

SCS Foundation: Werner Fund Scholarship Students visit Lonza in Visp



In the name of the SCS Foundation Werner Fund, Christoph Täschler, Principal Scientist, Process Development at Lonza, organized a networking event and a visit of the Lonza manufacturing site at Visp to stimulate the interaction between the students and the industrial partners of the program. All seven Werner scholarship holders as well as

Christian Chapuis, Firmenich SA, Geneva and David Spichiger from SCS followed the invitation and spent an exciting day in Visp.

A short introduction of David Spichiger about the SCS Foundation and a presentation round of the students' master thesis' opened the day before Christoph Täschler continued the program by presenting the wide range of activities and services that Lonza provides worldwide. After a delicious lunch the group visited three different sites of the factory and got an understanding of how new research findings are transformed into market products. It was very impressive to look at chemical processes outside an academic laboratory and to get an idea of the scaling-up process to produce not only milligrams but tons of a substance.

We hope that we can continue this initiative of company visits next year and thank very much to Christoph Täschler for hosting this first event.

Claudia Appenzeller wird Geschäftsführerin der Akademien der Wissenschaften Schweiz



Der Vorstand hat Claudia Appenzeller-Winterberger zur Geschäftsführerin der Akademien der Wissenschaften Schweiz ernannt. Per Ende April übernahm sie die neuen Aufgaben.

Als Generalistin mit einer grossen Faszination für das Zusammenspiel von Wissenschaft, Public Management und Kommunikation wird sich Claudia Appenzeller für eine intensivere und fachübergreifende Zusammenarbeit der Akademien der Wissenschaften Schweiz einsetzen, damit ein Fundament entsteht, um neue Herausforderungen zu lösen. Dabei ist ihr auch der Dialog mit der Gesellschaft ein besonders wichtiges Anliegen.

A warm welcome to our new members!

Period: 29.03.2016 – 26.04.2016

Yasser Bin Sabir, Neyruz – Andras Bödi, Bülach – Derek Crawford, Basel – Fabian Dey, Basel – Lluc Farrera Soler, Geneva – Daniele Fiorito, Vernier – Vanessa Galati, Kollbrunn – Johannes Ihli, Würenlingen – Milijana Jovic, St. Gallen – Nicolas Kaeffer, Zürich – Christian Kramer, Lörrach (DE) – Annemarie Mezzanotte, Dübendorf – Sotiria Mostrou, Zürich – Thomas Nielsen, Gais – Laura Piveteau, Zürich – Christian Ragot, Fontaine-melon – René Reiser, Wetzikon – Mirjam Schreier, Olten – Anja Stampfli, Basel.

HONORS AND AWARDS

Werner Prize 2016 awarded to Prof. Maksym Kovalenko



On the occasion of the SCS Spring Meeting at University of Zurich on April 22, 2016, the Swiss Chemical Society awarded the Werner Prize 2016 to Prof. Maksym Kovalenko, ETH Zurich and EMPA Dübendorf, for his innovative studies in the chemistry, physics and applications of inorganic nanostructures.

The Werner Prize honors a Swiss scientist or scientist working in Switzerland under the age of 40 for outstanding independent chemical research and consists of a medal in bronze and a cash check of CHF 10'000.

Maksym Kovalenko studied chemistry at Chernivtsi National University, Ukraine. He received his Ph.D. in nanoscience and nanotechnology from the Johannes Kepler University, Linz, Austria, in 2007. From 2008 to 2011, he performed postdoctoral research on colloidal nanostructures with Dmitri Talapin at the University of Chicago, IL, USA. Since 2011, Kovalenko has been Assistant Professor of Inorganic Functional Materials at ETH Zurich and affiliates with the Swiss Federal Laboratories for Materials Science and Technology.

Professor Majed Chergui wins an ERC Advanced Grant



Transition metal (TM) oxides (*e.g.*, TiO₂, ZnO, NiO) are large gap insulators that have emerged as highly attractive materials over the past two decades for applications in photocatalysis, solar energy conversion, etc. These applications rely on the generation of charge carriers, their evolution and their eventual trapping at defects or *via*

coupling to photons. Despite the huge interest for such materials, the very nature of the elementary electronic excitations (Frenkel, Wannier or charge transfer exciton) is still not established, nor is the way these excitations evolve after being created: excitonic polarons, charged polarons or free charges. Finally, the electron-hole recombination is also not clearly established because of issues related to defects and trapping.

Over the last decade, Professor Chergui's group achieved a number of breakthroughs on chemical systems and on materials, using element-selective spectroscopies: namely, ultrafast X-ray absorption and emission. His ERC project aims at pushing further these efforts by implementing novel ultrafast core-level spectroscopies: time-resolved resonant inelastic scattering (TR-RIXS) and time-resolved Angle-resolved photoemission spectroscopy (TR-ARPES), which both can probe the electrons and the holes. The former will exploit the unprecedented brilliance of X-ray Free-electron-lasers. The second will use the high harmonic generation (HHG) source of ultrashort extreme UV (10–100 eV) pulses newly developed by Chergui's group. While both methods will be implemented for the study of single crystals with a controllable degree of doping (Oxygen vacancies), TR-RIXS will also be implemented on nanoparticles and mesoporous films that are commonly used in functional devices. This combination of hitherto unused cutting-edge technologies on metal oxides will deliver a new degree of insight into the dynamics, trapping and decay of charge carriers in these materials.

Source: <http://actu.epfl.ch/news>