ES SYNTHESIS YEARS 1969-2014 SYNTHESIS

Editorial



Dieter Enders

Dear Readers,

In 1969, when I was a graduate student at the Justus Liebig University at Gießen, a new journal named "SYNTHESIS - International Journal of Methods in Synthetic Organic Chemistry" was launched by Thieme. The very first issue included a review on lithiated dithianes and trithianes as acyl anion equivalents, authored by Dieter Seebach, that was immediately heatedly discussed in our students' seminar. That concept subsequently became widely known as Umpolung. It happened that two years later Dieter Seebach accepted a call to come to Gießen as a full professor and I started my diploma and later doctoral studies in his research group. Of course, in those early days of my career as an organic chemist, I could not foresee that many years later, in 1984, I would become an editor of SYNTHESIS and, in 1998, the Editorin-Chief.

Now, after almost 30 years of service, and as **SYNTHESIS** starts its 45th year, it is appropriate to look back and review the journal's development.

In 1969, Thieme and the editors G. Schill, the late Manfred Schlosser, G. Sosnovski and H. J. Ziegler founded SYNTHESIS as a global forum for all organic chemists with a focus on synthetic methods. The publishers' many years of experience with Houben/Weyl undoubtedly gave the impulse for this enterprise. At first the journal published Reviews and Communications along with a section entitled "Reactiones Organicae", thus providing a selection of new synthetic methods abstracted from the literature. Just imagine – 45 years ago there were no personal computers, no worldwide web, no modern retrieval systems and the chemical formulas had to be drawn by hand using special pens on parchment paper, etc. By comparing an issue of today's **SYNFACTS**. our modern version of Reactiones Organicae, with an issue of those times, the big difference in quality and the way that chemical research is published nowadays becomes strikingly obvious. The appearance of SYNTHESIS in the 1970s was groundbreaking and a success from the start! Pioneered by Thieme, this journal was dedicated to the central role of the science of synthesis in chemistry and the molecular sciences, thus providing a unique platform for the needs of the organic synthesis community. Over the decades we witnessed an exponential growth of synthetic chemistry and the journal had to keep pace with the new developments in this field.

In 1985, under the editorship of the late H. J. Bestmann (with co-editors D. Enders, V. Jäger, K. C. Nicolaou, G. Schill and K. P. C. Vollhardt and the newly formed Editorial Advisory Board), **SYNTHESIS** broadened its scope and range covering not only synthetic methods but all aspects of modern synthetic organic chemistry as well. The title was changed accordingly to "**SYNTHESIS** – Journal of Synthetic Organic Chemistry". In 1986, Full Papers were included for the first time and the Abstract section discontinued. In 1989, Thieme launched a complementary sister journal **SYNLETT** under the editorship of K. P. C. Vollhardt for the publication of Rapid Communications and Accounts. As a result, **SYNTHESIS** gave up the designation "Communications" for its shorter articles.

In 1992, M. Regitz became the Editor-in-Chief and the newly constituted board with D. Enders, D. Hoppe, P. J. Kocienski, I. Kuwajima (followed by the late K. Koga) and P. A. Wender redefined the objectives of the journal in reaction to the increasing significance of organometallics in synthesis, of medicinal and biological chemistry, of supramolecular structures and of materials science. At this point Feature Articles were included, these being invited and highlighted full papers, and some years later Synthesis Alerts, organized by P. J. Kocienski, were introduced as a new monthly feature to assist the readers in keeping abreast of new developments.

In 1998, I had the honor to be elected as the new Editorin-Chief cooperating with E. M. Carreira, T. Fukuyama, D. Hoppe (followed by T. Bach), P. Knochel, P. J. Kocienski (followed by P. A. Evans) and M. Lautens. Several new activities were started then, including thematic and dedicated Special Issues and Special Topics (E. M. Carreira), Practical Synthetic Procedures (PSPs, more than 260 so far) and in 2011 Short Reviews (M. Lautens). In view of the widespread development of top research in China and the corresponding rapid increase in the number of publications and submissions from that region, in 2012 we were joined by X.-L. Hou as our Regional Editor from and for China. It should also be mentioned that Thieme was the first publisher worldwide to make primary experimental chemistry data (raw unprocessed data files such as FIDs) available on the reader's desktop. For details see our website http://www.thieme-chemistry.com/primary data.

Finally, a retrospective on the past 45 years of **SYNTHESIS** would not be complete without giving credit to the members of the editorial office (represented in chronological order by H. G. Padeken, W. Lürken, R. E. Dunmur, J. P. Richmond, R. J. Boucher, K. Kurz, and S. Haak). Special thanks are due to A. Hauff and G. F. Herrmann for their encouragement and support.

As I will officially retire from my chair at the RWTH Aachen University in April to continue research as a Senior Professor and being supported by an ERC Advanced Grant in the field of organocatalytic domino reactions, the time is ripe to pass the responsibility of the Editor-in-Chief to younger hands. I am very happy about the decision at Thieme to elect my good friend and fellow Editor Paul Knochel from the Ludwig Maximilians University in Munich as my successor. I will continue as Editor for the Review section and I look forward to a fruitful co-operation with Paul and our other fellow Editors. But now, Paul will also share some thoughts with you.



Paul Knochel

Organic synthesis has been the driving force of organic chemistry for the past hundred years, and this will certainly be true in the future. The design of new pharmaceuticals, new materials, new food additives and new agrochemicals has changed our world and way of life more than anything else. The availability of powerful pharmaceuticals has saved millions of lives, and the use of ecological agrochemicals has secured food for all humanity. All of this progress has been made possible by the creative development of new synthetic methods, allowing chemists to form new carbon-carbon bonds in a more rational, efficient and economical way. Synthetic chemists are the explorers of a new world, and whereas many chemists can dream of exotic and appealing novel structures, it is the synthetic chemists, with their knowledge of chemical reactivity, who transform dreams into reality.

Since 1969, **SYNTHESIS** has published new synthetic organic methodology in the form of short articles and timely reviews that are at the front of the progress of synthetic methodology. We believe that this field will expand further in the future and that milder reaction conditions and cheaper and safer reagents and catalysts will be required for achieving the ecological construction of complex organic molecules with novel useful properties. The use of additional tools, such as photochemical activation, microwave irradiation or ultrasound activation, have allowed impressive progress in synthetic methodology. Recently, micro reactors and the use of solid-supported reagents and catalysts have brought considerable flexibility and potential for synthetic organic chemists. These new directions will be present in the future editions of **SYNTHESIS**. By publishing timely Short Reviews (in addition to the more comprehensive Reviews), the readers will be provided with an insight of new emerging research fields, experimental techniques and modern concepts in synthetic chemistry. Although organic chemists

can prepare many organic target molecules with success, the predictability and efficiency of many reported syntheses still need improvement. It is the goal of **SYNTHESIS** to publish important advances of this dynamic and central field of organic chemistry. It will still require much effort in synthetic methodology before any organic molecule can be prepared using computer-driven retrosynthetic analysis and robotic techniques. **SYNTHESIS** is keen to publish chemical advances toward this goal. The journal will account for all major advances in the field of organic chemistry in a broad sense in order to assist the **SYNTHESIS** readers in their creative research work.

I am pleased to take on the role of Editor-in-Chief and, in doing so, will ensure that all the major fields in modern synthetic chemistry will still be covered in **SYNTHESIS**. Emphasis will be placed on the quality of published papers, and we will increase our efforts to attract the best authors worldwide to contribute to **SYNTHESIS**. We will continue to publish timely Reviews and Feature Articles from leading scientists in synthetic chemistry, as well as Practical Synthetic Procedures to highlight important synthetic procedures of interest to the synthetic community in both industry and academia.

In addition to the change in the Editor-in-Chief position, we will also reconstitute our Editorial Advisory Board for **SYNTHESIS** and **SYNLETT** starting its work in January 2014, consisting of the following well-respected chemists:

Lutz Ackermann (Göttingen, Germany) Matthias Beller (Rostock, Germany) Carsten Bolm (Aachen, Germany) Margaret A. Brimble (Auckland, New Zealand) Pauline Chiu (Hong Kong, P. R. of China) Iain Coldham (Sheffield, UK) Janine Cossy (Paris, France) Cathleen M. Crudden (Kingston, Canada) Klaus Ditrich (Ludwigshafen, Germany) Margaret M. Faul (Los Angeles, USA) Xiaoming Feng (Chengdu, P. R. of China) Michael M. Haley (Eugene, USA) Teck-Peng Loh (Singapore) Dawei Ma (Shanghai, P. R. of China) Shengming Ma (Shanghai, P. R. of China) Ilan Marek (Haifa, Israel) Mo Movassaghi (Cambridge, MA, USA) Mariappan Periasamy (Hyderabad, India) Melanie S. Sanford (Ann Arbor, USA) Richmond Sarpong (Berkeley, CA, USA) Peter H. Seeberger (Potsdam-Golm, Germany) Michael S. Sherburn (Canberra, Australia) Mikiko Sodeoka (Wako, Japan) Keisuke Suzuki (Tokyo, Japan) Debra J. Wallace (Hoddesdon, UK) HelmaWennemers (Zürich, Switzerland) Thomas Wirth (Cardiff, UK)

Jin-Quan Yu (La Jolla, USA)

At the same time we gratefully acknowledge the support of our "retiring" Editorial Advisory Board members and thank them very much for all their help and advice over the past five years.

On behalf of all Editors and the staff of the Editorial Office at Stuttgart we would like to thank our authors for their excellent contributions and our referees for their efforts and valuable comments during the past year. Let us continue in our pursuit of maintaining the high standards of **SYNTHESIS** as a leading journal and providing our worldwide readership with exciting novel results in the ever-expanding field of synthetic organic chemistry.

With best wishes for a successful and peaceful New Year

Dieter Enders, Editor for Reviews Paul Knochel, Editor-in-Chief

Aachen, Munich, December 2013