National Science and Technology Medals

The National Medal of Science and the National Medal for Technology and Innovation are awarded by the President of the United States of America for outstanding contributions to the sciences or to technological innovation. We mention three of the 2015 awardees here.

A. Paul Alivisatos (University of California, Berkeley and Lawrence Berkeley National Laboratory; National Medal of Science) was featured here when he won the Wolf Prize in Chemistry.[1a] He has recently reported in *Angewandte Chemie* on dual metal–dual semiconductor nanostructures.[1b]

Geraldine L. Richmond (University of Oregon; National Medal of Science) was featured here when she won the Pittsburgh Spectroscopy Award.[2]

Joseph M. DeSimone (University of North Carolina, Chapel Hill; National Medal of Technology and Innovation) was featured here when he joined the International Advisory Board of *Angewandte Chemie*.[3a] He has recently reported in *Advanced Healthcare Materials* on particles for the local delivery of proteins.[3b]

WATOC Schrödinger and Dirac Medals

The World Association of Theoretical and Computational Chemists (WATOC) has recently honored two outstanding chemists working in the field.

Hiroshi Nakatsuji (Quantum Chemistry Research Institute, Kyoto) is the recipient of the WATOC Schrödinger Medal, which is presented to outstanding theoretical and computational chemists. Nakatsuji studied at Kyoto University, where he completed his PhD (supervised by Teijiro Yonezawa) in 1971. He subsequently remained at Kyoto University, with periods as a research associate with Jeremy I. Musher at Yeshiva University, New York (1973–1974) and Robert G. Parr at the University of North Carolina, Chapel Hill (1974–1975), and was made emeritus professor in 2007. He has been Director of the Quantum Chemistry Research Institute since 2006. Nakatsuji's research involves the construction of highly predictive and widely applicable theories and concepts for chemistry and physics, including predictive quantum chemistry. He was honored for his "development of general methods of solving the Schrödinger equation of atoms and molecules". He has reported in *ChemPhysChem* on color tuning in photofunctional proteins,[4a] and is co-author of a report in *Chemistry—A European Journal* on electronic transitions in conformationally controlled tetrasilanes.[4b]

Johannes Neugebauer (University of Münster) is the winner of the Dirac Medal, which is given to outstanding researchers under the age of 40. Neugebauer studied at Bielefeld University, and carried out his PhD (awarded in 2003) with Bernd Artur Heß at the Friedrich-Alexander-Universität Erlangen-Nürnberg. From 2003–2006, he was a postdoctoral researcher with Evert Jan Baerends at the Vrije Universiteit Amsterdam, and from 2006–2008, he was a junior research group leader at the ETH Zürich, where he completed his habilitation (mentored by Markus Reiher) in 2009. From 2009–2011, he was associate professor at Leiden University, and from 2011–2012, he was professor at the Technische Universität Braunschweig. He was made Professor of Theoretical Organic Chemistry at the University of Münster in 2013. Neugebauer and his group are interested in the development of density functional theory based subsystem and embedding methods for studying the collective properties of molecular assemblies in complex environments, including light harvesting and energy transport in photosynthetic systems as well as excited electronic states and spectroscopic properties of molecules in solvents or cofactors in proteins. He has reported in *ChemPhysChem* on wavefunction in density functional theory embedding calculations.[5a] He was also one of the Guest Editors of a special issue of *ChemPhysChem* on computational chemistry of complex and biosystems.[5b]

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[2] *Angew. Chem. Int. Ed.* **2014**, *53*, 5003; *Angew. Chem.* **2014**, *126*, 5103.

[3] *Angew. Chem. Int. Ed.* **2014**, *53*, 38; *Angew. Chem.* **2014**, *126*, 40; b) K. Khodabandehlou, S. Tian, J. C. Luft, S. A. Khan, J. M. DeSimone, *Adv. Healthcare Mater.* **2016**, *5*, 653.

[4] a) J. Hasegawa, K. J. Fujimoto, H. Nakatsuji, *ChemPhysChem* **2011**, *12*, 3106; b) H. Tsuji, H. A. Fogarty, M. Ehara, R. Fukuda, D. L. Casher, K. Tamao, H. Nakatsuji, J. Michl, *Chem. Eur. J.* **2014**, *20*, 9431.

[5] a) C. Daday, C. König, J. Neugebauer, C. Filippi, *ChemPhysChem* **2014**, *15*, 3205; b) see the Editorial by A. Dreuw, G. J. O. Beran, J. Neugebauer, *ChemPhysChem* **2014**, *15*, 3139.

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Awarded ...


A. P. Alivisatos


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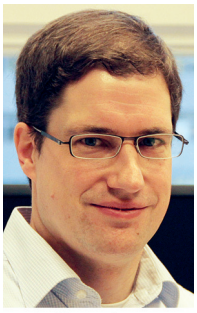
J. M. DeSimone


H. Nakatsuji


J. Neugebauer

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