

Swiss Chemical Society – Syngenta Symposium: Frontiers in Fluorine Chemistry



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“Fluorine leaves nobody indifferent; it inflames emotions be that affections or aversions. As a substituent, it is rarely boring, always good for a surprise, but often completely unpredictable.”
In memoriam Manfred Schlosser (1934–2013)

The success of the recent Swiss Chemical Society – Syngenta Symposium: Frontiers in Fluorine Chemistry compelled the organisers to commission a special edition of CHIMIA to mark the occasion. The instructions for the guest editors were plain and simple: invite excellent articles and show the breadth and diversity of the field. We feel certain that the collection of reviews, perspectives and original research articles contained in this journal satisfy these conditions, and we offer our gratitude to the contributors who have made this special edition possible. Papers from leading fluorine groups in China, France, Italy, Germany, Spain, Switzerland, and the United Kingdom underscore the internationality and breadth of interest in this flourishing field of research. Moreover, the mix of industrial and academic contributions highlights the interdisciplinary and translational nature of this branch of chemistry. In this special edition, Kirsch and Bremer discuss the importance of fluorinated materials for industrial liquid crystal applications at Merck. The Syngenta research division describe an improved process for the preparation of an α,α -difluorosulfonylisoxazoline herbicide, and the results of a fruitful hydroformylation collaboration between Smejkal and Breit (Freiburg) are presented. The preparation of an array of fluorinated building blocks is addressed in a set of articles and reviews by Haufe, Hu, Nevado, Sandford, Vo-Thanh and Magnier. The role of fluorine in directing the outcomes of enantioselective transformations is surveyed by Bizet and Cahard, and the reactivity of fluorinated substrates with transition metals is the subject of a review by Fustero. No fluorine edition of a Swiss journal would be complete without a mention of the well known Togni reagents, or a contribution from Roche’s Klaus Müller. Fortunately, this special edition contains both!

The junior editor (R.G.) was also successful in convincing the senior editor (D.S.) to write a ‘fluorous autobiography’, chronicling several decades of fluorine chemistry in the Seebach lab. This first article illustrates the rich tradition of organo-fluorine chemistry in Europe and is an appropriate place to begin! In closing, we wish to express our deepest thanks to all of the authors who made this special edition possible, and to Syngenta AG (Drs Alain de Maesmaeker and Andrew Plant) for supporting the Swiss Chemical Society – Syngenta Symposium: Frontiers in Fluorine Chemistry.

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The Editorial Board of CHIMIA expresses its thanks to the coordinating guest editors Prof. Ryan Gilmour and Prof. Dieter Seebach for their efforts in realising this excellent issue on fluorine chemistry.