Invited Presentations: William Esco (W. E.) Moerner


   (i) The Research Center for Advanced Science and Technology, University of Tokyo, Tokyo, Japan, October 23, 1989;
   (ii) SONY Corporation Central Research Center, Yokohama, Japan, October 24, 1989;
   (iii) Nikon Corporation Research Laboratory, Tokyo, Japan, October 25, 1989;
   (iv) Mitsubishi Central Research Laboratory, Hyogo, Japan, October 26, 1989;
   (v) Toray Industries Electronic and Imaging Materials Research Laboratory, Otsu, Japan, October 27, 1989.


143. “Single-Molecule Nanophotonics: Gels and Molecular Motors,” Physical Chemistry Seminar, University of California San Diego, La Jolla, California, October 8, 1996.


Colloquium, Department of Chemistry, Cornell University, Ithaca, New York, February 14, 2002.


230. “Single Molecules as Local Nanophotonic Probes and Sources”, a series of lectures presented in the Conference Universitaire de Suisse Occidentale du 3ème Cycle en
Chimie:
(a) “Single-Molecule Spectroscopy as a Local Nanoscopic Probe,” University of Basel, June 18, 2003
(b) “Optical Spectroscopy of Single Molecules in Condensed Phases,” University of Bern, June 19, 2003
(c) “Biophysical Studies Using Single-Molecule Local Probes,” EPFL Lausanne, June 20, 2003
(e) “Applications of Single Molecules as Nanophotonic Probes and Sources,” University of Geneva, June 24, 2003


239. “Single Molecules as Local Nanoscopic Probes,” Department of Chemistry and


268. “Probing, Imaging, and Trapping Single Biomolecules,” Imaging Focus Group Seminar Series, University of Texas Southwestern Medical School, Dallas, Texas, February 27, 2006.


275. “Visualizing Single Molecules with Lasers,” Yunker Lecture, Department of Physics, Oregon State University, Corvallis, Oregon, November 6, 2006.


315. “Lighting Up Single Molecules to Probe Complex Environments, From Crystals to Cells,” Evans Award Public Lecture, The Ohio State University, Columbus, Ohio, October 8, 2009.

316. “Single-Molecule Superresolution Imaging and Trapping,” The Evans Award Lecture, The Ohio State University, Columbus, Ohio, October 9, 2009.


338. “Examples, Molecules, and Methods for Super-Resolution Imaging in Cells with Single Molecules,” a series of lectures presented in the **Leica Scientific Forum** at:
   (a) Institute of Integrated Biology, University of Liverpool, June 27, 2011
   (b) Department of Pharmacology, University of Oxford, June 28, 2011
   (c) Department of Chemistry, University of Cambridge, June 29, 2011
   (d) Department of Physics, Imperial College London, June 30, 2011


345. “Single fluorescent molecules as nano-illuminators for biological structure and function in cells,” Single Molecules Meet Systems Biology Symposium, HHMI Janelia Farm Research Campus, Ashburn, Virginia, October 26, 2011.


348. “Photodynamics of Single Antenna Proteins and Redox Enzymes in Solution by
Suppression of Brownian Motion,” DOE-BES Photosynthetic Systems Research Meeting, Baltimore, Maryland, November 8, 2011.


386. “Single-Molecule Spectroscopy and Imaging: 3D Nanoscopy and Biomolecular Dynamics,” Biological Sciences Seminar, University of Southern California, Los Angeles, California, April 25, 2014.


444. “The Story of Single Molecules, from Early Spectroscopy in Solids, to Super-Resolution Nanoscopy in Cells and Beyond,” University Seminar, University of Bayreuth, Bayreuth,
“Light and Single Molecules Open a New Window into Super-Resolution Imaging in Cells,” plenary lecture, 2nd Mediterranean Workshop of Young Researchers (French Chemical Society), Montpellier, France, October 12, 2015.


“Fun with Light and Single Molecules Opens Up an Amazing New View Inside Cells,” Samuel I. Weissman Memorial Public Lecture, Department of Chemistry, Washington University, St. Louis, Missouri, November 5, 2015.


“Fun with Light and Single Molecules Opens Up an Amazing New View Inside Cells,” 50th Anniversary Celebration of Faculty of Science, University of Chile, Santiago, Chile, December 9, 2015.


“Super-Resolution Imaging in Cells Using Single Molecules Places New Requirements on Fluorophore Labels,” Pacificchem 2015 Symposium on Molecular Probes and
Fluorophores for Biological Imaging (#280), Honolulu, Hawaii, December 17, 2015.


466. “The story of single molecules, from early spectroscopy in solids, to super-resolution nanoscopy in cells and beyond,” Director’s Distinguished Lecture, Research School of Physics and Engineering, Australia National University, Canberra, Australia, February 9, 2016.

467. “My Route to the Nobel Prize: Fun with Light and Single Molecules Leads to an Amazing New View Inside Cells!,” University of New South Wales, Canberra, Australia, February 9, 2016.


478. “Multivariate photodynamics of individual molecules in solution with the ABEL trap,” Fred J. Robbins Lecture 4, Department of Chemistry, Pomona College, Claremont, California, March 31, 2016.

479. “Fun with Light and Single Molecules Started 27 Years Ago Opens Up an Amazing New View Inside Cells (and beyond),” 75th Anniversary of The Institute of Chemistry, UNAM, Mexico City, Mexico, April 5, 2016.

480. “My Route to the Nobel Prize: Fun with Light and Single Molecules Leads to an Amazing New View Inside Cells!,” UNAM Preparatory School ENP 6, Mexico City, Mexico, April 6, 2016.


Temperatures Led to Super-Resolution Microscopy and Beyond,” Hong Kong University of Science and Technology, 25th Anniversary Distinguished Speaker, Hong Kong, May 16, 2016.


Tracking in Cells,” University Lecture, University of Texas Southwestern School of Biomedical Science, Dallas, Texas, March 22, 2017.


518. “My Route to the Nobel Prize: Fun with Light and Single Molecules Leads to an Amazing New View Inside Cells,” Keynote Lecture, California State Science Fair 2017, California Science Center, Los Angeles, California, April 24, 2017.


526. “Super-Resolution Microscopy to Study Normal and Diseased Cells,” (with Colin Comerci), California Pacific Medical Center Research Institute Seminar, California Pacific Medical Center-Research Institute, San Francisco, California, 22 August 2017.


553. “Single-Molecule Nanoscience in Cells Through (Chemistry, of course.) Optics and Imaging,” ACS Publications Symposium, Innovations in Materials Science, ShanghaiTech University, Shanghai, China, July 29, 2018


555. “Single-Molecule Approaches to Cell Biology Based on (3D) Imaging and Tracking,” Special Seminar, Institute of Biomedical Sciences, Fudan University Medical School, Shanghai, China, August 2, 2018.


557. “Single Molecules Across the Decades, from Low Temperature, to 3D Imaging and Tracking in Cells, to Solution Photodynamics,” 13th International Conference on Hole Burning, Single Molecule, and Related Spectroscopies HBSM 2018, Moscow State Pedagogical University, Moscow, Russia, August 11, 2018.


570. “Roger Tsien and Blinking Fluorescent Proteins in the mid-1990s, Plus What’s New?”, Roger Tsien Memorial Conference, Methods and Applications in Fluorescence 2019, UCSD La Jolla, California, August 24, 2019.


573. “What is a Single Molecule, and What Can you Do With It?” J. T. Donald Public Lecture, McGill University, Montreal, Quebec, Canada, 23 September 2019.


580. “Nanophotonics Based on Individual Molecules and Light Gives Rise to 3D Super-Resolution Imaging in Cells and Biomolecular Insights,” Plenary Lecture, OVC-EXPO,
Optics Valley, Wuhan, China, 13 November 2019.