

# Editorial



E. Peter Kündig

In the *Community News* of the previous issue (4/2018) of CHIMIA the reader finds the announcement of the SCNAT Division of Chemistry for the *Young Faculty Meeting 2018*. This year's topic will be *Hiring and Getting Hired*. The step from academic dependence (Doctorate and Postdoctorate) to independence (Habilitation, Junior Faculty position, SNF-Ambizione Program, and Assistant Professorship) is a huge one. While carrying out a Habilitation involves the mentorship of a Full Professor, the alternative programs listed above are designed to give researchers complete scientific and financial independence at an earlier stage of their careers. These positions are highly competitive and the ideal profile, combined with being in the right place at the right time, are crucial elements.

This issue of CHIMIA presents the topics and achievements of ten colleagues who have made this step and are now ranked as Professor although they are at different levels of their careers. Profs. Arenz, University of Bern, and von Reuss, University of Neuchâtel, were appointed Full Professors in 2016, and Prof. von Ballmoos, University of Bern, was appointed Associate Professor in 2017 after three years as tenure track Assistant Professor. In addition, seven Assistant Professors who were hired in the years 2015–2017 present aspects of their research in this issue of CHIMIA. We welcome all cordially, wish them much success in their careers and excellent integration into the social and professional fabric of Switzerland.

From West to East:

**Kumar Agrawal** at the **Sion Campus of the EPFL** develops high-performance membranes with the target of energy efficiency of hydrogen purification, carbon capture, hydrocarbon and water purification.

**Stephan von Reuss** at the **University of Neuchâtel** reports on how highly sensitive mass spectrometric screens facilitate the comprehensive ascarioside profiling in crude nematode exometabolomes thereby enabling the researcher to eavesdrop on nematode chemical communication.

**Matthias Arenz** at the **University of Bern** reports on the field of nanoelectrocatalysis, in particular electrocatalytic energy conversion. Also at UniBE, **Ulrich Aschauer** discusses case studies of defect-induced functionality in the area of oxide electronics and photocatalysis; and **Christoph von Ballmoos** uses biochemical and biophysical techniques to unravel details of the molecular mechanism of membrane proteins.

**Paolo Arosio** at **ETH Zurich** combines principles of chemical engineering with microfluidic technology and biophysical methods to investigate problems of biomolecular self-assembly. Also at ETHZ **Jeremy Richardson** is developing a more general quantum version of transition-state theory for shedding light on how quantum tunnelling and nonadiabatic effects can strongly affect kinetics.

**Michal Juríček** at the **University of Zurich** is looking for promising  $\pi$ -conjugated hydrocarbon molecules as candidates for applications in spin electronics. Also at UZH **Sandra Luber** details her group's recent activities in the development of new computational approaches in the field of vibrational spectroscopy; and **David Tilley** reports on his group's recent work towards generating highly efficient and stable earth-abundant semiconducting materials for solar water splitting to generate renewable hydrogen fuel.

In keeping with the long tradition of Swiss academia, hiring is independent of nationality. It appears that many top Swiss scientists tend to favor industrial careers rather than the long and risky academic career path. Top female candidates are also rare in chemistry and we all hope that this will change in the near future.

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CHIMIA Editor-in-Chief