

**Instrumentation and Techniques (IT1 - Instrumentation)**

- 1 **Mr Tetsuya Akashi - 226:** Illumination semi-angle of 10<sup>-9</sup> rad achieved in a 1.2-MV TEM
- 2 **Mr Hasan Ali - 1013:** Setting up a streak camera for time resolved measurements in the TEM
- 3 **Dr Victoria Coleman - 766:** Does your scale bar measure up?
- 4 **Dr Masaki Morita - 447:** Calculation factors for determining solid angle of EDS

**Instrumentation and Techniques (IT2 - Computational methods for data acquisition, analysis and visualisation)**

- 5 **Dr Alex Cavallaro - 1172:** ToF-SIMS discrimination of inkjet printer inks on paper using inorganic and organic mapping

**Instrumentation and Techniques (IT5 - In-situ, environmental and time-resolved microscopies)**

- 6 **Mr Kimitaka Higuchi - 551:** Development of a specimen holder and specimen preparation for in-situ observation of SOFC's reaction by environmental HVSTEM
- 7 **Ms Teresa Weßels - 577:** Towards imaging magnetisation dynamics with high spatial and temporal resolution in a transmission electron microscope
- 8 **Dr Xin-an Yang - 212:** Fabrication of an in-situ magnetic TEM holder with double tilt

**Instrumentation and Techniques (IT7 - Multi-scale 3D imaging)**

- 9 **Mr Gerry Shami - 336:** Silver filler pre-embedding to enhance resolution and contrast in multidimensional SEM - A nanoscale imaging study on liver tissue

**Instrumentation and Techniques (IT8 - Phase-related imaging techniques)**

- 10 **Prof Helmut Kohl - 612:** Comparison of the Contrast Transfer Functions for Differential Phase Contrast with a Split, a Quadrant, and a Center of Mass Detektor
- 11 **Mr Colum O'Leary - 1006:** PtychoSTEM: an open source platform to perform electron ptychography

**Instrumentation and Techniques (IT9 - STEM and TEM imaging)**

- 12 **Ms Xiaofen Tan - 134:** Structure of Coated Voids in Aluminium Alloys

**Instrumentation and Techniques (IT10 - SEM, FIB, scanning probe and surface microscopy)**

- 13 **Dr Barbara Armbruster - 93:** Improved Pumpdown Times and Productivity in SEM/FIBs by means of Evactron Turbo Plasma Cleaning
- 14 **Ms Yuka Ito - 576:** Three-dimensional trajectory simulation of scattered electrons in scanning electron microscope specimen chamber
- 15 **Mr Kentaro Morimoto - 573:** Measurement of scattered electron current distribution in scanning electron microscope
- 16 **Ms Mari Sakaue - 243:** Various SEM observation methods for Wet samples using ASEM and high vacuum SEM with ionic liquid IL1000
- 17 **Mr Masahiro Sasajima - 760:** Development of a novel detection system for high resolution analytical FE-SEM
- 18 **Prof Shigeyasu Tanaka - 42:** Preparation of Biological Samples for SEM Observations using Ionic Liquid

**Instrumentation and Techniques (IT11 - Optical Nanoscopy and Spectral Imaging Techniques)**

- 19 **Mr Gerardas Dambrauskas - 956:** Super-resolution optical imaging of nanostructures using SMAL(Super-resolution Microsphere Amplifying Lens)

**Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)**

- 20 **Dr Masahiro Ohtsuka - 823:** Multiway hyperspectral data analysis of trace element/valence-state in W-type ferrite magnet by concurrent high-angular resolution electron channeling X-ray/elect

**Instrumentation and Techniques (IT13 - Spectroscopy – Low energy excitations and ultrafast spectroscopy)**

- 21 **Mr Hugo Lourenço Martins - 375:** Vibrational surface EELS probes confined phonon modes
- 22 **Prof Takumi Sannomiya - 386:** Interference of light emission in cathodoluminescence STEM

**Life Sciences (LS-1 - Structure and Function of Cells & Organelles)**

- 23 **Dr Nuannoi Chudapongse - 33:** Chrysophyllum cainito stem bark extract induces HepG2 apoptosis and cell death by ROS generation
- 24 **Miss Kyung Hee Kim - 150:** Controlled dual release of bone morphogenic protein-2 and insulin-like growth factor-1 using catecholfunctionalized adhesive polymer nano-particles on microgrooved titanium enhances the osteogenic activity of human mesenchymal stem cells
- 25 **Mr Behnam Lak - 45:** Functional subdomains of the endoplasmic reticulum in cultured mammalian cells
- 26 **Miss Oratai Weeranantanapan - 96:** Fabrication of PVP nanofibers incorporated with gold nanoparticles synthesized by Curcuma xanthorrhiza rhizome extract

**Life Sciences (LS-2 - Multiplex Live Imaging of Cells, Tissues & Organisms)**

- 27 **Miss Petra Tramontana - 1047:** Free-living alga Chlorella vulgaris as a freshwater ecosystem inhibitor?

**Life Sciences (LS-3 - 3-D Structures of Macromolecules & Supramolecular Assemblies)**

- 28 **Dr Josephine Lai Kee Him - 249:** The cryo-EM structure of the Broad Bean Stain Virus reveals a common capsid assembly mechanisms among comoviruses
- 29 **Prof José M. Valpuesta - 55:** Structural and functional analysis of the interaction between gelsolin and the chaperonin CCT

**Life Sciences (LS-4 - Atomic Force Microscopy in Molecular and Cell Biology)**

- 30 **Mr Eiji Usukura - 128:** Cutting Edge of Atomic Force Microscopy (AFM) of the Cell: Live Cell imaging and Structure Analysis of Cytoskeletal Actin Filaments at High Resolution

**Life Sciences (LS-8 - Pathology and Immunocytochemistry & Biomolecular Labeling)**

- 31 **Mr Marné Prinsloo - 699:** Automation of Multiplex Immunohistochemistry
- 32 **Mr Guillermo Solís Fernández - 1003:** Super-resolution profiling of proteomic derived colorectal cancer metastasis markers

**Life Sciences (LS-9 - Applications in Correlative Microscopy of Biological Systems)**

- 33 **Dr Yuri Nishino - 1136:** Molecular distribution analysis of nicotinic acetylcholine receptor and MuSK on the cell surface by correlative fluorescent microscopy and cryo-SEM

**Life Sciences (LS-10 - Plant Science & Mycology)**

- 34 **Dr Hilda Araceli Zavaleta-Mancera - 645:** Nano-silver treatments inhibit stem-end bacteria on vascular tissue of cut Rose hybrida

**Life Sciences (LS-12 - Multimodal Molecular Imaging in Health & Disease)**

- 35 **Dr Hussein Mansour - 572:** Increased oxidative stress and apoptotic cell death is closely correlated with reactive astrogliosis, altering their structural and functional properties in the aging retina

**Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)**

- 36 **Ms Sandra Crameri - 1176:** Diagnosis of virus belonging to the family Reoviridae in diseased pigeons, using transmission electron microscopy.
- 37 **Ms Alysia Hubbard - 1135:** HUMAN RHINOVIRUS AND ASTHMATIC EPITHELIUM - CHANGES IN BARRIER INTEGRITY AND FUNCTION

**Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)**

- 38 **Dr Wenqing Huang - 187:** Preparation of (Li,K)-codoped WO<sub>3</sub> for Smart Windows by One-step Hydrothermal Reaction
- 39 **Dr Kazuhiro Kumagai - 714:** Novel sample preparation to improve the accuracy of nanoparticle size distribution measurement by electron microscopies
- 40 **Dr Hiroshi Nakajima - 271:** Microstructures of dendronized CdS quantum dots
- 41 **Dr Emile Perez - 13:** How electron microscopy can contribute to the elaboration of porous organogels
- 42 **Dr Yuki Sasaki - 531:** Fabrication of a-phase AgI in graphene sandwiched structure under ambient temperature and pressure
- 43 **Dr Kazuhiro Yamamoto - 86:** TEM study of rat lung intratracheally instilled of metal oxide nanoparticles

**Physical Sciences (PS2 - Carbon-based materials and 2D structures)**

- 44 **Ms Eileen Courtney - 99:** Interaction between 2D transition metal dichalcogenides and metal atoms for use in electrical contacting, investigated via experimental and simulated atomic resolution HAADF Scanning Transition Microscopy
- 45 **Mr Andreas Hutzler - 497:** Large-Area Layer Counting of 2D Materials via Visible Reflection Spectroscopy
- 46 **Mr Julian Sickel - 514:** Manipulation of WSe<sub>2</sub>-monolayers on the nm-scale

**Physical Sciences (PS3 - Thin films, coatings and surfaces)**

- 47 **Mr Philipp Haefner - 185:** Measuring the bacterial adhesion of a single microorganism on plastic surface with a new tailor-made system  
48 **Dr Felipe Kremer - 849:** Ion shaping process of Au nanoparticles in silica for future plasmonic devices studied via TEM

**Physical Sciences (PS4 - Metals and alloys)**

- 49 **Mr Hironori Goto - 171:** Microstructure observation of  $\delta$ -Ni<sub>2</sub>Si in Cu-Ni-Si alloy during aging treatment  
50 **Mr Yuhei Haizuka - 149:** TEM observation of Al-2.5mass%Li(-2.0mass%Cu) alloys deformed by HPT (high pressure torsion)  
51 **Mr Tomoya Hiragi - 154:** Aging precipitation sequence of Mg-Y-Sc alloy by HRTEM  
52 **Mr Tomoya Kataoka - 160:** Precipitation observation of Al-1.0mass%Mg<sub>2</sub>Ge alloys with different elements  
53 **Mr Tomoyoshi Maeda - 170:** Aging precipitation structure observation of Mg-Zn alloys by HRTEM  
54 **Dr Takeshi Nishiyama - 263:** Three-dimensional microstructural analysis for novel TRIP steels by SEM-EBSD/FIB.  
55 **Mr Shivank Shukla - 186:** First-principles calculations and quantitative imaging of vanadium-oxygen solid solution  
56 **Mr Toru Yasumoto - 172:** Microstructure observation in Al-Zn-Mg-(Cu) alloys with high Zn concentration

**Physical Sciences (PS5 - Ceramics and inorganic composites)**

- 57 **Mr Shodai Aritomi - 689:** TEM studies of phase separation in VO<sub>2</sub> films  
58 **Prof Miguel Avalos-Borja - 530:** Characterization of Re<sub>2</sub>C obtained from different Re:C stoichiometries  
59 **Mr satyam choudhury - 416:** Elucidation of Crystal Structure of BiCrO<sub>3</sub> Structural Derivatives with Transmission Electron Microscopy  
60 **Dr Masahiro Ohtsuka - 548:** Trace dopant/oxygen vacancy site determination in Al-doped Y<sub>2</sub>Ti<sub>2</sub>O<sub>7</sub> by 2D electron channeling EDX analysis

**Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)**

- 61 **Mr Airit Agasty - 511:** Study of mobility of fluorescent probes in viscoelastic media  
62 **Prof José Jorge Chanona-Pérez - 1513:** Microscopy and spectroscopy techniques to characterization of cellulose nanoparticles from nopal waste

**Physical Sciences (PS8 - Phase transformations and corrosion)**

- 63 **Dr Junjie Li - 321:** In-Situ Atomic-Scale Observation of Intermediate States of Melting and Crystallization of Supported Bi Nanoparticles in the TEM

**Physical Sciences (PS9 - Amorphous and disordered materials, liquid crystals)**

- 64 **Dr Xiaoke Mu - 487:** Using Radial Distribution Function and Multivariate Statistic Analysis to Quantify STEM Diffraction for Imaging Complex Glasses  
65 **Mr Ankit Singh - 141:** Phase evolution, microstructure and interfaces in Fe-based bulk amorphous alloy coatings on steel

**Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)**

- 66 **Dr S.-B. MI - 237:** Atomic-scale structure of antiphase boundaries in Li<sub>0.5</sub>Fe<sub>2.5</sub>O<sub>4</sub> thin films on MgAl<sub>2</sub>O<sub>4</sub> substrates

**Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)**

- 67 **Mr yusuke uetake - 1223:** Analysis of internal structure for Radiolarian microfossil by SEM via Ar<sup>+</sup> ion beam cutting method

**Physical Sciences (PS12 - Materials for energy production, storage and catalysis)**

- 68 **Prof José Jorge Chanona-Pérez - 244:** Microscopy and spectroscopy characterization of carbon nanotubes functionalized with Spirulina for application in artificial photosynthesis.  
69 **Dr Paul Haghi-Ashtiani - 46:** STEM-EDS characterization of Carbon Coated TiO<sub>2</sub> Nanowires for the application of dielectric PVDF nanocomposites  
70 **Dr Byung Kyu Park - 301:** A Study on Silylated Beta Zeolite-Supported NiW Catalysts by TEM Techniques  
71 **Mr Avnish Singh Pal - 406:** Evolution of chessboard like nanodomains in Mn-doped CoFe<sub>2</sub>O<sub>4</sub> spinel and NdLiTiO<sub>3</sub> based perovskite systems for nanoelectronic applications  
72 **Mr Josh Vincent - 364:** AC-TEM Investigation of Metal-Support Interfacial Structure and its Impact on Activity in CeO<sub>2</sub>-Supported Pt Catalysts  
73 **Dr Richard Webster - 432:** STEM Characterisation of Pd-Ru Core-Shell Nanoparticle Geometries for Oxygen Evolution

**Physical Sciences (PS13 - Physical science applications of in-situ microscopy)**

- 74 **Prof Peng Wang - 491:** In-situ TEM Characterization of Ultra-robust memristors Based on Two-dimensional Materials  
75 **A/Prof Qinghua Zhang - 201:** Atomic-resolution imaging of electrically induced oxygen vacancy migration and phase transformation in functional oxides

**Instrumentation and Techniques (IT1 - Instrumentation)**

- 1 **Dr Sergey Gorelick - 1602:** Fabrication of glass microlenses using focused Xe beam for integration in microfluidic devices
- 2 **Prof Jarle Hjelen - 1258:** Development of an in-chamber EBSD detector system for material characterization in a table top SEM.
- 3 **Dr Shunichi Motomura - 1132:** Development of objective aperture holder capable of mounting ACE corrector and ACE corrector control system for aberration corrected SEMs
- 4 **Mr Georg Alexander Rosenthal - 1123:** A protected inert-gas sample manipulation and transfer environment for cryo electron microscopy and analytics

**Instrumentation and Techniques (IT2 - Computational methods for data acquisition, analysis and visualisation)**

- 5 **Prof Nadi Braidy - 1483:** Hyperfly: Hyperspectral and Hypermodal Data Visualization Using Dragonfly

**Instrumentation and Techniques (IT3 - Methods and workflows for correlative microscopy)**

- 6 **Mr Atsushi Miyaki - 278:** Development of correlative observation systems between SEM and various microscopes

**Instrumentation and Techniques (IT5 - In-situ, environmental and time-resolved microscopies)**

- 7 **Dr Daan Hein Alsem - 1035:** Direct observation of crystallization in phase-change materials using in-situ TEM
- 8 **Dr Daan Hein Alsem - 1147:** Easing in-situ TEM biasing experiments with movable probes
- 9 **Prof Takashi Ishiguro - 731:** Development of Sequential Transmission Infrared Spectroscopic Microscope Incorporating Microreactor

**Instrumentation and Techniques (IT6 - Diffraction techniques)**

- 10 **Dr Chris Stephens - 1516:** Introducing Lumis: A High Resolution High Sensitivity EBSD Detector

**Instrumentation and Techniques (IT8 - Phase-related imaging techniques)**

- 11 **Dr Zentaro Akase - 403:** Effect of dynamical diffraction on phase shift in electron holography study
- 12 **Mr Alexandre Pofelski - 519:** An attempt to map the electromagnetic field from plasmonic nanostructures using differential phase contrast and electron holography

**Instrumentation and Techniques (IT9 - STEM and TEM imaging)**

- 13 **Dr Hiroki Kawamoto - 228:** Advanced TEM Navigation Function for High-Throughput Image Acquisition
- 14 **Mr Hirotaka Sakai - 1422:** Tomographic 3D observation of crystalline microstructures using a STEM dark-field method

**Instrumentation and Techniques (IT10 - SEM, FIB, scanning probe and surface microscopy)**

- 15 **Dr Hiroshi Akamine - 1462:** Interpretation of moire fringes in SEM observations for periodic microstructures
- 16 **Mr Takatoshi Donga - 879:** Time evolution simulation of scattered electrons in scanning electron microscope specimen chamber
- 17 **Mr Hideya Mizuno - 1241:** Positive and negative charge accumulation mechanism generated by electron beam irradiation to insulating specimen
- 18 **Dr Karen Privat - 1179:** From Automotive Waste to New Industrial Materials
- 19 **Ms Jacinta White - 1192:** Investigation into the effect of cryogenic sample preparation on hydrogel for subsequent SEM examination

**Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)**

- 20 **Ms Alexandra Sheader - 903:** Sub-cellular elemental mapping by combined STEM-EDX-EELS

**Instrumentation and Techniques (IT13 - Spectroscopy – Low energy excitations and ultrafast spectroscopy)**

- 21 **Prof Peter Crozier - 644:** Local characterization of CeO<sub>2</sub>-x-TiO<sub>2</sub> mixed metal oxide interfaces
- 22 **Mr Daichi Yoshimoto - 1417:** Characterization of non-radiative Bloch modes in a plasmonic triangular lattice by electron energy-loss spectroscopy

**Life Sciences (LS-1 - Structure and Function of Cells & Organelles)**

- 23 **Mrs Lucinda Beutler - 744:** Characterising loss of transcription factor Gfi1b in megakaryocytes in murine bone marrow and spleen tissues by transmission electron microscopy
- 24 **Ms Megan Farrell - 1173:** Investigating the parameters influencing the rate of phosphorylation of CD3 subunits by Lck.
- 25 **Dr Adam Parslow - 1167:** Evaluating targeted therapy resistance in breast cancer through mTORC1 imaging



**Life Sciences (LS-2 - Multiplex Live Imaging of Cells, Tissues & Organisms)**

26 **Miss Daniela Petrinec - 1048:** Visualisation of hunting nets formed by algae: a perfect hunting mechanism?

**Life Sciences (LS-3 - 3-D Structures of Macromolecules & Supramolecular Assemblies)**

27 **Dr Matthias Floetenmeyer - 1218:** The University of Queensland. Services for the structural biology at the Centre for Microscopy and Microanalysis (CMM). An Integrated approach.

28 **Ms Anjali Malik - 1004:** Structure based inhibition of polyamine biosynthetic pathway enzyme arginase from *Entamoeba histolytica*

29 **Dr Sergey Ryazantsev - 851:** 3D structure of human myeloma IgG subclasses.

**Life Sciences (LS-7 - Embryology & Developmental Biology)**

30 **Dr Josip Barisic - 30:** The use of histopathological semi-quantitative scoring approach in zebrafish embryo toxicity tests

**Life Sciences (LS-8 - Pathology and Immunocytochemistry & Biomolecular Labeling)**

31 **Dr Nigel Waterhouse - 1598:** Unifying image analysis and flow cytometry software to analyse and present multi-parameter image data for quantitative pathology.

**Life Sciences (LS-9 - Applications in Correlative Microscopy of Biological Systems)**

32 **Miss Yukari Noma - 1188:** Internalized molecular localization of nAChR and MuSK by CLEM

33 **Prof Im Joo Rhyu - 1182:** Atmospheric SEM and some applications on biological specimens

**Life Sciences (LS-10 - Plant Science & Mycology)**

34 **Dr Rosemary White - 1138:** Second harmonic imaging of plant cell walls – the cotton fibre

**Life Sciences (LS-13 - Invertebrate Biology & Taxonomy)**

35 **Dr Brett Hamilton - 1206:** Biochemical venom modulation in spiders is achieved via compartmentalized toxin production and storage

**Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)**

36 **A/Prof Hiang Lian Hing - 1331:** Liquid cell TEM (L-TEM) for observation of Polymyxin effect on *E. coli*.

**Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)**

37 **Prof Miguel Avalos-Borja - 997:** Defects in gold nanoplates: A full characterization using PED

38 **Ms Pavithra Bellare - 771:** Structure and Stability of Ultrathin Au/ Alloy Nanowires

39 **Ms Pavithra Bellare - 930:** Simple Liquid Phase Exfoliation of Molybdenum Trioxide (MoO<sub>3</sub>) rods into Nanosheets and Nanotubes

40 **Dr Young Heon Kim - 1177:** Thermal behavior and decomposition mechanism of InAs nanowires: in-situ transmission electron microscopy study

41 **Dr Akira Niwata - 1227:** Evaluation of LaB<sub>6</sub> nanowire emitter

42 **Miss Debadarshini Samantaray - 1016:** Designing radial and axial heterostructure of Te/Telluride nanowires by controlled dewetting

**Physical Sciences (PS2 - Carbon-based materials and 2D structures)**

43 **Miss Jung Hwa Kim - 1414:** Dislocations in Bilayer Transition Metal Dichalcogenides

44 **Mr Etienne Minnaar - 1395:** QUANTITATIVE INVESTIGATION OF GRAPHITE AND DISLOCATIONS IN PCD SINTERED AT ELEVATED PRESSURE

45 **Mr Eoin Moynihan - 1101:** Low-Loss EELS Study of Monolayer MoS<sub>2</sub> and the Effects of Ion-Implantation

46 **Miss Hyoju Park - 1409:** Screw Dislocation-Driven Growth of Double-Helical Hexagonal Boron Nitride

**Physical Sciences (PS3 - Thin films, coatings and surfaces)**

47 **A/Prof Ivan Kempson - 1116:** Time-of-Flight Secondary Ion Mass Spectrometry (ToF-SIMS) Imaging and 3D Reconstruction of Cu in Metal Scavenging Polymers

48 **Prof Vilko Mandic - 953:** Regeneration performance of the nanostructured titania photocatalyst prepared by anodic growth

**Physical Sciences (PS4 - Metals and alloys)**

- 49 **Mr Taiga Kamei - 1424:** Electron microscopic analysis of austenite transformation behavior in cold-rolled low carbon steel
- 50 **Mr Yoshiki Kono - 456:** In situ electron microscopy analysis on thermal stability of PdRu-Rh nanoparticles
- 51 **Miss Sijia Liu - 1377:** Microstructural evolution upon creep test of Ni based superalloy
- 52 **Ms Bianca Sala - 329:** Absolute chemical analysis of nanoscale carbide precipitates within steel matrices
- 53 **Ms Wenhui Yang - 556:** STEM analysis of doping atom positions in  $\eta$ -Cu<sub>6</sub>Sn<sub>5</sub>
- 54 **Dr Ying Da Yu - 345:** EBSD characterization of incoherent CSL grain boundaries in pure aluminum processed by severe plastic deformation

**Physical Sciences (PS5 - Ceramics and inorganic composites)**

- 55 **Dr Young Heon Kim - 1099:** In-situ TEM study of the phase transformation in a single lanthanide co-doped NaYF<sub>4</sub> unconvertible nanoparticle
- 56 **Prof Joachim Mayer - 905:** Characterization of molybdenum substituted lanthanum tungstate: a Transmission Electron Microscopy study
- 57 **Dr Jacques O'Connell - 854:** TEM investigation of the velocity effect in materials with continuous and discontinuous latent tracks

**Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)**

- 58 **Dr Markus Drechsler - 1571:** Liquid Crystalline Nanostructures as PEGylated Reservoirs of Omega-3 Polyunsaturated Fatty Acids

**Physical Sciences (PS7 - Semiconductors and materials for communication)**

- 59 **A/Prof Junji Yamanaka - 828:** STEM Moire Observation of the Compositionally Step-Graded SiGe Thin Film and its Image Analysis

**Physical Sciences (PS8 - Phase transformations and corrosion)**

- 60 **Miss Su Kyeong Kwon - 1134:** Effect of oxidation of metallic 3D printing material on 3D printed object
- 61 **Dr Hirokazu Sasaki - 1144:** Observation of GaAs p-n junction using electron holography, electron diffraction microscopy, differential phase contrast STEM, and shadow image distortion method.
- 62 **Prof Ivan Guillermo Solórzano - 1270:** Study of Grain Boundary Precipitation in High Cr-Ni Corrosion Resistant Alloy

**Physical Sciences (PS9 - Amorphous and disordered materials, liquid crystals)**

- 63 **Mr Semir Vrana - 922:** Characterizing amorphous specimen by using the three particle structure factor
- 64 **Mr Taiki Yamada - 552:** Nanoscale local stress mapping of phase-separated glass by scanning transmission electron microscopy-cathodoluminescence

**Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)**

- 65 **Dr Youngji Cho - 535:** Extraction of desired phase information in dark-field electron holography
- 66 **Dr Gi-Yeop Kim - 1554:** STEM study of depolarization field effect in PTO/STO superlattices
- 67 **Prof Shigeo Mori - 256:** HAADF-STEM Study on Unusual Inhomogeneous Microstructures in Charge-Glass State of PbCrO<sub>3</sub>

**Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)**

- 68 **A/Prof Michael Lee - 359:** Evidence for thermal alteration of fission tracks in Phalaborwa baddeleyite

**Physical Sciences (PS12 - Materials for energy production, storage and catalysis)**

- 69 **Mr Hsiangsheng Chen - 1523:** Precise Illustration of Active Sites: The Case of Shape-Controlled Ordered Pt<sub>3</sub>Sn Catalysts
- 70 **Ms Yen Yee Choo - 1534:** Structure transition-property relationships in inorganic cesium lead halide perovskites
- 71 **Dr Santhana Eswara - 945:** Nanoscale correlative imaging of halide perovskite solar cells
- 72 **Dr Francisco Paraguay - 523:** Morphology and microstructural characterization of Mo-doped Bi<sub>2</sub>WO<sub>6</sub>
- 73 **Dr Aleksei Salanov - 787:** Microscopy study of catalytic etching of platinum, palladium and rhodium in ammonia oxidation

**Physical Sciences (PS13 - Physical science applications of in-situ microscopy)**

- 74 **Mr Atsuhiko Kotani - 1304:** Observation of magnetic nanostructures by phase plate microscopy with hole-free phase plate
- 75 **Dr Ji-Hwan Kwon - 1174:** Operando transmission electron microscopy observation: Dynamic structural changes of Si anode in Li-ion battery