

# Plenary speakers MNO2026



Pr. Ilko Bald

University of Postdam (Germany)

Ilko Bald studied chemistry at the Free University Berlin, Germany, where he also obtained a Ph.D. in physical chemistry. After a postdoctoral stay at the University of Iceland, he moved to the Interdisciplinary Nanoscience Center (iNANO) at Aarhus University, Denmark, working on scanning probe microscopy and DNA nanotechnology. In 2013, he established a junior research group ("optical spectroscopy and chemical imaging") at the University of Potsdam and the Federal Institute for Materials Research and Testing (BAM, Berlin, germany). Since 2019, he has been a professor of hybrid nanostructures at the University of Potsdam investigating nanomaterials, their optical properties, and electron-induced processes.



# Pr. Jean-Jacques Greffet

Institut d'Optique – Université Paris-Saclay (France)

Jean-Jacques Greffet is an emeritus professor at Institut d'Optique, Université Paris-Saclay. He has worked on light scattering of electromagnetic waves, near-field microscopy, radiative transfer at the nanoscale, coherent thermal emission, nanoantennas and quantum optics with surface plasmons. His current research interest involves controlling light-matter interaction at the nanoscale to develop sensors, light-emitting metasurfaces and label-free nanoparticle detection and characterization. He is an OSA fellow and the recipient of the Servant prize of the French Academy of Science. He is a coauthor of the textbook Introduction to Nanophotonics, Oxford University Press, in collaboration with Henri Benisty and Philippe Lalanne.



### Pr. Janina Kneipp

Chemistry Department of Humboldt-Universität – Berlin (Germany)

Janina Kneipp received her diploma and doctoral degrees at Freie Universität Berlin, Germany. After postdoctoral work in Rotterdam, Princeton, and Berlin, she has been conducting research in optical nanospectroscopy in the Chemistry Department of Humboldt-Universität zu Berlin since 2008, first as an assistant professor of Analytical Chemistry, since 2012 as full professor of Physical Chemistry. She has developed multimodal multiphoton microspectroscopy, specifically surface enhanced hyper Raman scattering to probe molecules and materials, and contributed to elucidating mechanisms in plasmon-driven catalysis and electron harvesting. She received the 2010 Bunsen-Kirchhoff Award of the German Association of Chemists (GDCh), the 2019 Caroline von Humboldt Professorship of HU, and was elected as Fellow of the European Academy of Sciences in 2020. Janina Kneipp serves as editorial co-chair of Analysis & Sensing (ChemistryEurope) and as associate editor of the Journal of Raman Spectroscopy.



#### Dr. Valentina Krachmalnicoff

Institut Paul Langevin - Paris (France)

Valentina Krachmalnicoff is a CNRS researcher at Institut Langevin, Paris, France. She performed her PhD on quantum atom optics experiments in the team lead by Alain Aspect and Chris Westbrook (LCFIO, Palaiseau, France). In 2010 she joined the team lead by Rémi Carminati and Yannick De Wilde as a post-doctoral fellow to work on light-matter interaction on nanostructured plasmonic samples. She was hired as a permanent researcher in the same laboratory in 2012. She has a recognized expertise on nanophotonics, near-field optics, single-molecule microscopy, energy transfer effects involving near-field interactions, with more than 30 articles published in the last 10 years in high impact factor reviews such as Nature, PRL, Light: Science & Applications, ACS

Photonics, Optica, and 2 patents. Her research topics attract the attention of the scientific community with an increasing number of invited talks in international conferences (2 to 3 per year in the last 7 years). Her publications have more than 2000 citations. She received several awards for her work (L'Oreal-Unesco "Pour les femmes et la Science" award for PhD students in 2007, CNRS Bronze medal in 2017, iXCore foundation for research in 2025)



#### Pr. Isabel Pastoriza-Santos

University of Vigo (Spain)

Isabel Pastoriza Santos is a Professor at the University of Vigo and the leader of the FunNanoBio Group. She holds a European PhD in Chemistry and has completed postdoctoral stays in Australia, the USA, and Austria. Her research focuses on plasmonic nanoparticles, with pioneering contributions to their synthesis, surface modification, and applications in sensing and catalysis. She has authored over 180 peer-reviewed papers and holds an H-index of 77 (WoS). Isabel has received several prestigious awards, including the L'Oréal-UNESCO "For Women in Science" Award (Spain), and the Research Excellence Award from the Spanish Royal Society of Chemistry. She is currently an Associate Editor of "ACS Applied Nano Materials".



# Pr. Emilie Ringe

University of Cambridge (UK)

Emilie Ringe earned her B.A./M.S. summa cum laude in chemistry, then Ph.D. in chemistry and materials science at Northwestern University in 2012. She became the Gott Research Fellow at Trinity Hall as well as a Newton International Research Fellow (Royal Society) in the Electron Microscopy group in the Materials Science and Metallurgy Department at the University of Cambridge, UK. In 2014, she was hired as an assistant professor at Rice University, where she established the Electron Microscopy Center and received funding from the Air Force Office of Scientific Research (YIP), NSF, ACS-PRF, 3M, and the US/Israel Binational Science Foundation.

In 2018, she moved back to the University of Cambridge, joint between the Department of Materials Science and Metallurgy and the Department of Earth Sciences; she was promoted to professor (grade 11) in 2022. She received an ERC Starting grant and an EPSRC grant to pursue her studies of Earth-abundant plasmonics, for which she has been named one of the 2021 C&EN's "Talented 12" and recipient of the 2021 The Journal of Physical Chemistry C and ACS PHYS lectureship.



## Pr. Jihyeon Yeom

Korean Advanced Institute of Science and Technology (Korea)

She also holds adjunct appointments in Biological Sciences, the NanoCentury Institute, and the KAIST Health Institute.

She earned her Ph.D. in Macromolecular Science and Engineering from the University of Michigan, advised by Prof. Nicholas Kotov.

Her doctoral work focused on the design and properties of chiral inorganic nanostructures.

She completed postdoctoral training at MIT with Prof. Robert Langer, working on nanomedicine and drug delivery.

Her research explores the origin and amplification of chirality at the nanoscale for photonic, magnetic, and biomedical applications.

She is a pioneer in chiroptical materials, including chiral ceramics, chiroferromagnetic quantum dots, and bioinspired lipid nanoparticles.

Her work has appeared in Nature Materials, Science, Advanced Materials, and ACS Nano. She integrates artificial intelligence with chiral nanotechnology to drive innovations in imaging, therapy, and diagnostics.

She has received prestigious awards including the POSCO Science Fellowship and continues to lead impactful interdisciplinary research.



## Pr. Renato Zenobi

Organic Chemistry Laboratory of the Swiss Federal Institute of Technology (ETH) - Zurich (Switzerland)

Renato Zenobi is Professor of Analytical Chemistry at the Organic Chemistry Laboratory of the Swiss Federal Institute of Technology (ETH) Zurich. Born in Zurich in 1961, he received a M.S. degree from ETH Zurich in 1986, and a Ph.D. at Stanford University in the USA in 1990. After two postdoctoral fellowships in the USA, he returned to Switzerland in 1992 as a Werner Fellow at the EPFL, Lausanne, where he established his own research group. He became assistant professor at the ETH in 1995, was promoted to associate professor in 1997, and to full professor in 2000. He is best known for using modern mass spectrometry methods to solve problems in the life sciences, for his contributions to understanding ion formation mechanisms in laser mass spectrometry, and for the invention of tip-enhanced Raman spectroscopy, a method that allows one to gain detailed molecular information on the nanometer scale. Together with clinicians at the University Hospital Zurich, he is developing a mass spectrometric "chemical nose" that could revolutionize medical diagnosis. He is the recipient of numerous fellowships and awards, most recently a 2017 ERC Advanced Grant from the EU, the 2019 "Golden Owl" from ETH for excellence in teaching, and the 2023 ACS Award in Spectrochemical Analysis.