

New Academicians of the Chinese Academy of Sciences

The Chinese Academy of Sciences (CAS) elected 53 Chinese citizens and 9 foreign scientists as academicians in December 2013. We feature some of those elected here.

Hongjie Zhang (Changchun Institute of Applied Chemistry, CAS) studied at Peking University and the Changchun Institute of Applied Chemistry, and carried out his PhD (awarded in 1993) at the Université Bordeaux I. He was made professor at the Changchun Institute of Applied Chemistry in 1994, and has also been Vice-President since 2000. He was made Director of the State Key Laboratory of Rare Earth Resource Utilization in 1996. Zhang's research interests are in luminescent materials containing rare-earth and transition-metal complexes. He has reported in *Angewandte Chemie* on polymer dots for cellular imaging.^[1]

Yi Xie (The University of Science and Technology of China) was featured here when she was announced as one of the 2013 IUPAC Distinguished Women in Chemistry or Chemical Engineering.^[2a] Her latest contribution to *Angewandte Chemie* is a report on the catalytic oxidation of carbon monoxide by atomically thin tin dioxide sheets.^[2b]

Kuiling Ding (Shanghai Institute of Organic Chemistry) was featured here when he joined the International Advisory Board of *Angewandte Chemie*.^[3a] His most recent contribution to *Angewandte Chemie* is a report on the use of rhodium(I) complexes for catalytic asymmetric hydrogenation.^[3b]

Xiaoming Feng (Sichuan University) studied at Lanzhou University and worked with Zhitang Huang and Yaozhong Jiang at the CAS, Beijing, for his PhD (awarded in 1996). He was subsequently professor at the Chengdu Institute of Organic Chemistry, CAS (1997–2000), a postdoctoral researcher with Yian Shi at Colorado State University (1998–1999), and was made professor at Sichuan University in 2000. Feng's research interests include the design of new chiral ligands and organocatalysts, metal-mediated catalysis, organocatalysis, and the total synthesis of pharmaceuticals. He has reported in *Angewandte Chemie* on catalytic asymmetric homologation reactions.^[4] Feng is on the advisory boards of *Advanced Synthesis & Catalysis* and the *Asian Journal of Organic Chemistry*.

Buxing Han (Institute of Chemistry, CAS) studied at Hebei University of Science and Technology, Shijiazhuang, and the Changchun Institute of Applied Chemistry, CAS, and carried out his PhD (awarded in 1988) with Riheng Hu and Haike Yan at the Institute of Chemistry, CAS. From 1989–

1991, he carried out postdoctoral research with Ding-Yu Peng at the University of Saskatchewan, in 1993, he joined the Institute of Chemistry, CAS, where he is currently professor. Han's research interests are focused on green solvents. His most recent contribution to *Angewandte Chemie* is an Essay on green carbon science.^[5] Han is on the International Advisory Board of *ChemSusChem*.

Wie-Hai Fang (Beijing Normal University) studied at Fuyang Teachers College, Anhui Province, and carried out his PhD (awarded in 1993) with R. Z. Liu at Beijing Normal University. He was an Alexander von Humboldt Fellow with Sigrid D. Peyerimhoff at the University of Bonn from 1996–1998, and he was made Professor of Chemistry at Beijing Normal University in 2000. Fang's research interests are in modeling non-adiabatic dynamics for exploring excited-state behavior and mechanistic photochemistry of complex molecular systems. He has reported in *Chemistry—A European Journal* on single-dopant white OLEDs.^[6]

Christian Amatore (École Normale Supérieure, Paris) was featured here when he was elected to the Academy of Europe.^[7a] Amatore is co-Chairman of the Editorial Advisory Board of *ChemPhysChem* and is a member of the Editorial Board of *ChemElectroChem*. He has recently reported in *ChemElectroChem* on the mechanism of the reduction of benzyl chloride at silver cathodes.^[7b]

Aaron Ciechanover (Technion–Israel Institute of Technology) studied at the Hassadah Medical Center and the Hebrew University School of Medicine, Jerusalem, and received his doctorate from the Technion–Israel Institute of Technology in 1981. From 1981–1984, he carried out postdoctoral research with Harvey F. Lodish at the Whitehead Institute for Biomedical Research at the Massachusetts Institute of Technology (MIT), and he subsequently returned to the Technion, where he is currently Distinguished Research Professor. Ciechanover shared the 2004 Nobel Prize in Chemistry^[8a] with Avram Herskko and Irwin Rose. His current research interests are focused on the involvement of the ubiquitin system in malignant transformation. His Minireview on ubiquitination was featured in the 125th Jubilee Issue of *Angewandte Chemie*.^[8b]

Swiss Chemical Society Awards 2014

The Paracelsus Prize is the highest honor of the SCS and is awarded biannually to an internationally recognized scientist for their lifetime achievements. The winner of the 2014 prize is **Richard R. Schrock** (MIT), who was recognized for his work on synthetic and mechanistic organo-transition metal chemistry. Schrock studied at the University of California, Riverside, and carried out his PhD

Featured ...



H. Zhang



Y. Xie



K. Ding



X. Feng



B. Han



W.-H. Fang



C. Amatore



A. Ciechanover



R. R. Schrock



C. Corminboeuf



J. Waser



E. Reisner

(completed in 1971) with John A. Osborn at Harvard University. After a year as a postdoctoral researcher with Jack Lewis at the University of Cambridge, he joined the group of George Parshall at the Central Research and Development Department of DuPont. In 1975, he joined the faculty at MIT, where he is currently Frederick G. Keyes Professor of Chemistry. Schrock shared the 2005 Nobel Prize in Chemistry^[9a] with Yves Chauvin and Robert Grubbs. His current research interests include the synthesis of molybdenum and tungsten alkylidene complexes and application of olefin metathesis reactions in organic and polymer chemistry. He is co-author of two recent reports in *Angewandte Chemie* on ring-closing,^[9b] and cross-metathesis reactions.^[9c] Schrock is on the International Advisory Board of *Chemistry—An Asian Journal*. He is also the 2014 International Solvay Chair in Chemistry.

The Werner Prize is awarded to promising scientists under the age of 40 who do not have a tenured position. The 2014 prize is shared between Clémence Corminboeuf and Jérôme Waser (École Polytechnique Fédérale de Lausanne; EPFL).

Clémence Corminboeuf is honored for “developing and applying state of the art computational and theoretical methods for interpreting and solving chemical problems in complex systems”. Corminboeuf studied at the Université de Genève, where she completed her PhD (supervised by Jacques Weber and Thomas Heine) in 2004. She carried out postdoctoral work with Yingkai Zhang and Mark E. Tuckerman at New York University (2005–2006) and with Paul von Ragué Schleyer at the University of Georgia (2006–2007). She joined the EPFL in 2007. She has reported in *Angewandte Chemie* on the use of NMR chemical shifts for the assessment of electron delocalization.^[10]

Jérôme Waser is recognized for the “development of novel synthetic methods and strategies to construct complex structures of potential biological interest”, such as alkynyl hypervalent iodine reagents, and the use of donor–acceptor activated cyclopropanes and cyclobutanes in the synthesis of nitrogen-substituted rings. Waser studied at the ETH Zurich, where he received his PhD in 2006 for work supervised by Erick M. Carreira. From 2006–2007, he was a postdoctoral researcher with Barry M. Trost at Stanford University, and in 2007, he started his independent career at the EPFL. Waser’s most recent contributions to *Angewandte Chemie* include a report on the total synthesis and properties of jerantinine E.^[11]

Erwin Reisner (University of Cambridge) has been awarded the Grammaticakis–Neumann Prize, which is presented to scientists under the age of 40 for research in photochemistry, photophysics, or

molecular photobiology. Reisner was recognized for his work on artificial photosynthetic systems to produce solar fuels. Reisner studied at the Universität Wien, where he worked with Bernhard K. Keppler for his PhD (awarded in 2005). He was a postdoctoral researcher with Stephen J. Lippard at MIT (2005–2007) and with Fraser A. Armstrong at the University of Oxford (2008–2009). In 2009, he started his independent career at the University of Manchester, and in 2010, he moved to the University of Cambridge, where he is currently lecturer, EPSRC Career Acceleration Fellow, and Head of the Christian Doppler Laboratory for Sustainable SynGas Chemistry. He has reported in *Angewandte Chemie* on photocatalytic hydrogen evolution.^[12]

- [1] a) W. Sun, J. Yu, R. Deng, Y. Rong, B. Fujimoto, C. Wu, H. Zhang, D. T. Chiu, *Angew. Chem.* **2013**, *125*, 11504; *Angew. Chem. Int. Ed.* **2013**, *52*, 11294.
- [2] a) *Angew. Chem.* **2013**, *125*, 10340; *Angew. Chem. Int. Ed.* **2013**, *52*, 10154; b) Y. Sun, F. Lei, S. Gao, B. Pan, J. Zhou, X. Xie, *Angew. Chem.* **2013**, *125*, 10763; *Angew. Chem. Int. Ed.* **2013**, *52*, 10569.
- [3] a) *Angew. Chem.* **2014**, *126*, 40; *Angew. Chem. Int. Ed.* **2014**, *53*, 38; b) K. Dong, Y. Li, Z. Wang, K. Ding, *Angew. Chem.* **2013**, *125*, 14441; *Angew. Chem. Int. Ed.* **2013**, 14191.
- [4] W. Li, X. Liu, F. Tan, X. Hao, J. Zheng, L. Lin, X. Feng, *Angew. Chem.* **2013**, *125*, 11083; *Angew. Chem. Int. Ed.* **2013**, *52*, 10883.
- [5] M. He, Y. Sun, B. Han, *Angew. Chem.* **2013**, *125*, 9798; *Angew. Chem. Int. Ed.* **2013**, *52*, 9620.
- [6] J. Han, X. Chen, L. Shen, Y. Chen, W. Fang, H. Wang, *Chem. Eur. J.* **2011**, *17*, 13971.
- [7] a) *Angew. Chem.* **2011**, *123*, 9405; *Angew. Chem. Int. Ed.* **2011**, *50*, 9238; b) O. V. Klymenko, O. Buriez, E. Labbé, D.-P. Zhan, S. Rondinini, Z.-Q. Tian, I. Svir, C. Amatore, *ChemElectroChem* **2014**, *1*, 227.
- [8] a) A. Ciechanover, *Angew. Chem.* **2005**, *117*, 6095; *Angew. Chem. Int. Ed.* **2005**, *44*, 5944; b) Y. Kravtsova-Ivantsiv, T. Sommer, A. Ciechanover, *Angew. Chem.* **2013**, *125*, 202; *Angew. Chem. Int. Ed.* **2013**, *52*, 192.
- [9] a) R. R. Schrock, *Angew. Chem.* **2006**, *118*, 3832; *Angew. Chem. Int. Ed.* **2006**, *45*, 3748; b) C. Wang, F. Haeffner, R. R. Schrock, A. H. Hoveyda, *Angew. Chem.* **2013**, *125*, 1993; *Angew. Chem. Int. Ed.* **2013**, *52*, 1939; c) T. J. Mann, A. W. H. Speed, R. R. Schrock, A. H. Hoveyda, *Angew. Chem.* **2013**, *125*, 8553; *Angew. Chem. Int. Ed.* **2013**, *52*, 8395.
- [10] S. N. Steinmann, D. F. Jana, J. I.-C. Wu, P. von R. Schleyer, Y. Mo, C. Corminboeuf, *Angew. Chem.* **2009**, *121*, 10012; *Angew. Chem. Int. Ed.* **2009**, *48*, 9828.
- [11] R. Frei, D. Staedler, A. Raja, R. Franke, F. Sasse, S. Gerber-Lemaire, J. Waser, *Angew. Chem.* **2013**, *125*, 13615; *Angew. Chem. Int. Ed.* **2013**, *52*, 13373.
- [12] T. Sakai, D. Mersch, E. Reisner, *Angew. Chem.* **2013**, *125*, 12539; *Angew. Chem. Int. Ed.* **2013**, *52*, 12313.

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