## **Lecture Schedules**

## **Research in Chemical Sciences & Engineering II Topical Lectures in Chemical Sciences & Engineering:**

Notice;

It is required to attend at least seven times.

To satisfy to get the course credit for one academic year, you must

- 1) submit at least one report in total.
- 2) write a report which summarizes a lecture onto one sheet of A4 paper.
- 3) send a report as an attached file by email to the "AGS Office" <ags@eng.hokudai.ac.jp> within two weeks after each lecture presentation finishes.

\_\_\_\_\_

- 01. 14 April @Science#7-310 Prof. Patrick G. Harran (University of California, Los Angeles, USA) <u>"Tactics and Strategy in Complex Molecular Synthesis"</u>
- 02. 18 May @Science#5-301 **Prof. Daniel John Weix (University of Rochester, USA)** <u>"Cross-Electrophile Coupling: Principles and New Reactions"</u>
- 03. 23 May @MC526, Engineering **Prof. Redouane Borsali (CERMAV-CNRS, France)** <u>"Carbohydrate Block Copolymers: Nanostructured Thin Films"</u>
- 04. 24 May @Science#7-219/220 Prof. Marek Wójcik (Jagiellonian University, Poland) <u>"Vibrational Spectroscopy of Hydrogen-Bonded Complexes, Liquids and Solids"</u>
- 05. 02 June @MC527, Engineering
  Dr. Šárka Mikmeková
  (JFE Steel Corporation, Japan <formerly: The Czech Academy of Sciences, Czech>)
  <u>"Principle and Applications of Scanning Low Energy Electron Microscopy"</u>
- 06. 21 June @Science#7-310
  Prof. Deju Ye (Nanjing University, China)
  <u>"Multimodality molecular imaging of enzyme activity in vivo using activatable probes"</u>
- 07. 29 June @Science#7-310 **Prof. Yunho Lee (KAIST, Korea)** <u>"Coordination Chemistry of the Pincer Complexes of Co, Ni, Cu"</u>

- 08. 05 July @MC208, Engineering **Prof. Antonio Togni (ETH Zürich, Switzerland)** <u>"Hypervalent Iodine Reagents for Perfluoroalkylation: Synthesis, Applications and</u> <u>Mechanistic Studies"</u>
- 09. 11 July @MC526, Engineering **Prof. Leo Paas (Massey University, New Zealand)** <u>"Big data analytics for defining and attaining tactical and strategic goals"</u>
- 10. 12 July @MC526, Engineering
  Prof. Soo-Gil Park (Chungbuk National University, Korea)
  <u>"High performance effects with organic additives for high voltage EDLC system"</u>
- 11. 18 July @Seminar Room 1, Frontier Research in Applied Sciences Building Prof. Evamarie Hey-Hawkins (Universität Leipzig, Germany) <u>"Formation of Rings, Chains and Nanotubes by Self-Assembly of Transition Metal</u> <u>Bis-Phospholane Complexes"</u>
- 12. 26 July @Seminar Room 2, Frontier Research in Applied Sciences Building <u>"CSE International Student Symposium 2017"</u>
- 13. 27 July @Science#6-204-02 **Prof. Stephen Michnick (Université de Montréal, Canada)** <u>"Endocytosis caused by liquid-liquid phase separation of proteins"</u>
- 14. 27 July @Science#7-219/220 Prof. David Sémeril (Université de Strasbourg, France) <u>"Macrocyclic ligands in catalysis"</u>
- 15. 29 July @Nanporo Onsen Heart & Heart <CSE Summer School 2017>
  Prof. Jochen Lauterbach (University of South Carolina, the U.S.A.)
  <u>"Imaging techniques in heterogeneous catalysis: from non-linear reaction dynamics to high-throughput screening"</u>

16. 02 August @Seminar Room 1, Frontier Research in Applied Sciences Building Prof. Yu-Tzu Huang (Chung Yuan Christian University, Taiwan) <u>"Bioenergy from microalgae and toxicology of diesel vs. biodiesel"</u>

03 August @Seminar Room 1, Frontier Research in Applied Sciences Building Prof. Kevin C.-W. Wu (National Taiwan University, Taiwan) "Functional Nanospace Materials for Lignocellulosic Biomass Conversion"

03 August @Seminar Room 1, Frontier Research in Applied Sciences Building Prof. Fa-Kuen Shieh (National Central University, Taiwan) <u>"From Imparting Functionality to Shielding Against Unfolding via Embedding Enzymes</u> <u>Into Metal-organic Frameworks: the insight of material biology"</u> <u>\*Wa will count one attendance when you attend at least two seminars of the above three</u>

\*We will count <u>one attendance</u> when you attend <u>at least two seminars</u> of the above three.

- 17. 04 August @MC208, Engineering **Prof. Ru-Jong Jeng (National Taiwan University, Taiwan)** <u>"Honeycomb-like Polymeric Films from Dendric Polymers Presenting</u> <u>Shape-memory Effect"</u>
- 12 September @MC102, Engineering Prof. Mikhail Proskurnin (M.V. Lomonosov Moscow State University, Russia) <u>"Advances in Photothermal Spectroscopy"</u>
- 19. 25 September @Seminar Room 2, Frontier Research in Applied Sciences Building Prof. Seonghoon Lee (Seoul National University, Korea) <u>"The Optical & Electrical Properties at the Nanoscale: Exciton, Plasmon, Polaron</u> and Synapses"
- 20. 13 October @Science#7-219/220
  Dr. Richard Kelly (Royal Society of Chemistry, the U.K.)
  <u>"The publication process demystified: tips on writing research papers for maximum impact"</u>
- 21. 16 October @Seminar Room 2, Frontier Research in Applied Sciences Building **Prof. Serge Cosnier (Grenoble Alpes University and UMR-CNRS, Grenoble, France)** <u>"Nanostructured bioarchitectures based on carbon nanotubes and/or organic polymers</u> <u>for energy conversion or electroanalysis"</u>
- 22. 16 October @Seminar Room 2, Frontier Research in Applied Sciences Building **Prof. Redouane Borsali (Grenoble Alpes University and CERMAV-CNRS, France)** <u>"Carbohydrate-based Block Copolymer Self-Assemblies: Highly Nanostructured Thin Films</u> <u>and DSA Patterning"</u>
- 23. 25 October @MC208, Engineering
  Prof. Daniel Cullen (US Department of Agriculture, the U.S.A.)
  <u>"Natural decomposition of Pinus contorta: Physiological process inferred from</u> <u>Metatranscriptome and proteome investigations"</u>

- 24. 25 October @Seminar Room 1, Frontier Research in Applied Sciences Building Prof. Matthias Wagner (Goethe University Frankfurt, Germany) <u>"Redox Reactions of Aryl Boranes and the Advent of Catalytic Applications"</u>
- 25. 09 November @MC030, Engineering Dr. Julien Massue (University of Strasbourg, France) <u>"Optimized fluorescent emittersbased on a hydroxybenzazole or anil scaffold"</u>
- 26. 09 November @Science#7-219 **Prof. Matteo Mauro (University of Strasbourg, France)** <u>"Engineering luminescent supramolecular architectures: lights, camera, action!"</u>
- 27. 17 November @MC030, Engineering **Prof. Matteo Mauro (University of Strasbourg, France)** <u>"Light-responsive metallo-supramolecular polymers for 2D and self-healable 3D materials"</u>
- 28. 24 November @MC526, Engineering
  Prof. Teofilo Rojo (University of the Basque Country, Spain)
  <u>"Na-ion batteries for large scale applications: challenges and opportunities"</u>
- 29. 27 November @Seminar Room 2, Frontier Research in Applied Sciences Building **Prof. Cheng-Liang Liu (National Central University, Taiwan)** <u>"Spray-coating technique for electronic and optoelectronic application"</u>

27 November @Seminar Room 2, Frontier Research in Applied Sciences Building Prof. Akon Higuchi (National Central University, Taiwan) "Bioengineering Aspect of Clinical Trials of Stem Cells"

\*We will count <u>ONE attendance</u> when you attend <u>BOTH of the above lectures</u> which are parts of the "HU-NCU Joint Symposium on Materials Chemistry and Physics 2017".

- 30. 30 November @Large Auditorium, Science#5
  Prof. Matthew Gaunt (University of Cambridge, the U.K.)
  <u>"New strategies for chemical synthesis: from C-H activation to protein functionalization"</u>
- 31. 26 January @Seminar Room 1, Frontier Research in Applied Sciences Building Prof. Seung Hwan Cho (Pohang University of Science and Technology, Korea) <u>"Chemo, Regio and Stereoselective Organic Transformations of 1,1-Diborylalkanes"</u>