



Rudolf BRDIČKA
(1906-1970)

Professor of physical chemistry at Charles University, founding member of the Czechoslovak Academy of Sciences, founder and the first director of the Institute of Physical Chemistry of the Czechoslovak Academy of Sciences.

An outstanding electrochemist renowned in particular by his pioneering work on kinetic polarographic current and on applications of polarography in medicine. A brilliant university teacher, author of an internationally recognized textbook of physical chemistry. He has crucial merits for development of modern physical chemistry in this country.

To commemorate his work and personality, the Institute of Physical Chemistry of the Academy of Sciences of the Czech Republic has organized since 1991 annually a festive R. Brdička Lecture. Invited speakers have been eminent scientists active in some field relating to the research currently pursued in the Institute.

R. BRDIČKA MEMORIAL LECTURES 1991-2019

1. (1991) Edgar **HEILBRONNER** (*Eidgenössische Technische Hochschule, Zürich*)
“The old Hückel formalism”
2. (1992) Kamil **KLIER** (*Lehigh University, Bethlehem, Pennsylvania*)
“Physical chemistry in two dimensions”
3. (1993) Joshua **JORTNER** (*Tel Aviv University, Tel Aviv*)
“Clusters – a bridge between molecular and condensed matter chemical physics”
4. (1994) David J. **SCHIFFRIN** (*The University of Liverpool*)
“Electrochemistry in two-dimensional systems”
5. (1995) Josef **MICHL** (*University of Colorado, Boulder, Colorado*)
“Molecular kit for new materials”
6. (1996) Gerhard **ERTL** (*Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin*)
“Self-organization in surface reactions”
7. (1997) Roger **PARSONS** (*University of Southampton*)
“Electrochemistry in the last 50 years: from Tafel plotting to scanning tunnelling”
8. (1998) G. Barney **ELLISON** (*JILA and University of Colorado, Boulder, Colorado*)
“The chemical physics of organic reactive intermediates in combustion and atmospheric processes”
9. (1999) Henry F. **SCHAEFER III** (*University of Georgia, Athens, Georgia*)
“The third age of quantum chemistry”
10. (2000) Alexis T. **BELL** (*University of California and Lawrence Berkeley Laboratory, Berkeley, California*)
“Progress towards the molecular design of catalysts – lessons learned from experiments and theory”
11. (2001) Mario J. **MOLINA** (*Massachusetts Institute of Technology, Cambridge, Massachusetts*) “The Antarctic ozone hole”
12. (2002) Jean-Marie **LEHN** (*Université Louis Pasteur, Strasbourg a Collège de France, Paris*) “Selforganization of supramolecular nanodevices”
13. (2003) Helmut **SCHWARZ** (*Technische Universität Berlin*)
“Elementary processes in catalysis: looking at and learning from “naked” transition ion”

14. (2004) Rudolph A. **MARCUS** (California Institute of Technology, Pasadena)
"Strange isotope effects in stratospheric ozone and in the earliest minerals in the solar system"
15. (2005) Avelino **CORMA** (Instituto de Tecnología Química, Valencia)
"Supramolecular Entities Based on Molecular Sieves for Catalysis and Synthesis of New Materials"
16. (2006) Paul **CRUTZEN** (Max Planck Institute for Chemistry, Mainz):
"Atmospheric Chemistry and Climate in the 'Anthropocene'"
17. (2007) Harry B. **GRAY** (California Institute of Technology, Pasadena)
"The Currents of Life: Electron Flow through Metalloproteins"
18. (2008) Michael **GRÄTZEL** (Ecole Polytechnique Fédérale de Lausanne)
"Mesoscopic Electrodes for Generation and Storage of Electric Power from Sunlight"
19. (2009) Gabor. A. **SAMORJAI** (Department of Chemistry and Lawrence Berkeley National laboratory, University of California, Berkeley)
"Molecular Foundations of Heterogeneous Catalysis"
20. (2010) Pavel **HOBZA** (Institute of Organic Chemistry and Biochemistry of the AS CR)
"Noncovalent Interactions and their Role in Chemistry and Biochemistry"
21. (2011) Klaus **MÜLLEN** (Max-Planck Institute, Mainz, Germany)
"Carbon Materials and Graphenes"
22. (2012) Enrico **GRATTON** (University of California, Irvine)
"Nanoimaging technique with high time and spatial resolution: Mechanisms of translocation through the nuclear pore complex"
23. (2013) J. Peter **TOENNIES** (Göttingen, Germany)
"Superfluid Helium Nanodroplets: Very Cold and Extremely Gentle"
24. (2014) Christian **AMATORE** (CNRS Paris, France)
"Seeing, Monitoring, Measuring and Understanding Vesicular Exocytosis of Neurotransmitters with Ultramicroelectrodes"
25. (2015) Ulrike **DIEBOLD** (TU Wien, Austria)
"Surface Science of Metal Oxides"
26. (2016) Ferdi **SCHÜTH** (Max-Planck-Institut, Mülheim, Germany)
"Controlled nanostructures for applications in catalysis and beyond"
27. (2017) Frank **NEESE** (Max-Planck Institute, Mülheim, Germany)

"Analysis of complex catalytic mechanisms by High-level spectroscopy and quantum chemistry: The case of water oxidation in PSII"

28. **(2018)** **Prof. Andrea C. Ferrari** (University of Cambridge, Great Britain)

"Light Scattering and Emission from Hetero-structures"

29. **(2019)** **Professor Renato Zenobi** (Department of Chemistry and Applied Biosciences, ETH Zurich)

"Nanoscale Chemical Analysis and Imaging using Tip-Enhanced Raman Spectroscopy"