



6th German-Japanese | 6th International Symposium on Nanostructures

March 3-5, 2013
Kusatsu/Kyoto, Japan

2013 International Workshop on Functionalization and Applications of Soft/Hard Materials (Soft/Hard 2013)
MEXT-Supported Program for Strategic Research Foundation at Private Universities

4-Mar				
	8:30	bus transfer departure from hotel		
resistration	9:00 - 10:00	resistration		
		coffee break		
welcome session	10:00 - 10:05	W01	Prof. Dr. Ameyama	
	10:05 - 10:10		Prof. Dr. Henning Zoz	
	10:10 - 10:20	W02	Prof. Naotaka Nakamura	
	10:20 - 10:30	W03	Mr. Ichiro Okamoto	
	10:30 - 10:40	W04	Mr. Chiu-Lung Chu	
session 1	10:40 - 11:05	V01	Dr.-Ing. Peter Wierach	
	11:05 - 11:30	V02	Mr. Kalidoss Jayasankar	
	11:30 - 11:55	V03	Prof. Yuri Estrin	
short presentation	11:55 - 12:55	short presentations		
	12:55 - 14:00	lunch, expo & Posters		
session 2	14:00 - 14:25	V04	Mr. Adamo Screnci	
	14:25 - 14:50	V05	Dr. Frank M. Koch	
	14:50 - 15:15	V06	Mr. Deng-An Tsai	
	15:15 - 15:40	V07	Dr. Sergey V. Komarov	
	15:40 - 15:50	short break		
session 3	15:50 - 16:15	V08	Dr. Carsten Busse	
	16:15 - 16:40	V28	Prof. Dr. Niranjan N. Chiplunkar	
	16:40 - 17:05	V09	Dr. Hirokazu Sato	
	17:05 - 17:20	coffee break		
session 4	17:20 - 17:45	V11	Prof. Cheng-Hsin Chuang	
	17:45 - 18:10	V12	Dr.R.John Errington	
	18:10 - 18:35	V13	Dr. Shoji Aoki	
	18:35 - 19:00	V18	Prof. Darrell F. Socie	
	19:00 - 21:00	dinner & cultural program		
	21:10	bus transfer departure from BKC		

5-Mar				
	7:30	bus transfer departure from hotel		
session 5	8:00 - 8:25	V15	Prof. Dr. Anatoly Popovich	
	8:25 - 8:50	V14	Dr. Xiao Sun	
	8:50 - 9:15	V10	Prof. Dr. Guy Dirras	
	9:15 - 9:40	V16	Prof. Dr. Nobuhiro Tsuji	
	9:40 - 10:00	coffee break		
short presentation	10:00 - 10:40	student short presentations 1		
	10:40 - 10:45	short break		
	10:45 - 11:25	student short presentations 2		
	11:25 - 12:30	poster evaluation		
	12:30 - 13:30	lunch, expo & Posters		
session 6	13:30 - 13:55	V25	Prof. Dr. Yutaka Sawada	
	13:55 - 14:20	V20	Mr. Yasuhiro Kanoko	
	14:20 - 14:45	V21	Dipl. -Ing. Andreas Franz	
	14:45 - 15:10	V22	Dr. Sung-Sil Jung	
	15:10 - 15:20	short break		
session 7	15:20 - 15:45	V23	Dr. Valerie Alain-Rizzo	
	15:45 - 16:10	V24	Prof. Yanlei Yu	
	16:10 - 16:35	V19	Prof. Dr. Xiaolan Cai	
	16:35 - 16:50	coffee break		
session 8	16:50 - 17:15	V26	Mr. Deniz Yigit	
	17:15 - 17:40	V27	Prof. Dr. Narcis Avarvari	
	17:40 - 18:05	V17	Prof. Dr. Daniel Guillon	
	18:05 - 18:30	V29	Prof. Dr. Henning Zoz	
	18:30 - 18:40	poster award		
	19:00	bus transfer departure from BKC		

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招待講演リスト

V01	Nanotechnology in High Performance Composite Materials for Aerospace Applications	Dr.-Ing. Peter Wierach Vice Director, Head of Dept. Multifunctional Materials	German Aerospace Center Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR) D-38108 Braunschweig Germany
V02	Preparation and Structural Investigations of ODS Ferritic Steel	Mr. Kalidoss Jayasankar Advanced Materials Technology Department	Institute of Minerals & Materials Technology Bhubaneswar 751013, Odisha India
V03	Geometry-inspired design of hybrid Materials: the Concept of Topological interlocking	Prof. Yuri Estrin Director, Centre for Advanced Hybrid Materials	Monash University Clayton VIC 3800 Australia
V04	No utilization of renewable energies without energy storage – energy mass storage ultimately leads to hydrogen leads to McPHY	Mr. Adamo Scenci Chief Commercial Officer & Board Member	McPhy Energy S.A. F-26190 La Motte-Fanjas France
V05	North Rhine-Westphalia's Steps to a Hydrogen based Energy Economy	Dr. Frank M. Koch	Fuel Cell and Hydrogen Network North Rhine-Westphalia D-40476 Düsseldorf Germany
V06	The investigation of AlCr alloyed target by novel powder metallurgy method for hard coating industry	Mr. Deng-An Tsai presented by Mr. Harry Liao	Solar Applied Materials Technology Corp. Tainan City 70955 Taiwan
V07	Ultrasonic shot peening process for applying thin nanostructured metal film on ceramic substrate	Dr. Sergey V. Komarov R&D	Nippon Light Metal Co., Ltd. 421-3297 Shizuoka Japan
V08	Graphene	Dr. Carsten Busse Senior Scientist II. Physical Institute	University of Cologne D-50937 Cologne Germany
V09	Tire ~ The Soft/Hard Composite Material ~	Dr. Hirokazu Sato Researcher, Central Research	Bridgestone Corporation 252-0804 Kanagawa Japan
V10	Powder metallurgy routes as strategies for tailoring multi-structured materials	Prof. Dr. Guy Dirras Material Sciences, Physical and Structural Metallurgy	Université Paris 13 F-3407 Paris, Sorbonne France
V11	Microsystem to Integrate Nanomaterials with Biotechnology	Prof. Cheng-Hsin Chuang Director of RicFoe & MANST Lab	Southern Taiwan University of Science and Technology Tainan City 71005 Taiwan
V12	Polyoxometalates for Nanoscale Assembly of Functional Oxide Materials	Dr. R. John Errington Leader Metalorganic Chemistry School of Chemistry	Newcastle University Newcastle upon Tyne, NE1 7RU United Kingdom
V13	Functionalization of polymer materials by radiation grafting technique and its applied products	Dr. Shoji Aoki Assistant Manager, EPIX filter group	Ebara Clean Environment Co., Ltd. Kanagawa, 251-8502 Japan
V14	High Performance CO2-low Cement / Concrete by HKP, fist public bridge in Germany [2012]	Dr. Xiao Sun Battery, Cement, WPC & Coatings	Zoz GmbH D-57482 Wenden Germany
V15	Development of high-alloyed powder Fe-Cr-Ni-Mn-N processed by mechanical alloying	Prof. Dr. Anatoly Popovich, Director, presented by Mr. Sufiiarov Vadim, PhD student	St. Petersburg State Polytechnical University 195251 Saint Petersburg Russian Federation
V16	Unique Structure and Properties of Bulk Nanostructured Metals	Prof. Dr. Nobuhiro Tsuji Dept. of Materials Science & Engineering	Kyoto University Kyoto 606-8501 Japan

V17	Elaboration of Hybrid Functional Materials using supramolecular organization	Prof. Dr. Daniel Guillon Research Director Dept. of Organic Materials	University of Strasbourg F-67034 Strasbourg France
V18	Using the things we already know	Prof. Darrell F. Socie Mechanical Engineering	University of Illinois 61801 Urbana, Illinois USA
V19	Research the composite Milling Additives of Preparation Cu-Zn alloy flakes	Prof. Dr. Xiaolan Cai Faculty of Metallurgical and Energy Engineering	Kunming University of Science and Technology 650093 Kunming, Yunnan P. R. China
V20	Production of Ultra-thin porous metal by applying the fiber space holder method	Mr. Yasuhiro Kanoko PhD candidate	Taisei - Kogyo Co. Ltd. 577-0011 Osaka Japan
V21	Power to Gas to Fuel and H2-OnAir project	Dipl.-Ing. Andreas Franz Hydrogen-storage & Energy	Zoz GmbH D-57482 Wenden Germany
V22	Study of ASTM D2 Matrix carbon nano Composites for cold mold.	Dr. Sung-Sil Jung Director of Research Lab.	Applied Carbon Nanotechnology Co. Ltd. 790-834 Pohang City Republic of Korea
V23	New molecules and polymers based on s-tetrazine for optical applications	Dr. Valerie Alain-Rizzo Assistant Professor	Ecole Normale Supérieure de Cachan (ENS) F- 94235 Cachan France
V24	Photocontrollable Liquid Crystalline Soft Actuators via Upconversion Luminescence	Prof. Yanlei Yu Dept. of Materials Science	Fudan University 200433 Shanghai P. R. China
V25	Chemical Deposition of Ceramic Transparent Conducting Films	Prof. Dr. Yutaka Sawada Director of Center for Hyper Media Research, Dept. of Life Science and Sustainable Chemistry	Tokyo Polytechnic University Atsugi, Kanagawa 243-0297 Japan
V26	Roadmap about on-going projects focusing on Nanostructured Lightweight Materials e. g. Zentallium®	Mr. Deniz Yigit Head of R&D	Zoz GmbH D-57482 Wenden Germany
V27	Chiral electroactive molecular precursors and materials	Prof. Dr. Narcis Avarvari CNRS director of research	University of Angers F-49100 Angers France
V28	Industry Institute Interaction in India	Prof. Dr. Niranjana N.Chiplunkar, Principal NITTE Institute of Technology	NITTE University Nitte 574 110 Karnataka India
V29	Materials driving technology drives future, closing remarks	Prof. Dr. Henning Zoz President & CEO	Zoz Group D-57482 Wenden Germany

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ポスター発表リスト

P01	Direct Growth of Mutiwallled Carbon Nanotubes on Carbon Paper for Polymer Electrolyte Fuel Cells	Prof. Dr. Takeshi Hashishin	Ritsumeikan University 525-8577 Shiga Japan
P02	Research and Development of Micro Metal Injection Molding	Mr. Benjamin Hefler B. Sc.	Taisei - Kogyo Co. Ltd. 5770011 Osaka Japan
P03	A Creative Microstructural Design for High Strength and High Ductility in Pure Titanium and Ti-6Al-4V alloy	Dr. Tatsuya Sekiguchi Researcher	Zoz-Rits-Center 525-8577 Shiga Japan
P04	Preparation of Fine-grained Ti-Al with Controlled Microstructure from High Purity Pre-alloyed Coarse Powders	Dr. Sanjay Kumar Vajpai Post-Doctoral Researcher	Ritsumeikan Global Innovation Research Organization, Department of Mechanical Engineering Faculty of Science and Engineering, Ritsumeikan University, 525-8577 Shiga Japan
P05	Characterization of Hydroxyapatite Coating on TiO ₂ Nanotube by Sol-Gel Method	Prof. Kwangmin Lee	Chonnam National University 500-757 Gwangju Republic of Korea
P06	Characterization of hydroxyapatite coating on titanium by r.f. magnetron sputtering	Prof. Kwangmin Lee	Chonnam National University 500-757 Gwangju Republic of Korea
P07	Fabrication of Copper/Bronze Harmonic Structured Composite and its Mechanical Properties	Mr. Takashi Nishimoto M. Sc.	Doshisha University Graduate School Kyoto 602-8580 Japan
P08	Effect of Microstructure Factor on Mechanical Properties in the Al ₂ O ₃ dispersed Mg Compacts	Mr. Suguru Hamanaka M. Sc.	Doshisha University Metallic Materials Science Laboratory Kyoto 610-0394 Japan
P09	Microstructure and Mechanical Properties of a Multi-modal Al Alloy with Super High Strength	Mrs. Xiaoning Hao M. Sc.	Beihang University Key Laboratory of Aerospace Advanced Materials and Performance of Ministry of Education School of Materials Science and Engineering 100191 Beijing P.R. China
P10	Preparation of multilayered Ti-Al based Intermetallics by annealing and hot pressing using elemental foils	Mrs. Maowen Liu M. Sc.	Beihang University Key Laboratory of Aerospace Advanced Materials and Performance of Ministry of Education School of Materials Science and Engineering 100191 Beijing P.R. China
P11	The Influence of High-energy Ball Milling and Sintering Process on Microstructure and Mechanical Properties of Al-Ni-Y-Co-La Alloy	Mr. Yuan Yanbo M. Sc.	Beihang University Key Laboratory of Aerospace Advanced Materials and Performance of Ministry of Education School of Materials Science and Engineering 100191 Beijing P.R. China
P12	Microstructure and Mechanical Properties of aluminum alloy reinforced by FeNiCrCoAl ₃ high entropy alloy	Mr. Zhiwei Wang M. Sc.	Beihang University Key Laboratory of Aerospace Advanced Materials and Performance of Ministry of Education School of Materials Science and Engineering 100191 Beijing P.R. China

P13	Microstructural Development of Pure Copper and Fe-Cr Alloys Processed by Equal-Channel Angular Pressing	Mr. Muhammad Rifai M. Eng, PhD Student	Doshisha University Graduate School of Science and Engineering Metallic Material Laboratory Kyoto Japan
P14	Effect of Grain Boundary Character on Misorientation change of the Grain Boundary in Pure Copper Bicrystals Subjected to One-pass ECAP	Mr. Kazuki Nagai Undergraduate Student	Doshisha University Graduate School of Science and Engineering Metallic Material Laboratory Kyoto Japan
P15	Fabrication of Harmonic Structure for Co-Cr-Mo alloys by using Mechanical Milling and Spark Plasma Sintering Process	Mr. Choncharoen Sawangrat PhD Student	Ritsumeikan University College of Science and Engineering, Department of Mechanical Engineering, 525-8577 Shiga Japan
P16	Revealing structure-performance relationship in copper with harmonic structure	Dr. Dmitry Orlov Researcher	Ritsumeikan Global Innovation Research Organization, Department of Mechanical Engineering Faculty of Science and Engineering, Ritsumeikan University, 525-8577 Shiga Japan
P17	Multilayered Ti-Al intermetallic sheets fabricated by cold rolling and annealing of titanium and aluminum foils	Mr. Yanbo Sun PhD Student	Beihang University Key Laboratory of Aerospace Advanced Materials and Performance of Ministry of Education School of Materials Science and Engineering 100191 Beijing P.R. China
P18	Microstructure and Mechanical Properties of Al Alloy Matrix Composite Reinforced with Fe-based Metallic Glass Particle	Mr. Ruixiao Zheng PhD Student	Beihang University Beijing P.R. China
P19	Severe plastic deformation as a new processing for grain boundary engineering (GBE) to enhance the performance of the structural materials	Mr. Kosuke Shonaka Undergraduate Student	Doshisha University 610-0394 Kyoto Japan
P20	A model for photo-induced threshold voltage shift in a transistor based on a BTBT derivative	Prof. Ichiro Fujieda	Ritsumeikan University Department of Photonics 525-8577 Shiga Japan
P21	Low cycle corrosion fatigue of metastable austenitic stainless steel. (Relationship between formation of deformation-induced martensite and corrosion fatigue crack)	Mr. Takuma Kakiuchi Undergraduate Student	Doshisha University 610-0394 Kyoto Japan
P22	Full Color Luminescence from Liquid-Crystalline Gold Complexes	Mr. Sho Tamai Graduate Student	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P23	Development of GDC Electrolyte Cell And Its Application for Simultaneous Reduction of NOx and PM in Diesel Exhaust	Prof. Y. Yoshihara	Ritsumeikan University College of Science and Engineering Department of Mechanical Engineering 525-8577 Shiga Japan
P24	Application of CDI on Regeneration of Aqueous Waste Including Chlorine Ion	Prof. Y. Yoshihara	Ritsumeikan University College of Science and Engineering Department of Mechanical Engineering 525-8577 Shiga Japan
P25	The Role of Cathode Buffer Layer in Inverted Organic Solar Cells	Mr. Yuya Yokota Graduate Student	Ritsumeikan University Department of Electrical and Electronic Engineering 525-8577 Shiga Japan
P26	Preparation of nitrogen doped TiO ₂ films embedded with Au nanoparticles and their photocatalytic activities under visible light irradiation	Mr. Yuji Yokomizo Graduate Student	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan

P27	Luminescent behavior of chiral liquid-crystalline gold complexes	Ms. Nana Sugimoto Graduate Student	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P28	Electrochemical Behavior of Hybrids of Giant-Ring-Shaped Polyoxomolybdate and Liquid-Crystalline Organic Molecules	Mrs. Shota Nishida Graduate Student	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P29	Multiple isomerism of 2-substituted dimedone	Mr. Hideyasu China Graduate Student	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P30	Controlled Self-Assembly of Organic-Inorganic Hybrid Materials Containing Ring-Shaped Polyoxometalate and Liquid-Crystalline Organic Molecules	Mr. Tatsuhiro Tsumori Graduate Student	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P31	Phase Transition Behavior of Polymer and Polyoxometalate Hybrid Materials	Mr. Kenta Hagiwara Graduate Student	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P32	Air-Stable Organic Solar Cells with Thin Ag/Pentacene Anode Buffer	Mrs. Yuta Omoto Graduate Student	Ritsumeikan University Department of Electrical and Electronic Engineering 525-8577 Shiga Japan
P33	Preparation of Magnesium Ferrite for Detection of Sub ppm levels of Hydrogen Sulfide Gas	Mr. H. Onoda Graduate Student	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P34	Preparation of morphology-controlled tungsten trioxide for dilute NO ₂ detection	Mr. Zhicong Meng Graduate Student	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P35	Origin of Open Circuit Voltage in Heterostructure Organic Solar Cells	Mr. Kenta Arisawa Graduate Student	Ritsumeikan University Department of Electrical and Electronic Engineering 525-8577 Shiga Japan
P36	Concentration dependence of fluorescence properties in Tb ³⁺ -doped B ₂ O ₃ -CaO glasses	Prof Noriyuki Wada	Suzuka National College of Technology Department of Materials Science and Engineering Japan
P37	Partial molar volume of L-valine in water under high pressure	Prof. Seiji Sawamura	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P38	Green Luminescence of Sol-Gel Derived Tb ³⁺ -Doped GeO ₂ -ZrO ₂ Thin Films	Dr. Tomoe Sanada	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P39	Harmonic Structure Formation and Mechanical Properties of Two Phase Stainless Steel	Ms. Mie Ota Graduate Student	Ritsumeikan University Ritsumeikan Global Innovation Research Organization 525-8577 Shiga Japan
P40	Electro-Rheological effect of the gold nanoparticles capped with mesogenic ligands dispersed in cyanobiphenyl liquid crystals	Mr. Kodai Oto Graduate Student	Ritsumeikan University Department of Applied Chemistry 525-8577 Shiga Japan
P41		Mr. Taku Miura Graduate Student	Ritsumeikan University College of Science and Engineering, Department of Mechanical Engineering, 525-8577 Shiga Japan