

Program for EMN Melbourne Meeting 2016

Monday Oct. 10

14:00-18:00PM

Onsite registration & Sign up

Tuesday Oct. 11, 2016

Room A

8:20-8:30AM

Opening Ceremony

Session: Keynote

Chair: Klaus-Dieter Liss

8:30-9:05AM

A01: Graphene and Nanostructure:
Innovative Approaches to Remarkable
Corrosion Resistance of Metallic
Materials

Raman Singh
Monash University, Australia

Session: Chemical and Physical Properties I

Chair: Raman Singh

9:05-9:30AM

A02: In-Situ Diffraction Studies Related
To Thermo-Mechanical Processes in
Metals and Alloys

Klaus-Dieter Liss
Australian Nuclear Science and Technology
Organisation, Australia

9:30-9:55AM

A03: A Micro-Scale Potential Drop
Technique for Electro-Thermal Problems
of Metallic Thin Wires

Hironori Tohmyoh
Tohoku University, Japan

9:55-10:15AM

Session Break

Session: Ultrafast Laser Pulse I

Chair: Benoit Mahieu

10:15-10:40AM

A04: Orientation dependence in
multi-channel dissociative ionization of
carbonyl sulfide (OCS) molecules

Hirofumi Sakai
The University of Tokyo, Japan

10:40-11:05AM

A05: Efficiency improvement of
ultra-short pulse lasers

Sakae Kawato
University of Fukui, Japan

11:05-11:30AM

A06: Measuring cross-sections of
astrophysical interest in a laser
experiment

Marina Barbui
Texas A&M University, USA

11:30-11:55AM

A07: Milli-Joule-level
Chirped-Volume-Bragg-Grating Based
Femtosecond Fiber CPA laser

Ying Deng
China Academy of Engineering Physics,
China

12:00-14:00PM

Lunch Break

Tuesday Oct. 11, 2016

Room A

Session: Plasma Science and Technology

Chair: Bohdan I. Lev

14:00-14:25PM	A08: Electron Acceleration by Electron Plasma Wave Excited by Cross Focused Cosh-Gaussian Laser Beams in Relativistic Plasmas	Arvinder Singh National Institute of Technology Jalandhar, India
14:25-14:50PM	A09: Micro-Fabricated Plasma Devices	Massood Tabib-Azar University of Utah, USA
14:50-15:15PM	A10: Structure formation in dusty plasma	Bohdan I. Lev National Academy of Sciences of Ukraine, Ukraine
15:15-15:35PM	Session Break	
Session: Ultrafast I		Chair: Quentin Mocaer
15:35-16:00PM	A11: Nanomagnets and Their Dynamics Studied with X-Rays	Gisela Schuetz Max Planck Inst Intelligent Syst, Germany
16:00-16:25PM	A12: Spin Waves in Magnonic Nanostructures	Joachim Graefe Max-Planck-Institut für Intelligente Systeme, Germany
16:25-16:50PM	A13: First-principles simulation for attosecond spectroscopy of solids	Shunsuke A. Sato University of Tsukuba, Japan
16:50-17:15PM	A14: Spin/orbital and magnetic quantum number selective magnetization measurements for CoFeB/MgO multilayer films	Hiroshi Sakurai Gunma University, Japan
17:30PM	Dinner Social	

Wednesday Oct. 12, 2016

Room B

Session: Chemical and Physical Properties II

Chair: Hironori Tohmyoh

8:30-8:55AM	B01: Palladium-containing alloy nanoclusters for low-temperature activation of carbon halogen bond	Hidehiro Sakurai Osaka University, Japan
8:55-9:20AM	B02: One way to design a valence-skip compound	Izumi Hase National Institute of Advanced Industrial Science and Technology, Japan
9:20-9:45AM	B03: Novel approaches to study high-temperature corrosion	Juho Lehmusto Abo Akademi University, Finland
9:45-10:10AM	B04: Magnetic and electrical properties of the Heusler compounds $Ru_{2-x}Fe_xCrSi$	Masahiko Hiroi Kagoshima University, Japan
10:10-10:30AM	Session Break	
Session: Synthetic and Structures		Chair: Juho Lehmusto
10:30-10:55AM	B05: High pressure synthesise of new long-period super-lattice structure in Mg ternary alloy	Masafumi Matsushita Ehime University, Japan
10:55-11:20AM	B06: Fabrication and Characterization of Core-shell Nanoparticles Based on Copper Nanoparticles	Yang Liu Harbin University of Science and Technology, China
11:20-11:45AM	B07: Electrochemical Fabrication of Japonica-like Silver Flowers	Shien-Ping Feng The University of Hong Kong, Hong Kong
12:10-14:00PM	Lunch Break	

Wednesday Oct. 12, 2016

Room B

Session: Ultrafast II

Chair: Michel van Veenendaal

14:00-14:25PM	B08: Novel ultrafast sources for time-resolved applications	Quentin Mocaer Amplitude Systemes, France
14:25-14:50PM	B09: Nonlinear Optical Phenomena in Europium Chalcogenides EuX	Viktor Pavlov Ioffe Physical-Technical Institute of the Russian Academy of Sciences, Russia
14:50-15:15PM	B10: Ultrafast carrier dynamics of carbon nanodots in different environments	Song Zhang Wuhan Institute of Physics and Mathematics, CAS, China
15:15-15:50PM	Poster Session	
Session: Ultrafast III		
Chair: Quentin Mocaer		
15:50-16:15PM	B11: Ultrafast intersystem crossings in transition-metal ions	Michel van Veenendaal Northern Illinois University, USA
16:15-16:40PM	B12: Ultrafast phase control driven by strong-light-field in strongly correlated materials	Shinichiro Iwai Tohoku University, Japan
16:40-17:05PM	B13: Quantum Spin Nanotubes	Toru Sakai University of Hyogo, Japan
17:30PM	Dinner Social	

Wednesday Oct. 12, 2016

Room C

Session: Ultrafast IV

Chair: Dong-Kwon Lim

8:30-8:55AM	C01: Nano-structuring of thin films and volume by femtosecond laser pulses	Saulius Juodkazis Swinburne University of Technology, Australia
8:55-9:20AM	C02: Carrier dynamics and mobile ion effect in organic-inorganic perovskites: from ultrafast to ultraslow	Xiaoming Wen University of New South Wales, Australia
9:20-9:45AM	C03: Temperature Dependence of Intermolecular Vibrational Dynamics of Imidazolium-Based Ionic Liquids	Hideaki Shirota Chiba University, Japan
9:45-10:10AM	C04: Femtosecond relaxation dynamics in strongly correlated organic superconductors κ -(BEDT-TTF) ₂ X (X = Cu[N(CN) ₂]Br and Cu(NCS) ₂)	Satoshi Tsuchiya Hokkaido University, Japan
10:10-10:30AM	Session Break	
Session: Ultrafast V		
Chair: Xiaoming Wen		
10:30-10:55AM	C05: Ultrafast nonlinear spectroscopy of polar perovskite cobalt oxide	Yoichi Okimoto Tokyo Institute of Technology, Japan
10:55-11:20AM	C06: Ultrafast transfer of hot-electron for efficient photoproduction of HCOOH	Dong-Kwon Lim Korea University, South Korea
11:20-11:45AM	C07: Propagating coherent magnon induced by ultrafast laser pulse in metallic films	Shigemi Mizukami Tohoku University, Japan
12:10-14:00PM	Lunch Break	

Wednesday Oct. 12, 2016

Room C

Session: Alloys and Compounds I

Chair: Jian Cao

14:00-14:25PM	C08: Biomimetic Nonwetting Surface Design and Applications	Kijung Yong POSTECH, Korea
14:25-14:50PM	C09: Vacuum Brazing Ti6Al4V Alloy to Si ₃ N ₄ Ceramic Using Nano-Si ₃ N ₄ Reinforced AgCu Composite Filler	Shengpeng Hu Harbin Institute of Technology, China
14:50-15:15PM	C10: Surface modification of quartz fiber reinforced composite to improve its wettability by growing carbon nanotubes	Lixia Zhang Harbin Institute of Technology, China
15:15-15:50PM	Poster Session	
Session: Alloys and Compounds II		Chair: Kijung Yong
15:50-16:15PM	C11: Interfacial microstructure and mechanical strength of TiAl and ZrO ₂ brazed joint	Jian Cao Harbin Institute of Technology, China
16:15-16:40PM	C12: Brazing SiO ₂ -BN with Nb by CNTs-reinforced TiNi brazing alloy	Jun Lei Qi Harbin Institute of Technology, China
16:40-17:05PM	C13: Effect of Solder Thickness on IMC Growth and Evolution Behavior in Micro-solder Joint	Fenglian Sun Harbin University of Science and Technology, China
17:30PM	Dinner Social	

Thursday Oct. 13, 2016

Room B

Session: Solid materials

Chair: Francisco Salguero

8:30-8:55AM	B14: High efficiency kesterite Cu ₂ ZnSnSe ₄ solar cells through the implementation of Ge	Paul Pistor IREC, Spain
8:55-9:20AM	B15: Fe-Vacancy and Superconductivity in K _{2-x} Fe _{4+y} Se ₅ system	Ming-Jye Wang Institute of Astronomy and Astrophysics, Academia Sinica, Taiwan
9:20-9:45AM	B16: Shear strength of LED packages using SAC-nano Cu solder pastes	Yang Liu Harbin University of Science and Technology, China
9:45-10:10AM	B17: The formation mechanism of magnetic anisotropy in Fe-based ribbons	Yunzhang Fang Zhejiang Normal University, China
10:10-10:30AM	Session Break	
Session: Drug Discovery		
Chair: Congbao Kang		
10:30-10:55AM	B18: A stepwise approach for balancing the polypharmacology of a clinical kinase inhibitor	Masahiro Sonoshita Icahn School of Medicine at Mount Sinai, USA; Kyoto University Graduate School of Medicine, Japan
10:55-11:20AM	B19: Bacterial Gyr B/ParE-inhibitor interactions and its insight into antibacterial discovery	Congbao Kang Experimental Therapeutics Centre, Singapore
11:20-11:45AM	B20: Small Molecule Modulators of Autophagy	Nicholas D. P. Cosford Sanford Burnham Prebys Medical Discovery Institute, USA
12:00-14:00PM	Lunch Break	

Thursday Oct. 13, 2016

Room B

Session: Ultrafast Laser Pulse II

Chair: Marina Barbui

13:00-13:25PM	B21: Generation of stable polarized X-rays from a laser-plasma accelerator for probing femtosecond dynamics in matter	Benoit Mahieu Laboratoire d' Optique Appliquée (LOA), France
13:25-13:50PM	B22: Time-resolved photoemission spectroscopy implemented by femtosecond laser sources	Yukiaki Ishida University of Tokyo, Japan
13:50-14:15PM	B23: Laser assisted electron diffraction for femtosecond molecular imaging	Reika Kanya The University of Tokyo, Japan
14:15-14:40PM	B24: The Xingguang-III laser facility with synchronized femtosecond, picosecond and nanosecond beams	Na Xie China Academy of Engineering Physics, China
14:40-14:55PM	Session Break	
Session: Chemical and Physical Properties III		Chair: Izumi Hase
14:55-15:20PM	B25: Universal stress-strain equation for metallic materials	Francisco Salguero University of Huelva, Spain
15:20-15:45PM	B26: Vortex Dynamics and Superconducting Gap Structure in Organic Superconductors with d-Wave Pairing Symmetry	Syuma Yasuzuka Hiroshima Institute of Technology, Japan
15:45-16:10PM	B27: Magnetic properties of compounds made of rare-earth icosahedra	Ryuji Tamura Tokyo University of Science, Japan
16:20PM	Dinner Social	

Thursday Oct. 13, 2016

Room C

Session: Ultrafast VI

Chair: Peter Elliott

8:55-9:20AM	C14: Ultrafast and efficient nonlinear optical response by long-range coherent coupling between light and polarization waves	Masayoshi Ichimiya The University of Shiga Prefecture, Japan
9:20-9:45AM	C15: Exciton dynamics of a single colloidal perovskite nanoparticle by femtosecond light scattering microscopy	Tetsuro Katayama Kwansei Gakuin University, Japan
9:45-10:10AM	C16: Ultrafast and Hot Carrier Transfer in Semiconductor Nanocrystals	Naoto Tamai Kwansei Gakuin University, Japan
10:10-10:30AM	Session Break	
Session: Ultrafast VII		
Chair: Masayoshi Ichimiya		
10:30-10:55AM	C17: Ab-initio Simulations of Ultrafast Magnetization Dynamics	Peter Elliott Max-Planck Institute of Microstructure Physics, Germany
10:55-11:20AM	C18: Electronic and Structural Dynamics of Photoexcited π -Conjugate Polymers in Solution as Studied by Ultrafast Near-IR Absorption and Stimulated Raman Spectroscopy	Tomohisa Takaya Gakushuin University, Japan
11:20-11:45AM	C19: Ultimate Time-Domain Raman Approach to Reveal Ultrafast Nuclear Motions in Photo-Responsive Proteins	Satoshi Takeuchi Molecular Spectroscopy Laboratory, RIKEN, Japan
12:00-14:00PM	Lunch Break	

Thursday Oct. 13, 2016		
Room C		
Session: Ultrafast VIII Chair: Kotaro Makino		
13:00-13:25PM	C20: Ultrafast Structural Asymmetric Diode employing Metallic Materials	Jeong Hee Shin DGIST, South Korea
13:25-13:50PM	C21: High-speed optical memory based on photo-induced spin-torque. Features of non-reciprocal effect in nanosecond-time scale	Vadym Zayets National Institute of Advanced Industrial Science and Technology (AIST), Japan
13:50-14:15PM	C22: Proposing all-optical petahertz device	Jaedong Lee DGIST, South Korea
14:15-14:40PM	C23: Coherent Generation and Detection of Ultrafast Infrared Pulse Covering from Terahertz to Near-infrared Frequencies	Masaaki Ashida Osaka University, Japan
14:40-14:55PM	Session Break	
Session: Ultrafast IX Chair: Jeong Hee Shin		
14:55-15:20PM	C24: Anisotropically driven coherent lattice oscillation induced by a linearly-polarized femtosecond optical pulse	Kotaro Makino National Institute of Advanced Industrial Science & Technology, Japan
15:20-15:45PM	C25: Scientific Evolution of Time-Resolved Local Structure Imaging by Micro-Photoelectron Holography and Photoemission Electron Microscope at SPring-8	Toyohiko Kinoshita Japan Synchrotron Radiation Research Institute, Japan
16:20PM	Dinner Social	
Oct. 14, 2016	One day Excursion	

Wednesday Oct. 12, 2016

15:15-15:50PM

Poster Session

P01	Laser Induced Ultrafast Demagnetization: An Ab-Initio Perspective	Tristan Muller Max-Planck-Institute of Microstructure Physics, Germany
P02	The development of key technologies for the production and applications of a natural anti-tumor drug	Yu-Hong Wei Yuan Ze University, Taiwan
P03	Relationship between the structure and the color of Al ₂ Pt	Yasuharu Tsuruta Tokyo University of Science, Japan
P04	Change of the electric properties during crystallization in the Zr ₅₅ Cu ₃₀ Al ₁₀ Ni ₅ metallic glass	Hiroki Monna Tokyo University of Science, Japan
P05	Effect of Brazing Temperature on The Microstructure and Shear Strength of Cu/SiO ₂ Ceramic Brazed Joint	Duo Liu Harbin Institute of Technology, China
P06	Thermodynamic phase stability of Zr(C _{1-x} N _x) solid solution compounds	Jiwoong Kim Korea University of Science and Technology, Korea