Program

May 17 (Wednesday), 2017

Session WeA  Chair: M. Miles (University of Bristol, U.K.)

9:30 Opening Address
T. Takahashi [General Chair]
University of Tokyo (Japan)

9:40 WeA-1PL (Plenary)
High-speed Atomic Force Microscopy and Its Future Prospects
T. Ando
Kanazawa University (Japan)

10:20 WeA-2I (Invited)
Ultrafast Time Resolution in AFM Measurements of Charge Transport in Sustainable Energy Materials
P. Grütter
McGill University (Canada)

10:45 WeA-3
Formation of SAS-6 Protein Assembly Imaged by High-speed Off-resonance Tapping Atomic Force Microscopy
A.P. Nievergelt, N. Banterle, J.D. Adams, N. Hosseini and G.E. Fantner
Federal Institute of Technology in Lausanne [EPFL] (Switzerland)

11:00 WeA-4
High Speed Atomic Force Microscopy Imaging on Condensin
J.K. Ryu¹, A. Katan¹, J. Eeftens¹, S. Bisht², C. Haering² and C. Dekker¹
¹Delft University of Technology (the Netherlands), ²European Molecular Biology Laboratory (Germany)

11:15 WeA-5
Fundamental High Speed Limits in Single-molecule and Nanoscale Force Spectroscopies
C.A. Amo, M.R. Uhlig and R. Garcia
The Spanish National Research Council [CSIC] (Spain)

11:30 WeA-6
Development of High Speed AFM Operating at 1,000 Lines/s
U. Celik¹,², I. Kehribar¹, Y. Uysalli³, K. Celik², H.Ö. Özer² and A. Oral³,¹
¹NanoMagnetics Instruments (Turkey), ²Istanbul Technical University (Turkey), ³Middle East Technical University (Turkey)

11:45 WeA-7
AFM Scan Speed Phenomena
C. Glover¹, J.P. Killgore² and R.C. Tung¹
¹Univ. of Nevada, Reno (U.S.A), ²National Institute of Standards and Technology (U.S.A)

12:00 - 14:00 Lunch
12:30-13:30 Luncheon Seminar @ Seminar Room (3F)
Session WeB  Chair: P.M. Koenraad *(Eindhoven Univ. of Technology, the Netherlands)*

14:00  WeB-1I (Invited)
*Local Deep Level Transient Spectroscopy Imaging of Trap Distribution in SiC MOS Interface Based on Scanning Nonlinear Dielectric Microscopy*
N. Chinone and Y. Cho  
*Tohoku University (Japan)*

14:25  WeB-2
*Atomic Resolution Imaging of MoS2 by Noncontact Scanning Nonlinear Dielectric Microscopy*
K. Yamasue and Y. Cho  
*Tohoku University (Japan)*

14:40  WeB-3
*Visualization of Nanostructures Buried in a Polymer Matrix by Scanning Thermal Noise Microscopy*
S. Nosaka, K. Kimura, K. Kobayashi and H. Yamada  
*Kyoto University (Japan)*

14:55  WeB-4
*Tailoring Dynamic Stiffness for Improved Piezoresponse Force Microscopy*
G. MacDonald, F.W. DelRio and J.P. Killgore  
*National Institute of Standards and Technology (U.S.A)*

15:10  WeB-5
*AFM Mode for Compositional Electromechanical Study of Biopiezoelectrics*
A.S. Kalinin\(^1,2\), V.V. Polyakov\(^1\) and V.A. Bykov\(^1\)  
\(^1\)NT-MDT Spectrum Instruments (Russia), \(^2\)Moscow Institute of Physics and Technology (Russia)

15:25  WeB-6
*Viscoelastic Surface Forces and the Moving Surface Model*
D.B. Haviland, P.-A. Thorén, R. Borgani and D. Forchheimer  
*KTH Royal Institute of Technology (Sweden)*

15:40 - 16:10  Session WeEX: Exhibitor Presentation

16:10 - 16:40  Coffee Break
Session WeC  Chair: P. Hinterdorfer (Johannes Kepler University Linz, Austria)

16:40 WeC-11 (Invited)
Force Spectroscopic Profiling of Phosphoinositide Interactions with Viral Proteins and Small Molecule Inhibitors
S.-O. Kim¹, J.A. Jackman¹,², S.-J. Cho³, J.S. Glenn² and N.-J. Cho¹
¹Nanyang Technological University (Singapore), ²Stanford University (USA), ³Seoul National University (Korea)

17:05 WeC-2
AFM Study of Hydrodynamics around Micro- and Nanoﬁbers
J.D. de Baubigny¹, M. Benzaquen², C. Mortagne¹, C. Devailly³, S. Kosgodagan³, A. Steinberger³, J.-P. Salvetat⁴, J.-P. Aime⁴ and T. Ondarçuhu¹
¹University of Toulouse (France), ²Ecole Polytechnique (France), ³University of Lyon (France), ⁴University of Bordeaux (France)

17:20 WeC-3
SICM and SICM Based SECM Development for Biomedical Applications
G.-E. Jung¹, M.-H. Choi¹ and S.-J. Cho²
¹Park Systems (Korea), ²Seoul National University (Korea)

17:35 WeC-4
Imaging of Two-dimensional Crystal Growth of Streptavidin Injected from a Glass Pipette by FM-AFM
T. Hamada, H. Kominami, M. Miyamoto, K. Kobayashi and H. Yamada
Kyoto University (Japan)

17:50 WeC-5
Imaging Friction Forces with Intermodulation Friction Force Microscopy
P.-A. Thörens, R. Borgani, D. Forchheimer and D.B. Haviland
KTH Royal Institute of Technology (Sweden)

18:05 WeC-6
3D Imaging of Hydration Structures at Step Edges of Calcite
Y. Araki, K. Kobayashi and H. Yamada
Kyoto University (Japan)

18:20 WeC-7
Precise Determination of Hamaker Constants Using Dynamic Atomic Force Spectroscopy
J. Colchero¹,², J. Sánchez Lacasa³ and M. Salmerón¹,²
¹The University of Murcia (Spain), ²Lawrence Berkeley National Laboratory (U.S.A.)

18:35 WeC-8
A Novel Real-time Control System for an Atomic Force Microscope
Z. Wang, Y. Li, G. Shan, Y. Zhang and J. Qian
Beihang University (China)

19:00 - 20:30  Session WeP: Poster Session
May 18 (Thursday), 2017

Session ThD  
Chair: T.T. Perkins (JILA, NIST & Univ. of Colorado, Boulder, U.S.A.)

9:30  ThD-1I (Invited)  
Atomic Scale Contact Studied with a Functionalized Tip of High-resolution Atomic Force Microscopy  
S. Kwawai  
National Institute for Materials Science (Japan)

9:55  ThD-2  
Controlled Switching of Single-molecule Junctions by Mechanical Motion of a Phenyl Ring  
H. Okuyama, Y. Kitaguchi, H. So, S. Hatta and T. Aruga  
Kyoto University (Japan)

10:10  ThD-3  
Contrast Mechanisms on Nanoscale Subsurface Imaging Using Ultrasonic Atomic Force Microscopy  
H.J. Sharahi¹, G. Shekhawat², V. Dravid², S. Park¹, P. Egberts¹ and S. Kim¹  
¹University of Calgary (Canada), ²Northwestern University (U.S.A.)

10:25  ThD-4  
Simultaneous Nanopatterning and Imaging Using Dual-frequency Resonant Frequency Tracking  
K. Maturova¹, A.K. Janbahan¹,², M.S. Tamer¹,², J.J. Biemond¹, V. Navarro¹ and H.S. Marnani¹  
¹Netherlands Organization for Applied Scientific Research [TNO] (the Netherlands), ²University of Delft (the Netherlands)

10:40  ThD-5  
Molecular-scale Investigations of Hydration Structures of Alkanethiol Self-assembled Monolayers of Different Functional Groups by FM-AFM  
A. Fujita, K. Kobayashi and H. Yamada  
Kyoto University (Japan)

10:55 - 11:15  
Coffee Break
Session ThE  
Chair: P. Grütter (McGill University, Canada)

11:15 ThE-II (Invited)
Magnetic Interactions in Artificially Created Mn Assemblies in a GaAs (110) Surface
D. Grossi¹, P. Koenraad¹, F. Islam², R. Mahani³, C. Canali² and M. Flatté⁴
¹Eindhoven University of Technology (the Netherlands), ²Linnaeus University (Sweden), ³KTH Royal Institute of Technology (Sweden), ⁴University of Iowa (U.S.A.)

11:40 ThE-2
Atomic Scale Defects on KBr(001) Created by Low Temperature Plasma and Investigated by ncAFM
A. Hinaut¹, B. Eren², S. Freund¹, R. Jöhr¹, R. Steiner¹, T. Glatzel¹, L. Marot¹, S. Kawai³ and E. Meyer⁴
¹University of Basel (Switzerland), ²Lawrence Berkeley National Laboratory (U.S.A.), ³National Institute for Materials Science (Japan)

11:55 ThE-3
Image States and Energy Dissipation on Bi₂Te₃ Surface
D. Yildiz, M. Kisiel and E. Meyer
University of Basel (Switzerland)

12:10 ThE-4
Sub-20 nm Patterning of Thin Layer WSe₂ by Scanning Probe Lithography
A.I. Dago, Y.K. Ryu and R. Garcia
The Spanish National Research Council [CSIC] (Spain)

12:25 ThE-5
Molecular Adsorption on Anatase TiO₂(101) Studied by Submolecular AFM Imaging Using Silicon Cantilevers as Force Sensors
M. Todorovic¹, O. Stetsovych², R. Perez¹, T.K. Shimizu² and O. Custance²
¹Universidad Autonoma de Madrid (Spain), ²National Institute for Materials Science (Japan)

12:40 - 18:30 Free Time

18:30 - 20:30 Banquet @ Kyoto Modern Terrace
May 19 (Friday), 2017

Session FrF  Chair: R. Garcia (The Spanish National Research Council [CSIC], Spain)

9:30  FrF-1I (Invited)
What Can We Do by Optical Pump-probe STM?
H. Shigekawa
Tsukuba University (Japan)

9:55  FrF-2
How to Identify Lipid Vesicles by AFM-IR and Multi-frequency AFM?
E. Lesniewska¹, N. Pocholle¹, E. Bourillot¹, M.J. Virolle², A. Deniset² and A. Dazzi²
¹University Bourgogne Franche-Comté (France), ²University Paris-Sud (France)

10:10 FrF-3
Local Charge Injection and Extraction on Nanocomposite Insulators
R. Borgani, P.-A. Thorén, D. Forchheimer and D.B. Haviland
KTH Royal Institute of Technology (Sweden)

10:25  FrF-4
Micro-second Time-resolved Electrostatic Force Microscopy
K. Araki, Y. Ie, Y. Aso, H. Oyama and T. Matsumoto
Osaka University (Japan)

10:40 FrF-5
Scanning Probe Electrospray Ionization (SPESI) for Surface Chemical Analysis
- the Fast Derivatization of Steroid -
Y. Otsuka¹, K. Kobayashi², T. Kohigashi², R. Arakawa² and T. Matsumoto¹
¹Osaka University (Japan), ²Kansai University (Japan)

10:55 - 11:15  Coffee Break
Session FrG     Chair: S. Kawai (National Institute for Materials Science, Japan)

11:15 FrG-1I (Invited)
Scanning Probe Lithography and Its Application to Directed Self-assembly of Block Co-polymers
F. Perez-Murano
The Spanish National Research Council [CSIC] (Spain)

11:40 FrG-2
Visualization of microRNA in a Nerve Cell
J.W. Park
Pohang University of Science and Technology (Korea)

11:55 FrG-3
Identification and Characterization of Lantibiotic Activity in the Populus Microbiome
M.J. Doktycz1,2, S. Hasim1,2, B. Mendez1, P. Blair1, B.P. Mohr1,2, M. Land1, D. Pelletier1, S.T. Retterer1,2 and D.P. Allison1,2
1Oak Ridge National Laboratory (U.S.A.), 2The University of Tennessee (U.S.A.)

12:10 FrG-4
Investigating the Mechanism of Action of a Novel Antimicrobial Peptide on Live E. coli Cells
A. Pyne1,2, M.-P. Pfeil1,3, I. Bennett2, J. Ravi1, B. Lamarre1, B.W. Hoogenboom2 and M.G. Ryadnov1
1National Physical Laboratory (U.K.), 2University College London (U.K.), 3University of Oxford (U.K.)

12:25 FrG-5
Time-resolved Nanomechanical Rheology of a Single Cell under the Depolymerization of the Actin Cytoskeleton
P.D. Garcia, C.R. Guerrero and R. Garcia
The Spanish National Research Council [CSIC] (Spain)

12:40 - 14:15 Lunch
Session FrH  Chair: J.W. Park (Pohang University of Science and Technology, Korea)

14:15 FrH-1 (Invited)
Hidden Dynamics in the Unfolding of a Membrane Protein Revealed by 1-µs Resolution Force Spectroscopy
T.T. Perkins
JILA / National Institute of Standards and Technology / University of Colorado, Boulder (U.S.A.)

14:40 FrH-2
A Mucosal Pellicle Modifies the Physical Properties of Epithelial Cells
E.N. Aybeke, M. Brule, B. De Fonseca, S. Ployon, M. Morzel, E. Bourillot, E. Lesniewska and F. Canon
University Bourgogne Franche-Comté (France)

14:55 FrH-3
An AFM Approach to Target and Destroy Antifungal Resistant Microbes
S. Hasim2, D.P. Allison1,2, S.T. Retterer1, M.J. Doktycz1,2 and T.B. Reynolds2
1Oak Ridge National Laboratory (U.S.A.), 2University of Tennessee (U.S.A.)

15:10 FrH-4
Forces between Dopamine Transporter (DAT) and Its Substrates
R. Zhu1, S.H. Suh1, M. Bindl1, M. Holy2, V. Kumar3, A. Ebner1, H.J. Gruber1, M. Freissmuth2, A.H. Newman3, H.H. Sitte2 and P. Hinterdorfer1
1Johannes Kepler University Linz (Austria), 2Medical University of Vienna (Austria), 3National Institute on Drug Abuse (U.S.A.)

15:25 FrH-5
High-resolution Imaging and Surface Charge Measurement of Right-handed and Left-handed DNA by FM-AFM in Aqueous Solution
H. Kominami, K. Kobayashi and H. Yamada
Kyoto University (Japan)

15:40 FrH-6
Characterizing the Effect of the Polymyxin B Antibiotics to Lipopolysaccharide on Escherichia coli Surface Using AFM
Y.J. Oh1, B. Plochberger2, M. Rechberger2 and P. Hinterdorfer1
1Johannes Kepler University Linz (Austria), 2University of Applied Sciences Upper Austria (Austria)

15:55 FrH-7
Investigation of Biotin-binding Proteins Attached to DNA Origami Using FM-AFM in Aqueous Solutions
Y. Yamamoto, H. Kominami, K. Kobayashi and H. Yamada
Kyoto University (Japan)

16:10 FrH-8
Ideal Atomic Force Microscopy Imaging of Heterogeneous Biological Samples in Liquids: Topography and Chemical Information
J. Colchero and L. Almonte
The University of Murcia (Spain)
Combined AFM and FTIR: A Versatile Tool to Decipher the Molecular Mechanism of Antimicrobial Action toward to Bacterial Biofilms
F. Quilès\textsuperscript{1,2} and G. Francius\textsuperscript{1,2}
\textsuperscript{1}University of Lorraine (France), \textsuperscript{2}CNRS, Laboratory of Physical Chemistry and Microbiology for the Environment (France)

Closing Remarks
T. Takahashi\textsuperscript{1} and T. Ushiki\textsuperscript{2}
\textsuperscript{1}The University of Tokyo (Japan), \textsuperscript{2}Niigata University (Japan)
Poster Program

May 17 (Wednesday), 2017
19:00 - 20:30

WeP-01  **Introducing the New Cypher VRS Video-Rate Atomic Force Microscope**  
I. Revenko, H. Sugasawa, M. Viani, M. Kocun, T. Limpoco and S. Hohlbauch  
*Oxford Instruments Asylum Research (U.S.A.)*

WeP-02  **Scan Speed Linear Self-adjusting Mechanism for Reducing Imaging Time of Atomic Force Microscope**  
Y. Zhang¹, Y. Li¹, G. Shan¹, Z. Wang¹, B. Yin² and J. Qian¹  
¹Beihang University (China), ²Chinese Academy of Science (China)

WeP-03  **Nonlinear Electrical Properties of Ru Binuclear Complex Monolayer by Conductive Probe AFM**  
T. Takagi¹, Y. Otsuka¹, H. Ozawa², M. Haga² and T. Matsumoto¹  
¹Osaka University (Japan), ²Chuo University (Japan)

WeP-04  **Theoretical Prediction of Nonlinear Frequency Response for Sensing Tiny Tip Mass on Cantilevered Carbon Nanotube**  
I.K. Kim and S.I. Lee  
*University of Seoul (Korea)*

WeP-05  **Vibration Analysis of AFM Microcantilevers Using Equivalent Stiffness Element Model**  
D.H. Han, I.K. Kim and S.I. Lee  
*University of Seoul (Korea)*

WeP-06  **Structural Observation of Electron Emitting Tip Using UHV STM**  
K. Noda, M. Tanaka, N. Watanabe, T. Kubo and T. Shimizu  
*National Institute of Advanced Industrial Science and Technology (Japan)*

WeP-07  **Parallel Atomic Force Microscope with Automated Cantilever Exchange and Alignment**  
H. Sadeghian, R. Herfst, B. Dekker and J. Winters  
*Netherlands Organization for Applied Scientific Research [TNO] (the Netherlands)*

WeP-08  **Intermodulation Products in Ultra High Vacuum AFM**  
D. Forchheimer¹,², C. Wagner³, D. Platz¹,⁴ and D.B. Haviland¹  
¹*KTH Royal Institute of Technology (Sweden), ²Intermodulation Products AB (Sweden), ³Forschungszentrum Jülich (Germany), ⁴Max-Planck Institute for the Physics of Complex Systems (Germany)*

WeP-09  **In-situ, Correlative Atomic Force and Scanning Electron Microscopy**  
J.D. Adams¹, A. Lieb¹, M. Winhold² and C. Schwalb²  
¹Nanosurf AG (Switzerland), ²GETec Microscopy GmbH (Austria)

WeP-10  **Atomic Force Microscopy for Education**  
S.H. Lee  
*Andong National University (Korea)*
WeP-11  **Design and Control of Dynamic Mode AFM based on Optical Pick-up Unit Probe Head**  
M.A. Cruz, S.H. Jang, J.H. Lee and S.H. Lee  
*Andong National University (Korea)*

WeP-12  **Development of a Scanning Nanopipette Probe Microscope for Atmospheric Pressure Plasma Jet Fine Processing**  
F. Iwata, D. Morimatsu, A. Nakamura, A. Ogino and M. Nagatani  
*Shizuoka University (Japan)*

WeP-13  **Investigation of Streptavidin-biotin Interactions by Static/dynamic-mode AFM**  
K. Sugimoto, M. Miyamoto, H. Kominami, K. Kobayashi and H. Yamada  
*Kyoto University (Japan)*

WeP-14  **Modeling of Asymmetric Hysteresis in Large-scale AFM with an Optimized Prandtl-Ishlinskii Model Based on Fermi-Dirac Distribution**  
G. Shan, Y. Li, Y. Zhang, Z. Wang and J. Qian  
*Beihang University (China)*

WeP-15  **Probing Electronic Alignment between Organic Dye Molecule and Gold Film Interface by Kelvin Probe Force Microscopy**  
M. Yamada, K. Araki, Y. Otsuka and T. Matsumoto  
*Osaka University (Japan)*

WeP-16  **Single Crystal Doped Diamond Tips for Enhanced Nano-Electrical Characterization**  
P. De Wolf¹, J. Kilpatrick²,³, C. McManamon² and H. Cavazos²  
¹*Bruker Nano Surfaces (U.S.A.)*, ²*Trinity College Dublin (Ireland)*, ³*University College Dublin (Ireland)*

WeP-17  **Protein Synthesis in Growth Cones of Rat Dorsal Root Ganglion Neurons in Relation to the Three-dimensional Structure**  
O. Hoshi¹, Y. Cho¹ and N. Takei²  
¹*Tokyo Medical and Dental University (Japan)*, ²*Niigata University (Japan)*

WeP-18  **Quantification down to Few Copies of Chronic Myeloid Leukemia (CML) Specific Biomarker without Amplification onto Locked Nucleic Acid (LNA)-based Sensing Platform: Towards Enhanced Sensitivity and Specificity**  
S. Mishra¹, Y. Lee² and J.W. Park¹  
¹*Pohang University of Science and Technology (Korea)*, ²*Columbia University (U.S.A.)*

WeP-19  **Observation of Interaction between IEC-6 and Vanillin by AFM in Liquid**  
H. Shimonishi, M. Nanto and T. Yoshino  
*Prefectural University of Hiroshima (Japan)*

WeP-20  **Movement of Oral Carcinoma Cells Investigated by Scanning Ion Conductance Microscopy**  
Y. Mizutani, Y. Yamada, Y. Mikami and T. Ushiki  
*Niigata University (Japan)*
WeP-21 Imaging Technique without Surface Charge Influence Using Scanning Ion Conductance Microscopy with a Theta Nanopipette
T. Shirasawa¹, Y. Eguchi¹, Y. Mizutani², T. Ushiki² and F. Iwata¹
¹Shizuoka University (Japan), ²Niigata University (Japan)

WeP-22 Effect of pH on Two-dimensional Crystal Formation of Streptavidin on Mica
Z. Cui¹, K. Kobayashi¹, Y. Hirata² and H. Yamada¹
¹Kyoto University (Japan), ²National Institute of Advanced Industrial Science and Technology (Japan)

WeP-23 Observation of Silver Nanoparticles-doped DNA Nanofibers Bonding YOYO-1 by Scanning Near-field Optical/Atomic Force Microscopy
M. Nanto¹, H. Nakao² and T. Yoshino¹
¹Prefectural University of Hiroshima (Japan), ²National Institute for Materials Science (Japan)

Y. Bae¹, I. Hwang², I. Kim¹, K. Kim¹,² and J.W. Park¹
¹Pohang University of Science and Technology (Korea), ²Institute for Basic Science (Korea)

WeP-25 Phase Separation and Structural Transition in Hydrogen-Bonded Networks Containing Melamine on Au(111) from Solutions
A. Okada¹, Y. Nakata¹, M. Yoshimura² and K. Kadono¹
¹Kyoto Institute of Technology (Japan), ²Toyota Technological Institute (Japan)

WeP-26 Reactions of Atomic Defect on the Surface of Titanium Dioxide
T. Minato¹,², T. Nakayama³, M. Kawai⁴,⁵ and Y. Kim¹
¹RIKEN (Japan), ²Kyoto University (Japan), ³Chiba University (Japan), ⁴Institute for Molecular Science (Japan), ⁵The University of Tokyo (Japan)

WeP-27 Observation of Interface between Organic Solvent and Solid Materials by Liquid Frequency Modulation Atomic Force Microscopy
T. Minato¹, Y. Araki¹,² and H. Onishi²
¹Kyoto University (Japan), ²Kobe University (Japan)

WeP-28 GaN Initial Growth on β-Ga₂O₃ (201) Surface Studied by Scanning Tunneling Microscopy: Some Preliminary Results
L. Chen, A. Okada, R.A. Ferreyra, D. Ueda and K. Kadono
Kyoto Institute of Technology (Japan)

WeP-29 Photovoltaic Measurements on Cu(In,Ga)Se₂ Solar Cells by Photo-assisted KFM under Various Illumination Conditions
H. Yong¹, T. Minemoto² and T. Takahashi¹
¹The University of Tokyo (Japan), ²Ritsumeikan University (Japan)

WeP-30 Photothermal Measurements by AFM on Cu(In,Ga)Se₂ Materials
R. Komatsu¹, Y. Hamamoto¹, T. Minemoto² and T. Takahashi¹
¹The University of Tokyo (Japan), ²Ritsumeikan University (Japan)
WeP-31  STM Study of NO Exposed β-FeSi₂(100) Islands on Si(001) Substrate
H. Yang, K. Tanimoto, S. Takemoto, K. Hattori and H. Daimon
Nara Institute of Science and Technology (Japan)

WeP-32  An Investigation of Crystal Growth of Metal-organic Frameworks by AFM
Z. Wang, H.-Y. Nie and Y. Huang
The University of Western Ontario (Canada)

WeP-33  Li⁺ Ion Insertion Behavior on LTO/ionic-liquid-electrolyte Interfaces Investigated by FM-AFM
Y. Takara¹, M. Kitta², T. Ichii¹, T. Utsunomiya¹ and H. Sugimura¹
¹Kyoto University (Japan), ²National Institute of Advanced Industrial Science and Technology (Japan)

WeP-34  Investigation of KBr (100) and KBr (111) in Ionic Liquid by Frequency Modulation Atomic Force Microscopy
H.P. Mungse¹, S. Okudaira¹, M. Yamauchi², T. Ichii¹, T. Utsunomiya¹, S. Maruyama², Y. Matsumoto² and H. Sugimura¹
¹Kyoto University (Japan), ²Tohoku University (Japan)

WeP-35  Structural Determination of Rutile TiO₂ (011)-(nx1) Structures
T. Kubo
National Institute of Advanced Industrial Science and Technology (Japan)
Exhibitor Presentation

May 17 (Wednesday), 2017
15:40 - 16:10

Chair: F. Iwata (Shizuoka University, Japan)

WeEX-01  Bruker Corporation
WeEX-02  JPK Instruments AG
WeEX-03  NT-MDT Spectrum Instruments
WeEX-04  Asylum Research, Oxford Instruments K.K.
WeEX-05  Research Institute of Biomolecule Metrology Co., Ltd.
WeEX-06  UNISOKU Co., Ltd.