion of CO₂ into sustainable hydrocarbon fuels, Workshop on «Capture and conversion of CO₂ into sustainable hydrocarbon fuels», Roskilde, DK, 04-14 thru 15 ♦
- Vogt, U.** Catalytic Hydrogen Combustion on Porous SiC Ceramics, EUROPEAN FUEL CELL FORUM 2011, Kultur- und Kongresszentrum Luzern, 06-28 thru 07-01 ▶
- Vogt, U.** Zementchemie: Vom mineralischen Rohstoff zum Klinker, Albert-Ludwigs-Universität Freiburg, Fakultät für Chemie, Pharmazie und Geowissenschaften, DE, 08-01 ▶
- Vogt, U.** Entwicklung, Charakterisierung und Anwendung von Materialien für nachhaltige Energiesysteme, Fraunhofer-Institut für Solare Energiesysteme (ISE), Freiburg im Breisgau, DE, 08-12 ▶
- Wiedenmann, D.** Gas Separation Diaphragms for Alkaline Hydrogen Production: Influence of Microstructure on Ion Conductivity and Gas Purities, 5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■♦
- Yan, Y.** The Role of Li₂B₁₂H₁₂ in Decomposition of LiBH₄-Related Hydrogen Storage Materials, 1st Asian Symposium on Hydrogen Storage Materials, Hangzhou, CN, 05-23 thru 26 ♦
- Züttel, A.** Electrochemical Processes and Energy Storage, EMPA-NIMS-KIT-MPIMF Workshop on Materials Science for Energy Technologies, KIT, Karlsruhe, DE, 01-11 thru 12 ▶
- Züttel, A.** Synthetic Energy Carriers, ACTS Symposium 2011, Lunteren, NL, 01-12 thru 13 ▶●
- Züttel, A.** Erneuerbare synthetische Energieträger, Technische Universität Berlin, DE, 01-13 ▶●
- Züttel, A.** Was kommt nach dem Öl?, Thurgauische Naturforschende Gesellschaft, Frauenfeld, 01-18 ▶●
- Züttel, A.** Future Hydrogen Storage Projects, EMPA – KIST Workshop, Dübendorf, 01-21 ■▶
- Züttel, A.** Liquid Complex Hydrides, 5th Int. Symposium Hydrogen & Energy, Seminarhotel Stoos, Stoos, 01-23 thru 28 ■▶
- Züttel, A.** Hydrogen Storage Materials, Achievements and Outlook, University of Birmingham, Birmingham, GB, 02-03 ▶●
- Züttel, A.** Energiespeicherung: Was wir aus der Geschichte lernen können um die Zukunft zu meistern, erdstoffwissenschaftliches Kolloquium, Universität Erlangen-Nürnberg, Erlangen, DE, 02-08 ▶●
- Züttel, A.** From Metal to Complex Hydrides and Beyond, SCS Spring Meeting 2011, Universität Zürich, 02-10 ▶●
- Züttel, A.** Complex Hydrides and Beyond, Mini Workshop on Hydrogen: From basic sciences to applications, Uppsala University, Uppsala, SE, 02-17 ▶●
- Züttel, A.** Energy Storage and the Role of Hydrogen, 481. WE-Heraeus-Seminar on Energy Materials Research by Neutrons and Synchrotron Radiation, Physikzentrum Bad Honnef, DE, 05-08 thru 11 ▶●
- Züttel, A.** The Role of Nanomaterials in Hydrogen Storage, NanoMaterials for Sustainable Energy workshop (NMSE 2011), MESA + Institute for Nanotechnology, University of Twente, NL, 06-17 ▶●
- Züttel, A.** Synthetic Energy Carriers, 4th International Conference on Advancing the Chemical Sciences (ISACS 4), Challenges in Renewable Energy, MIT Energy Club, MIT, Boston, US, 07-05 thru 08 ▶●
- Züttel, A.** Hydrogen Storage in Complex Hydrides and Beyond, Gordon Research Conference, Hydrogen-Metal Systems, Stonehill College, 320 Washington St, North Easton, MA 02356, US, 07-17 thru 22 ▶●

Empa Activities 2011

Conferences

Hydrogen & Energy	Züttel, A.	Stability and Reversibility of Borohydrides for Hydrogen storage, Fundamental and applied hydrogen storage materials development Task 22 IEA HIA Expert Meeting, Copenhagen, DK, 09-04 thru 08 ▶
	Züttel, A.	The role of Hydrogen in energy storage, specialized iNANO lecture Aarhus, Aarhus, DK, 10-05 ▶●
	Züttel, A.	The role of Hydrogen in renewable energy storage, The Royal Society, Discussion meeting on «Can solar power deliver?», London, GB, 11-15 ▶●
Internal Combustion Engines	Bach, Ch.	Diversifizierung der Fahrzeugantriebe und Treibstoffe – ein absolut sinnvoller und notwendiger Trend, Fachtagung Networking + vffs/aseai, Mövenpick Hotel, Regensdorf, 03-24 ▶●
	Bach, C.	Jahrestagung der Schweizerischen Studiengesellschaft für Motorbetriebsstoffe, Campus Sursee, 09-29 ■
	Bach, Ch./ Dimopoulos Eggenschwiler, P.	Ceramic Foam Catalyst Substrates in Automotive Elhaust Aftertreatment: Pollutant conversion and operational Issues, SAENA 10 th International Conference on Engines & Vehicles, Capri, I, 09 11thru 14 ▶
	Chmielowiec-Jablczyk, M./ Soltic, P./Schneider, W./Rüst, B.	Analyse einer hydraulischen Gaswechsellventilbetätigung, 10. Tagung Motorische Verbrennung – Aktuelle Probleme und moderne Lösungsansätze, München, DE, 03-24 thru 25 ◆
	Dimopoulos Eggenschwiler, P.	Particle Filter anatomy, 2. VERT Forum Diesel Particle Filter Technologies – Opportunities and Future Challenges, Empa Akademie, Dübendorf, 03-25 ▶
	Dimopoulos Eggenschwiler, P./ Liati, A./Schreiber, D.	Soot Layer Degradation during Regeneration of Diesel Particulate Filters, 11. Internationales Stuttgarter Symposium Automobil- und Motorentechnik, Stuttgart, DE, 02-22 thru 23 ▶●
	Dimopoulos Eggenschwiler, P./ Schreiber, D./Liati, A.	Active Regeneration Characteristics in Diesel Particulate Filters (DPFs), SAENA 10 th International Conference on Engines & Vehicles, Capri, I, 09 11thru 14 ▶
	Egli, R.	Clean and Efficient Vehicle Research, Tagung Verbrennungsforschung in der Schweiz, ETH Zürich, 10-28 ◆
	Liati, A./ Dimopoulos Eggenschwiler, P.	Deposition, development and oxidative behavior of diesel particulate matter in diesel particulate filters, 9 th International CTI Forum, Exhaust Systems, Stuttgart, DE, 01-25 thru 26 ▶●
	Liati, A./ Dimopoulos Eggenschwiler, P./ Czerwinski, J./Bonsack, P./ Hermle, S.	Comparative studies of particles deposited in diesel particulate filters operating with biofuel, diesel fuel and fuel blends, SAENA 10 th International Conference on Engines & Vehicles, Capri, I, 09 11thru 14 ▶
	Liati, A./Gebauer, D., Fanning, M.	Multiple Alpine (U)HP metamorphic events recorded in single zircon crystals, Rhodope zone, N' Greece, 9 th Eclogite Conference 2011, Prague, CZ, 08-06 thru 09 11 ▶
	Santhosh Kumar, M./Aguirre, M./ Hug, P./Winkler, A./Ulrich, A./ Rentsch, D./Bach, Ch./ Weidenkaff, A./Ferri, D.	Lab scale fixed-bed reactor for operando x-ray absorption spectroscopy for structure activity studies of supported catalysts, 1 st Swiss Heterogeneous Catalysis Meeting, Switzerland, Grindelwald, 06-16 ▶●
	Santhosh Kumar, M./Aguirre, M./ Hug, P./Winkler, A./Ulrich, A./ Rentsch, D./Bach, Ch./ Weidenkaff, A./Ferri, D.	New insights into thermal and chemical aging of exhaust gas catalysts, 22 nd North American Catalysis Society Meeting, Detroit, US, 06-05 ◆
	Santhosh Kumar, M./Aguirre, M./ Hug, P./Winkler, A./Ulrich, A./ Rentsch, D./Bach, Ch./ Weidenkaff, A./Ferri, D.	Deactivation of exhaust gas catalysts: understanding how and why by microscopy and spectroscopy, EuropaCat 1, Glasgow, GB, 08-28 ◆
	Soltic, P.	Katalytisch beschichtete Kolben im Benzin- und Erdgasmotor, Tagung Verbrennungsforschung in der Schweiz, ETH Zürich, 10-28 ▶

Empa Activities 2011

Conferences

Internal Combustion Engines

Soltic, P./Egli, R./Mauke, D./Wright, Y. M./Bach, C./Boulouchos, K. Strömung, Gemischbildung und Verbrennung bei Methandirektinblasung im homogenen $\lambda = 1$ Betrieb, 6. Tagung Gasfahrzeuge, Stuttgart, DE, 10-26 thru 27 ▶

Weilenmann, M. Aspects of highly transient catalyst simulation, MODEGAT-Congress, Bad Herrenalb (Karlsruhe), DE, 09-19 thru 20 ◆

Weilenmann, M./Alvarez, R./Keller, M. Fuel Consumption and Exhaust Emissions of Mobile Air Conditionings, Status and Options for the Future, IAMF Congress, PALE1PO, Geneva, 03-08 thru 09 ▶

Winkler, A./Ferri, D./Santhosh Kumar, M./Aguirre, M./Rentsch, D. Aging phenomena in diesel oxidation catalysts, 1st Swiss Heterogeneous Catalysis Meeting, Switzerland, Grindelwald, 06-16 ▶●

Solid State Chemistry and Catalysis

Alfaruq, D./Otal, E./Aguirre, M./Populoh, S./Weidenkaff, A. E-MRS 2011 – Spring meeting, Nice, FR, 09 -05 thru 13 ▶

Eyssler, A./Lu, Y./Santhosh Kumar, M./Nachttegaal, M./Hug, P./Weidenkaff, A./Ferri, D. Concentration modulation excitation QuickEXAFS study of LaFe_{0.95}Pd_{0.05}O₃ under cyclic red-ox conditions for methane oxidation, JUM@P'11, Joint Users Meeting at PSI, Villigen-PSI, 09-16 ▶●

Eyssler, A./Santhosh Kumar, M./Nachttegaal, M./Hug, P./Weidenkaff, A./Ferri, D. Activity improvement of La/Fe,Pd)O₁ for CH₄ oxidation under periodic red-ox conditions, Europacat 1, Glasgow, Scotland, UK, 08-28 through 09-02 ▶

Eyssler, A./Winkler, A./Safonova, O./Nachttegaal, M./Hug, P./Weidenkaff, A./Ferri, D. Influence of A(B,Pd)O₃ (A = La,Y;B = Mn,Fe,Co) composition on teh state of Pd, Fall Meeting SCS, Lausanne, 09-09 ◆

Eyssler, A./Santhosh Kumar, M./Lu, Y./Nachttegaal, M./Hug, P./Weidenkaff, A./Ferri, D. Modulation excitation xAS study of LaFe_{0.95}Pd_{0.05}O₃ under cyclic red-ox conditions for methane oxidation, 22nd North American Catalysis Society Meeting, Detroit, US, 06-5 thru 10 ▶

Ferri, D./Santhosh Kumar, M./Hug, P./Weidenkaff, A./Newton, M. A. Making EXAFS surface sensitive? A concentration modulation excitation study of CO-NO on Rh Al₂O₃ and Pd, Al₂O₃, Europacat 1, Glasgow, Scotland, UK, 08-28 through 09-02 ▶

Karvonen, L./Maegli, A./Otal, E./Yoon, S./Hug, P./Yamauchi, H./Karpinen, M./Weidenkaff, A. Anionic Sublattice Variations in Perovskite-Type Materials, 1st Central and East-European Conference on Thermal Analysis and Calorimetry (CEEC-TAC), University of Craiova, Craiova, RO, 09-06 thru 09-10 ●●

Karvonen, L./Räsänen, S./Valkeapää, M./Populoh, S./Hug, P./Yoon, S./Liu, R. S./Chen, J. M./Weidenkaff, A./Yamauchi, H./Karpinen, M. Oxygen Non-Stoichiometry, Ordering and Mobility in SrCoO_{3-d} Perovskite, International Discussion Meeting on Thermoelectrics and Related Functional Materials, Aalto University School of Chemical Technology, Espoo, FI, 06-14 thru 17 ◆

Karvonen, L./Räsänen, S./Valkeapää, M./Populoh, S./Hug, P./Yoon, S./Liu, R. S./Chen, J. M./Weidenkaff, A./Yamauchi, H./Karpinen, M. Oxygen Non-Stoichiometry, Ordering and Mobility in SrCoO_{3-d} Perovskite, International Discussion Meeting on Thermoelectrics and Related Functional Materials, Aalto University School of Chemical Technology, Espoo, FI, 06-14 thru 06-17 ◆◆

Lu, Y./Ferri, D. Nano-scale perovskite-supported catalysts for the exhaust after treatment of natural gas vehicles with very low precious metal content, Annual Meeting NFP62, Fribourg, 09-15 ▶

Lu, Y./Michalow-Mauke, K./Heel, A./Graule, T./Hug, P./Weidenkaff, A./Ferri, D. Preparation and active phase composition of Pd-substituted perovskite-type oxides as three-way catalysts/Fall Meeting SCS, Lausanne, 09-09 ◆

Maegli, A./Yoon, S./Otal, E./Santhosh Kumar, M./Hisatomi, T./Leroy, C./Graetzel, M./Weidenkaff, A. Investigation of the oxynitride photocatalyst LaTiO₂N, 1st Het-CAT Meeting, Grindelwald, 06-16 thru 17 ◆◆

Empa Activities 2011

Conferences

Solid State Chemistry

- Maegli, A. E./Otal, E./Yoon, S./** E-MRS 2011 – Spring meeting,
Leroy, C./Hisatomi, T./Graetzel, M./ Nice, FR, 09 -05 thru 13 ♦
Weidenkaff, A.
- Moser, D./Karvonen, L./** High-temperature thermoelectric properties and oxygen content of polycrystalline
Populoh, S./Weidenkaff, A. Ca₂8Bi_{0.2}Co₄O₉ + δ ,
International Discussion Meeting on Thermoelectrics and related functional Materials,
Helsinki Aalto University School of Chemical Technology, Espoo, Fi, 06-14thru17 ♦
- Moser, D./Karvonen, L./** High-temperature thermoelectric properties and oxygen content of polycrystalline
Populoh, S./Weidenkaff, A. Ca₂8Bi_{0.2}Co₄O₉ + δ ,
International Discussion Meeting on Thermoelectrics and related functional Materials,
Helsinki, Fi, 06-14thru17 ♦
- Otal, E./Aguirre, M./Walsøe, N./** Hybrid Materials 2011,
De Reca, /Weidenkaff, A. Strasburg, FR, 06-03 thru 10 ♦
- Populoh, S./Galazka, K./** Structure and thermoelectric properties of TiNiSn-based half-Heusler compounds,
Sagara, L./ Montpellier, FR, 09-12 thru 15 ●●
Weidenkaff, A.
- Populoh, S./Weidenkaff, A.** Development of nanostructured high temperature thermoelectric materials,
Cancun, MX, 08-14 thru 19 ●●
- Sagara, L./Aguirre, M./** xNiSn (x = Ti, Zr, Hf) half-Heusler compounds. Structural analysis and thermoelectric properties,
Populoh, S./Ye, L./Weidenkaff, A. Villars, 08-14 thru 18 ■●
- Sagara, L./Aguirre, M./** Structural analysis and thermoelectric properties of xNiSn (x = Ti, Zr, Hf) half-Heusler
Populoh, S./Ye, L./Weidenkaff, A. compounds., Thessaloniki, GR, 09-27 thru 29 ♦
- Sagara, L./Shkabko, A./** 2011 Swiss Workshop on Materials with Novel Electronic Properties,
Populoh, S./Karvonen, L./ Les Diablerets, 06-28 thru 07-01 ■♦
Weidenkaff, A.
- Santhosh Kumar, M./Aguirre, M./** Lab scale fixed-bed reactor for operando x-ray absorption spectroscopy for structure activity
Hug, P./Winkler, A./Ulrich, A./ studies of supported catalysts,
Rentsch, D./Bach, Ch./ 1st Het-CAT Meeting, Grindelwald, 06-16 thru 17 ■●
Weidenkaff, A./Ferri, D.
- Santhosh Kumar, M./Aguirre, M./** Deactivation of exhaust gas catalysts: understanding how and why by micro- and
Hug, P./Winkler, A./Ulrich, A./ spectro- scopy,
Rentsch, D./Bach, Ch./ EuropaCat 1, Glasgow, Scotland, UK, 08-28 thru 09-2 ♦
Weidenkaff, A./Ferri, D.
- Santhosh Kumar, M./** New insights into thermal and chemical aging of exhaust gas catalysts,
Weidenkaff, A./Ferri, D./et al. 22nd North American Catalysis Society Meeting, Detroit, US, 06-5 thru 10 ♦
- Santhosh Kumar, M./Aguirre, M./** Lab scale fixed-bed reactor for operando x-ray absorption spectroscopy for structure activity
Hug, P./Winkler, A./Ulrich, A./ studies of supported metal oxide catalysts,
Rentsch, D./Bach, Ch./ 22nd North American Catalysis Society Meeting, Detroit, US, USA●
Weidenkaff, A./Ferri, D.
- Schäuble, N./Dujardin, R./** Anakon,
Weidenkaff, A./Aguirre, M. H. Zürich, 03-22 thru 25 ♦
- Schäuble, N./Otal, E./** E-MRS 2011 – Spring meeting,
Aguirre, M./Weidenkaff, A. Nice, FR, 09 -05 thru 13 ♦
- Schäuble, N./Romanyuk, Y./** Thermoelectric properties and structural characterisation of ZnO:Al thin films,
Yoon, S./Weidenkaff, A./ Villars, 08-14 thru 18 ■●
Aguirre, M.
- Yoon, S./Mägli, A./** Facile Synthesis and Characterization of β -TaON for Solar Water Splitting,
Santhosh Kumar, M./ 17th International Symposium on the Reactivity of Solids (ISRS17),
Trottmann, M./Hisatomi, T./ Bordeaux, FR, 06-27 thru 07-01 ●
Leroy, C. M./Grätzel, M./
Weidenkaff, A.

Empa Activities 2011

Conferences

Solid State Chemistry and Catalysis

- Yoon, S./Mägli, A./
Santhosh Kumar, M./
Trottmann, M./Hisatomi, T./
Leroy, C. M./Grätzel, M./
Weidenkaff, A.** Photocatalytic water oxidation with TaON powder,
1st Het-CAT Meeting, Grindelwald, 06-16 thruh 17 ■▶
- Vogel-Schäuble, N./Süess, B./
Populoh, S./Weidenkaff, A./
Aguirre, M.** A morphology study on thermoelectric Al-substituted ZnO,
Thessaloniki, GR, 09-28 thruh 30 ✦
- Weidenkaff, A.** Functional Oxides for Thermoelectric Converters,
ISIS Universität Bremen, Bremen, DE, 01-12 ▶●
- Weidenkaff, A.** Materials chemistry of high temperature thermoelectric converters,
Colloquium at the University of Florida, Tampa, Tampa, Florida, US, 01-28 ▶●
- Weidenkaff, A.** Thermoelektrische Oxide, Zintl-Kolloquium,
Technische Universität Darmstadt, Darmstadt, DE, 02-03 ▶●
- Weidenkaff, A.** Materials design for future energy technologies: Thermoelectric Oxides,
MPI Stuttgart, 4.5.2011., Stuttgart, DE, 05-04 ▶●
- Weidenkaff, A.** Perovskite-type materials for future energy technologies,
Plenary lecture at the Bilateral Energy Conference, E-MRS spring meeting, Nice, FR, 05-12 ▶●
- Weidenkaff, A.** Nanostructured complex thermoelectric oxides,
International Discussion Meeting on Thermoelectrics and Related Functional Materials,
Aalto University, Aalto, FI, 06-14 thruh 17 ▶●
- Weidenkaff, A.** Thermoelectric Oxides and Heusler Compounds,
Int. Symp on React. Of Solids, Bordeaux, Bordeaux, FR, 06-27 thruh 07-01 ▶●
- Weidenkaff, A.** Unconventional thermoelectrics: from new materials to energy conversion devices,
FUMAT 2011, Future Materials for Grand Challenges of our time, Warsaw, PL, 09-22 thruh 23 ▶●
- Weidenkaff, A.** Perovskite-type materials for energy technologies,
European Conference of Solid State Chemistry, Lund, Lund, SE, 09-26 thruh 28 ▶●
- Weidenkaff, A./Galatzka, K.** Thermoelektrik-Frühjahrsschule, Koeln, DE, 03-28 thru 04-01 ▶●
- Weidenkaff, A./Reller, A.** Criticality of technologically strategic functional metals,
35th ICACC, Daytona Beach, Florida, US, 01-26 ▶●
- Weidenkaff, A./Veziridis, A./
Brunko, O./Alfaruq, D./
Aguirre, M./Suess, B./Moser, D./
Karvonen, L./Tomeš, P.** Perovskite-Type Cobaltates and Manganates for Thermoelectric Oxide Modules (TOM),
Traverse City MI, US, 07-17 thru 21 ■✦
- Yoon, S./Maegli, A./Eyssler, A./
Trottmann, M./Hisatomi, T./
Leroy, C. M./Grätzel, M./
Chiarello, G. L./Weidenkaff, A.** E-MRS – Synthesis and Characterization of La(Ti,Nb)(O,N)₃ for Solar Water Splitting,
Nice, FR, 05-09 thru 13 ✦▶
- Yoon, S./Maegli, A./
Matam, S. K./Trottmann, M./
Hisatomi, T./Leroy, C. M./
Grätzel, M./Weidenkaff, A.** 1st Swiss Heterogeneous Catalysis Meeting – Photocatalytic water oxidation with TaON powder,
Grindelwald, 06-16 thru 17 ■
- Yoon, S./Maegli, A./Matam, S. K./
Trottmann, M./Hisatomi, T./
Leroy, C. M./Grätzel, M./
Weidenkaff, A.** 17th International Symposium on the Reactivity of Solids (ISRS17)- Facile Synthesis and
Characterization of β -TaON for Solar Water Splitting,
Bordeaux, FR, 06-27 thru 07-01 ▶

Empa Activities 2011

Conferences

Technology and Society

- Edelmann, X.** Rohstoff- und Energie-Effizienz- ein Thema, das uns alle angeht 11. Thurgauer Technologietag, Oerlikon Saurer AG Arbon, 04-01 ▶●
- Edelmann, X.** Erfolgreiche Innovation durch Kooperation in Netzwerken NTB Technologietag, NTB Buchs, 06-24 ▶●
- Edelmann, X.** World Resources Forum, Davos, 09-19 thru 21 ■
- Edelmann, X.** Energiesituation global und national Energieperspektiven Schweiz, Beitrag des ETH-Bereichs ITS Technologie Apéro, ITS Neuhausen, 10-31 ▶●
- Edelmann, X.** Nachhaltiger Ressourcenverbrauch – ein globales Problem, Re-source 2011, Pfalzweiler St.Gallen, 11-09 thru 10 ▶●
- Althaus, H. J.** Sind Elektroautos ökologisch besser? / E-Wirtschaft mach E-Mobil, Nottwil, 03-15 ▶●
- Althaus, H. J.** Comparative assertion of battery electric cars with various alternatives, 43rd LCA Discussion Forum: Life Cycle Assessment of Electromobility – Answers and Challenges., ETH Zürich, 04-06 ▶●
- Althaus, H. J.** Individuelle Mobilität im Öko-Vergleich; Ökobilanz von Elektromobilen im Vergleich zu konventionellen Autos, Blue-Tech, Casino Theater Winterthur, 06-16 ▶●
- Althaus, H. J./Gauch M./Widmer, R./Del Duce A.** Elektromotoren für mobile Anwendungen, Blue-Tech, Casino Theater Winterthur, 06-16 ▶●
- Birtel, M.** World Resources Forum 2011, Davos, 09-18 thru 21 ■
- de Leeuw, B.** World Resources Forum 2011, Davos, 09-18 thru 21 ■
- Del Duce, A.** Life cycle assement of conventional and electric bicycles, Eurobike 2011, Friedrichshafen, DE, 02-09 ▶●
- Faist Emmenegger, M./Reinhard, J./Zah, R./Ziep, T./Widok, A./Wohlgemuth, V./Junquera, V./Guiramand, M./Kopse, A.** Roadmap to the RSB Tool: a modular approach for assessing the compliance to the Roundtable on Sustainable Biofuels,, 19th European Biomass Conference & Exhibition, Berlin, DE, 06-06 thru 10 ◆
- Faist Emmenegger, M./Zah, R.** Accuracy vs. robustness: challenges of including LCA into legislations, standardization schemes for sustainable biofuels, SETAC Europe 21st Annual Meeting, Milano, IT, 05-16 thru 20 ◆
- Faist, M./Schnetzler, J./Nemecek, Th./Simons, A./Bauer, Ch./Zah, R.** Environmental impacts of biofuels: what's new?, LCM 2011, Berlin, DE, 08-28 thru 31 ▶
- Gauch, M.** Design Considerations for EVs and Batteries from the environmental perspective, Opportunities for large scale integration of electric vehicles, Hanson Wade, London, GB, 02-09 ▶●
- Gauch, M.** Environmental Impact Assessment of Electric Mobility, Automotive Battery Technology 2011, IQPC, Wiesbaden, DE, 05-09 ▶●
- Gauch, M.** Electric Mobility vs. Conventional Mobility with Biofuels and Fossil Fuels, Batteries 2011, Cannes, FR, 09-28 ▶●
- Gauch, M.** Comparative Life Cycle Assessment: Electric Mobility vs. Conventional Mobility, Workshop of APEC Asian Pacific Economic Cooperation, Hong Kong, CN, 10-25 ▶●
- Gottschalk, F.** Modeled Environmental Concentrations of Engineered Nanomaterials (ENM)/EMPA, Natural Resources and Pollutants Research Program (NAREP) Seminar (2011), Dübendorf, 02-07 ■▶
- Gottschalk, F.** Engineered nanomaterials in the environment – exposure scenarios for Switzerland at different resolutions, FHS St.Gallen, Institut für Modellbildung und Simulation (IMS) (2011), St. Gallen, 02-22 ■▶

Empa Activities 2011

Conferences

Technology and Society

- Gottschalk, F.** Modeled exposure to engineered nanomaterials (ENM) in the environment, NanoToxCom-Kolloquium Uni Bremen, Bremen, DE, 05-19 ▶
- Gottschalk, F.** Engineered nanomaterials in rivers – exposure scenarios for Switzerland at high spatial and temporal resolution/SETAC Europe 21st Annual Meeting, Milano, IT, 06-20 ▶
- Gottschalk, F.** Nanotechnologie und Wasserwirtschaft, Tagung des Ministeriums für Klimaschutz, Umwelt, Landwirtschaft, Natur- und Verbraucherschutz des Landes Nordrhein-Westfalen (MKULNV), Düsseldorf, DE, 11-16 ■▶
- Gottschalk, F.** Understanding Human Health Effects and Environmental Impacts of Engineered Nanomaterials, Ca' Foscari University, Venice, Third Nanosafety autumn school, Venice, IT, 11-24 ■
- Hilty, L. M.** Informatik und nachhaltige Entwicklung, Universität Zürich, Zürich, 28-03 ▶●
- Hilty, L. M.** Sustainability and ICT – An Overview of the Field with a Focus on Socio-economic Aspects, Joint workshop co-organised by IFIP's working groups 9.2 and 9.9, Centro Studi Politeia, Milano, IT, 06-04 ▶●
- Hilty, L. M.** Sustainability of ICT- What could that be? 24^{èmes} Entretiens Jacques Cartier, Montréal, CA, 10-04 ▶●
- Hilty, L. M.** Von Green IT zu Sustainable IT, öbu-Apéro Sustainable IT, Zürich, 06-28 ▶●
- Hischier, R.** Ökologie & Nachhaltigkeit von Verpackungen, OMNIday «Nachhaltige Verpackungen / Neuomarketing», St. Gallen, 03-31 ▶●
- Hilty, L. M.** Sustainability and Internet Governance, Internet Governance Forum Italia, Trento, IT, 11-12 ▶●
- Hilty, L. M.** Nachhaltigkeit in der Informatik und durch die Informatik, Jubiläumsfeier 40 Jahre Informatik in Hamburg. Universität Hamburg, Hamburg, DE, 11-18 ▶●
- Hischier, R.** Building Credibility into Data – theecoinvent database approach to Completeness, Transparency & Consistency, 5th PCF World Summit, Rüschlikon, 04-07 thru 08 ▶
- Hischier, R.** ecoinvent – le plus complète des bases de données pour des analyses de cycle de vie, 1^{ères} Assises Nationales de l'Energie Grise, Grenoble, FR, 04-14 thru 15 ▶●
- Hischier, R.** Ökologische Nachhaltigkeit – begreifbar & messbar, SVI – Tag der Verpackung, Dübendorf, 07-01 ▶●
- Hischier, R.** Life Cycle Assessment / Nanocarbons 2011 – an European Science Foundation (ESF) workshop, Acquafredda di Maratea, IT, 09-07 thru 11 ▶●
- Hischier, R.** Requirements at LCI of engineered Nanomaterials & Strategies to overcome existing gaps, NanoSustain Workshop, Bremen, DE, 09-26 thru 27 ▶
- Hischier, R.** LCA Bioplastik in Verpackungen – wie nachhaltig ist Bioplastik ?, Workshop «Bioplastik: Verpackung der Zukunft?», St. Gallen, 09-27 ▶●
- Hischier, R.** Life Cycle Assessment of Engineered Nano-materials: State of the Art & a forward strategy to fill up identified weaknesses, LCA 11 Conference, Chicago, US, 10-04 thru 06 ▶
- Hischier, R.** Evolution of Life Cycle Inventory Data – The example of Information and Communication Technology, LCA XI Conference, Chicago, US, 10-04 thru 06 ▶
- Hischier, R./Som, C.** Comparison of the Approaches Risk Assessment and Life Cycle Assessment to Nanomaterials in Façade Coatings (project NanoHouse, coordinated by CEA), Workshop «Safety Issues of Nanomaterials along their Life Cycle», Barcelona, ES, 05-05 thru 06 ▶

Empa Activities 2011

Conferences

Technology and Society

- Knoeri, C./Binder, C./Althaus, H. J.** How interacting agents affect resources; Demand for recycled mineral construction materials in Switzerland, WRF 2011, Davos, 09-19 thru 21 ◆
- Knoeri, C./Waeger, P./Stamp, A./Althaus, H. J.** From static to dynamic criticality assessment: Linking agent-based modelling with material flow modelling approaches, ISIE 2011, Berkeley, California, US, 07-7 thru 10 ▶
- Knoeri, C./Waeger, P./Stamp, A./Althaus, H. J./Weil, M.** Towards a dynamic criticality assessment: Linking agent-based demand – with material flow supply modelling approaches, WRF 2011, Davos, 09-19 thru 21 ▶
- Kostadinov F./Steubing B.** An agent-based model of an energy wood market in a Swiss region, 7th European Social Simulation Association Conference (ESSA), Montpellier, FR, 09-19 thru 23 ▶
- Lehmann, M.** World Resources Forum 2011, Davos, 09-18 thru 21 ■
- Ménard, L./Gschwind, B./Blanc, I./Beloin-Saint-Pierre, D./Wald, L./Blanc, P./Ranchin, T./Hischier, R./Gianfranceschi, S./Smolders, S./Gilles, M./Grassin, C.** Assessment of environmental impact of electricity production by photovoltaic system using GEOS recommendation on interoperability, EnviroInfo 2011, Ispra, IT, 10-05 thru 07 ▶
- Mueller, E./Schlupe, M./Amoyaw-Osei, Y./Prakash S./Terekhova, T.** E-waste management in Ghana: a country massflow assessment, Sardinia 2011 Thirteenth International Waste Management and Landfill Symposium, S. Margherita di Pula, Sardinia, IT, 10-03 thru 07 ▶
- Nowack, B.** Towards a predictive modeling of environmental behavior and effects of nanomaterials, Quantitative Nanostructure Toxicity Relationships (QNTR), COST Exploratory Workshop, Vaeshartelt, NL, 03-04 ▶●
- Nowack, B.** Nanomaterials in the Environment: Life Cycle Aspects, Workshop on Environmental Nanotechnologies: Industrial developments, Economic and societal Impacts, Aix-en-Provence, FR, 07-07 ▶●
- Nowack, B.** Nanopartikel in der Umwelt: Freisetzung, Verhalten und Effekte, SVGW Gas- und Wasserfachtagung, Olten, 08-09 ▶●
- Nowack, B.** Use of Modeling to Predict Environmental Concentrations of Nanomaterials, Bridging nanoEHS research efforts, US-EU Workshop, Washington, DC, US, 10-03 ▶●
- Nowack, B.** Modeling release from uses of nano-Ag in textiles / NANORELEASE, Developing Methods to Measure Release of Nanomaterials from Solid Matrices, Steering Committee Workshop, Washington, DC, US, 10-05 ▶●
- Nowack, B.** Release of Nanomaterials to the Environment, Plenary Keynote Lecture / ICCE 2011 – EuCheMS International Conference on Chemistry and the Environment, Zürich, 11-09 ▶●
- Nowack, B.** Risk quantification of engineered nanomaterials in water based on probabilistic species sensitivity distribution modeling, SETAC North America 32nd Annual Meeting, Boston, US, 11-13 thru 17 ▶
- Nowack, B.** Auswirkungen der Nanotechnologie auf die Umwelt, Pädagogische Hochschule Luzern, Luzern, 11-18 ▶●
- Nowack, B.** Synthetische Nanopartikel in der Umwelt und ihre Grundwasserrelevanz, Strategische Begleitgruppe Grundwasserbeobachtung Schweiz SBG-CH, Arbeitsgruppe Parameter, Bern, 28-03 ▶●
- Nowack, B./Müller, N.** Workshop on «Nanosorbents for water treatment», Nano and Water 2011 Conference, Monte Verita, 16-05 ■
- Nowack, B./Müller, N.** Workshop on «Nanofiltration and nano-enhanced filtration», Zürich, 18-01 thru 19-01 ■

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Conferences

Technology and Society

- Ott, D.** Side-event COP10: Latinamerican Public Private e-Waste Initiative, Cartagena, Colombia, CO, 19-10 ■▶●
- Reinhard, J.** RSB tool: A LCA tool for the assessment of biofuels sustainability, Winter Simulation Conference, Phoenix, Arizona, US, 12-10 thru 14 ▶●●
- Schluep, M.** Brief overview of hazardous substances issues within the life-cycle of EEE, UNIDO, Vienna, AT, 03-29 thru 31 ▶●
- Schluep, M.** The role of the informal sector in the management of secondary resources – the case of e-Waste in West Africa, World Resource Forum, WRF 2011, Davos, 09-19 thru 21 ■▶
- Som, C.** Technikfolgenabschätzung und Systemanalyse als Basis für eine nachhaltige Innovation: eine Fallstudie zu Nanotextilien, NTA 4, Berlin, DE, 03-14 ▶
- Som, C.** Dialog Nanosafetextiles, Empa Akademie, Dübendorf, 10-05 ■
- Som, C.** Leitfaden Nanotextilien / Nano-Dialog Baden-Württemberg – kleine Teilchen, große Fragen! Kongress zu Verbraucheraspekten im Umgang mit Nanotechnologien, Stuttgart, DE, 12-01 ▶
- Som, C./Hischier R.** NanoHouse Life Cycle of Nanoparticle-based Products used in House Coating – Life cycle thinking Claudia Som, Roland Hischier / Specialist Brainstorming and Coordination Meeting on Life cycle Assessment (LCA) and Risk Analysis in Nanomaterials- related NMP projects, Brussels, BE, 03-02 ▶●
- Som, C./Hischier R.** Comparison of the Approaches Risk Assessment and Life Cycle Assessment to Nanomaterials in Façade Coatings, Safety Issues of nanomaterials along their life cycle, Barcelona, ES, 05-04 thru 05 ▶●●
- Spescha G./Som C.** Workshop: Breakout Session: Bridging Projects, Particle Day, Empa Dübendorf, 03-29 ■
- Stamp, A./Meskers, C./ Robertz, B./Wäger, P./ Reimer, M./Althaus, HJ./ Scholz, R. W.** Challenges for LCAs of complex systems: the case of a large-scale precious metal refinery plant, LCM 2011, Berlin, DE, 08-30 ▶
- Steubing, B.** A framework for LCA-based system optimization and selection of best technologies and examples from its application to the optimal use of European bioenergy, World Resource Forum, WRF 2011, Davos, 09-19 thru 21 ▶
- Steubing, B./Ballmer, I./ Thees, O./Gerber, L./ Maréchal, F./Zah, R./Ludwig, C.** An environmental optimization model for bioenergy plant sizes and locations for the case of wood-derived SNG in Switzerland, World Renewable Energy Congress, Linköping, SE, 05-09 thru 13 ▶
- Steubing, B./Kostadinov, F./ Ghorbani, A./Wäger, P./ Thees, O./Ludwig, C.** Agent-based modelling of a woodfuel market – factors that affect the availability of woodfuel, ISIE 2011, Berkeley, California, US, 07-7 thru 10 ▶
- Steubing, B./Reinhard, J./ Zah, R./Ludwig, C.** What are the environmentally optimal uses of different biomass feedstocks – heating, electricity generation or transportation?, ISIE 2011, Berkeley, California, US, 07-7 thru 11 ▶
- Wäger, P.** Wie können wir nachhaltiger mit seltenen Metallen umgehen? Tagung, Grenzenlose Verfügbarkeit strategischer Metalle?, Evangelische Akademie Tutzing, DE, 01-31 thru 02-1 ▶●●
- Wäger, P.** Gehen der Hightechindustrie die seltenen Metalle aus? PUSCH-Tagung, Knappe Ressourcen – Risiken und Chancen für die Schweizer Wirtschaft, Bern, 03-31 ▶●
- Wäger, P.** Interventions towards a more sustainable scarce metals supply / IFIP-Workshop Social accountability and sustainability in the information society: Perspectives on long-term responsibility, Centro Studi Politeia, Milano, IT, 06-04 ▶●●

Empa Activities 2011

Conferences

Technology and Society

[Wäger, P.](#) Nachhaltiger Umgang mit seltenen Metallen
swissmem-Tagung, Swissmem und Cleantech, Dübendorf, 11-02 1 ●

Media Technology

[Glavitsch, U./Simon, K./Szakos, J.](#) SpeechIndexer: A Flexible Software for Audio-Visual Language Learning.
International Conference on Information and Communication Technologies and Applications, ICTA 2011, Orlando, CA, US, 11-29 thru 12-02 1

[Küpfer, D./Simon, K.](#) Aspects of computational geometry in gamut mapping implementations. Color Imaging XV: Displaying, Processing, Hardcopy, and Applications, San Jose, CA, US, 01-19 thru 21 1

[Scheller-Lichtenauer M./Spro, I./Zolliker, P.](#) Perception of contrast on different backgrounds.
Midterm Meeting of the International Colour Association (AIC), Zürich, 06-07 thru 10 2

[Sormaz, M./Jenny, P.](#) Subsurface imaging with NIR light using polarization gating.
Progress In Electromagnetics Research Symposium, PIERS, Sozhou, CN, 09-12 thru 16 2

[Zolliker, P./Barańczuk, Z./Giesen, J.](#) Image Fusion for Optimizing Gamut Mapping.
19th Color and Imaging Conference, CIC, San Jose, CA, US, 11-07 thru 11 1