# Program for EMN Berlin Meeting

July 17<sup>th</sup> to 18<sup>th</sup>, 2018  
Mövenpick Hotel Berlin at Potsdamer Platz, Berlin, Germany

## Monday, July 16<sup>th</sup>

**Registration**  
**Time:** 14:00-17:30PM

## Tuesday morning, July 17<sup>th</sup>

### ROOM A

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chair</th>
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<tbody>
<tr>
<td>8:50-9:00AM</td>
<td>Opening</td>
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</table>
| 9:00-9:25AM| 01:     | Sodium niobate based photocatalysts for CO<sub>2</sub> reduction and organic compound decomposition | Haifeng Shi  
Jiangnan University, China |
| 9:25-9:50AM| 02:     | Materials for energy applications produced by pulsed laser ablation | Roberto Teghil  
Universita della Basilicata, Italy |
| 9:50-10:15AM| 03:   | Bidirectional and efficient conversion between terahertz-wave and infrared in MgO:LiNbO<sub>3</sub> | Shin'ichiro Hayashi  
National Institute of Information and Communications Technology, Japan |
| 10:10-10:35AM|         | Session Break          |
| 10:35-11:00AM| 04:   | Graphene-Based Platinum Catalysts for PEM Fuel Cell Application | Dana Schonvogel  
DLR Institute of Networked Energy Systems, Germany |
| 11:00-11:25AM| 05:   | Self-assembly atomic stacking transport layer of two-dimensional layered titania for perovskite solar cells with extended UV stability | Chun-Wei Chen  
National Taiwan University, Taiwan |
| 11:25-11:50AM| 06:   | Cathode optimization in microtubular SOFC/SOEC systems | Alodia Orera  
Instituto de Ciencia de Materiales de Aragón, Spain |

### Lunch Break
Tuesday afternoon, July 17th
ROOM A

<table>
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<tr>
<th>Time</th>
<th>Session: Alloys and Compounds I</th>
<th>Chair: Günter Schmitt</th>
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| 14:00-14:25PM | 07: From Renewable Energy to Hydrogen and Hydrocarbons | Andreas Züttel  
École polytechnique fédérale de Lausanne (EPFL), Switzerland |
| 14:25-14:50PM | 08: Magnetic behavior of colloidal nanoparticles of diverse iron oxide's phases modified by a cation-exchange approach | Andrea Falqui  
King Abdullah University for Science and Technology (KAUST), Saudi Arabia |
| 14:50-15:15PM | 09: Size dependence of solid-liquid interfacial energy quantified by molecular dynamics calculations | Nobufumi Ueshima  
Tohoku University, Japan |
| 15:15-15:40PM | 10: Performance of preformed Au/Cu nanoclusters deposited on MgO powders in catalytic reduction of 4-nitrophenol in solution | Rongsheng Cai  
Swansea University, UK |
| 15:40-16:00PM | Session Break                          |                                   |
| 16:00-16:25PM | 11: Disentanglement and control of coherent and incoherent surface deformations | Peter Gaal  
Universität Hamburg, Germany |
| 16:25-16:50PM | 12: Self-assembled colloidal crystals for passive thermal management | Juliana Jaramillo Fernandez  
CSIC and The Barcelona Institute of Science and Technology, Spain |
| 16:50-17:15PM | 13: Instrumentation and Implementation of a sub 10ps hard X-ray source at the European Synchrotron | Mathias Sander  
ID09 at ESRF – The European Synchrotron, France |
| 17:30PM       | Dinner Social                          |                                   |
**Wednesday morning, July 18**

**ROOM A**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session: General III</th>
<th>Chair: Haiping He</th>
<th>Speaker(s)</th>
</tr>
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</table>
| 9:00-9:25AM | 14: Magneto-absorption effect in Co coated ZnO nanowires                              |                   | Hua Shu Hsu  
National Pingtung University, Taiwan     |
Korea Institute of Ceramic Engineering & Technology, Korea    |
| 9:50-10:15AM | 16: Highly reliable non-volatile memory operated by energy harvesting and its business solutions |                   | Hitoshi Saito  
Fujitsu Semiconductor Limited, Japan     |
| 10:10-10:35AM | Session Break                                                                      |                   |                                                                          |

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<thead>
<tr>
<th>Time</th>
<th>Session: Alloys and Compounds II</th>
<th>Chair: Andreas Züttel</th>
<th>Speaker(s)</th>
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</thead>
</table>
| 10:35 -11:00AM | 17: A completely different evaluation of electrochemical noise for real time corrosion monitoring |                       | Günter Schmitt  
Institute for Maintenance and Corrosion Protection Technologies gGmbH, Germany   |
| 11:00-11:25AM | 18: Microstructure and fatigue behavior of precipitation hardening Cu-Ni-Si alloy |                       | Masahiro Goto  
Oita University, Japan     |
| 11:25-11:50AM | 19: Purely Antiferromagnetic Magnetoelectric Random Access Memory (AF-MERAM)       |                       | Tobias Kosub  
Helmholtz-Zentrum  
Dresden-Rossendorf, Germany  |
| 11:50AM-12:15PM | 20: Study on the Method of Decreasing Stacking Fault Energy of Copper Alloys      |                       | Linghong Liu  
Central South University of Forestry and Technology, China     |
<p>| 11:10-12:15PM | Lunch Break                                                                        |                       |                                                                          |</p>
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<thead>
<tr>
<th>Time</th>
<th>Session: General IV</th>
<th>Chair: Jamil Ur Rahman</th>
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| 14:00-14:25PM     | 21: Quantum processes via semiconductor exciton-polaritons with applications in quantum technologies | Emmanuel Paspalakis  
University of Patras, Greece                                  |
Sangmyung University, Korea                                   |
| 14:50-15:15PM     | 23: Low threshold lasing from solution-processed lead halide perovskite films       | Haiping He  
Zhejiang University, China                                    |
| 15:15-15:40PM     | 24: Ultra high response broad band optical detector from single semiconductor nanowires: Enabling effect of surface states | Arup Kumar Raychaudhuri  
S.N.Bose National Center for Basic Sciences, India              |
| 15:40-16:05PM     | 25: Metals decorated nanocomposite to assist charge transport in thin film organic solar cell | Genene Tessema Mola  
University of KwaZulu-Natal, South Africa                        |
| 16:05-17:00PM     | Poster Session & Session Break                                                      |                                                             |
| 17:30PM           | Dinner Social                                                                       |                                                             |

**Thursday, July 19th**
One-day excursion
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<tr>
<th>Poster Session</th>
<th>Wednesday afternoon, July 18&lt;sup&gt;th&lt;/sup&gt; 16:05-17:00PM</th>
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<tbody>
<tr>
<td>P-01</td>
<td>A Dual-alternating-color Live Cell Imaging Materials Based on AIE-active Fluorescent Polymer Dots (Pdots)</td>
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<tr>
<td>P-02</td>
<td>Thallium based Elpasolite Scintillation Crystal and its Applications</td>
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<tr>
<td>P-03</td>
<td>Protein purification using surface activated magnetic materials</td>
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<tr>
<td>P-04</td>
<td>Compositional effects on the low-temperature transport properties of non-stoichiometric Bi&lt;sub&gt;2&lt;/sub&gt;Te&lt;sub&gt;x&lt;/sub&gt;Se&lt;sub&gt;y&lt;/sub&gt;-based crystals</td>
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<tr>
<td>P-05</td>
<td>Thermoelectric and Electronic Properties of Semimetallic Ru2TaAl and Ru2NbAl Heusler Compounds</td>
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<tr>
<td>P-06</td>
<td>Electrode design for superior catalytic activity and enhanced stability</td>
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