

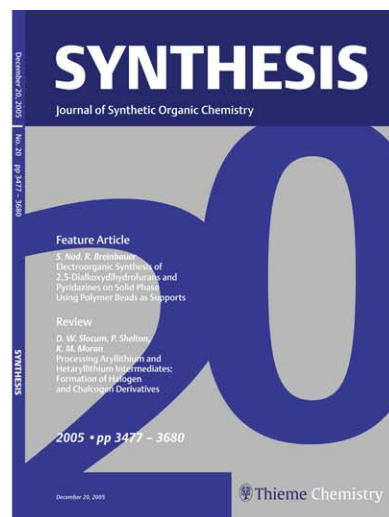
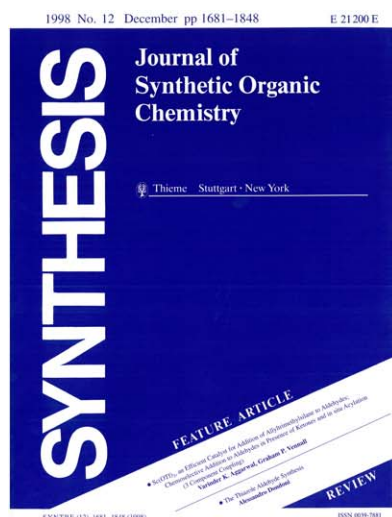
## Editorial

Dear Readers,

1969 is a year to remember for the many notable firsts and the culmination of a decade of scientific marvels, culminating with the much-celebrated moon landing. An appreciation of the scientific significance of the final year of the 1960s, however, need not be limited to events of such proportions. For the molecular sciences, it was the year in which Barton and Hassel were awarded with the Nobel Prize in chemistry for their work on the conformational analysis. The award recognized this fundamental structural property of carbon compounds and its inevitable consequences for the understanding of molecular phenomena. In this year, Corey reported the landmark syntheses of prostaglandins F<sub>2α</sub> and E<sub>2</sub>, which remain as relevant and monumental today as ever. 1969 also marked the introduction of the first issue of *Synthesis* by Thieme. Today it seems commonplace to witness the launching of new journals in the chemical sciences, yet it is important to note that at that

time, the appearance of *Synthesis* was ground-breaking. Indeed, it was an acknowledgement and validation of the central role of the science of synthesis in chemistry and in the molecular sciences. In order to mark the journal's 40<sup>th</sup> birthday, the Editorial Board of *Synthesis* has undertaken the publication of a commemorative issue, which features articles penned by authors who also turn 40 in 2009, as well as reviews by Dieter Seebach, Dieter Hoppe, and K. C. Nicolaou.

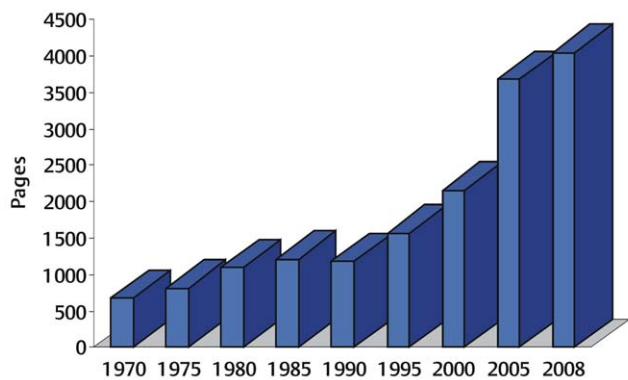
The first issue of *Synthesis* consisted of 40 pages and included three reviews along with five research papers. Interestingly, roughly one third of these appeared in print in German. One was a timely review authored by Dieter Seebach and detailed the chemistry of 2-lithium-1,3-dithianes and 2-lithium-1,3,5-trithianes as acyl anion equivalents, in what would subsequently come to be widely known as Umpolung. We are especially thankful to Dieter Seebach, who has written another review,



From then to now

40 years later, to help us mark this birthday. Starting even within its first decade, the journal grew quickly, and it can be proud of having maintained its tradition of excellence. In this respect, it is interesting to note that today the issue boasts four times the number of pages and offers its readers timely reviews, a collection of short papers, 15–20 full-length papers, feature articles, and a section on practical synthetic procedures. Additionally, in keeping up with the pace of the science of synthesis, *Synthesis* has introduced a periodic series of sections within the issues that include collections of papers on important current topics in synthesis. These Special Topics sections bring to the attention of the community publications that underscore the timeliness and rapid development of a method, in both its fundamentals and its applications. Moreover, a full issue is dedicated each year to provide broader coverage of a topic or honoring a scientist. Thus, one can see the evolution of *Synthesis* from its inception to the present, throughout which time it has held a notable position in the discipline.

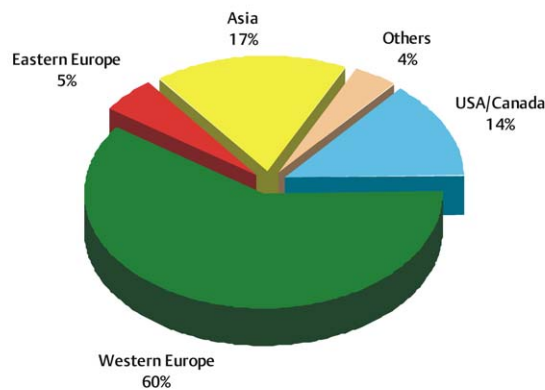
Initially *Synthesis* was published monthly, but since the beginning of the new century the frequency increased rapidly to 24 issues per year. As seen in the graphic below, this development is reflected well by the number of pages published, in particular looking at the trend over the last 10 years.



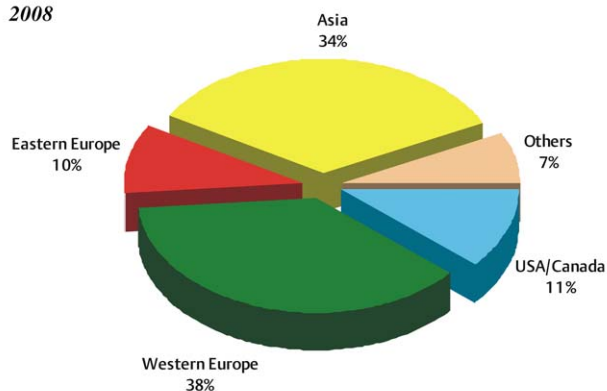
Increase in the number of published pages over the last 40 years

Not only has the quantity of research results submitted for publication in *Synthesis* increased exponentially, the geographical origin of published papers has also changed significantly. In 1998 only 17% of all published papers came from Asian countries; a mere ten years later this number has already doubled, owing mainly to the dramatic economic and scientific developments in China.

1998



2008



Regional partition of published papers in 1998 compared with 2008

Celebrating 40 years of *Synthesis* also means celebrating 40 years of innovation and highlights in synthetic organic chemistry and closely related disciplines. Those papers that have attracted the highest interest among the readers of *Synthesis* are highlighted in the following tables, which also provide a nice overview of the most exciting topics of that era.

*Most Cited Papers in Synthesis 1969–2007*

Citations	Title	Corresponding author(s)	Citation, article type
4243	The Use of Diethyl Azodicarboxylate and Triphenylphosphine in Synthesis and Transformation of Natural Products	O. Mitsunobu	1981, 1 (Review)
1228	The Design and Application of Free Radical Chain Reactions in Organic Synthesis. Part 1	D. P. Curran	1988, 417 (Review)
1191	Activated Dimethyl Sulfoxide: Useful Reagents for Synthesis	D. Swern	1981, 165 (Review)
1126	A Convenient Synthesis of Ethynylarenes and Diethynylarenes	N. Hagihara	1980, 627 (Communication)
1086	The Design and Application of Free Radical Chain Reactions in Organic Synthesis. Part 2	D. P. Curran	1988, 489 (Review)
916	New Solvent-Free Organic Synthesis Using Focused Microwaves	A. Loupy	1998, 1213 (Review)
875	Tetrapropylammonium Perruthenate, Pr <sub>4</sub> N <sup>+</sup> RuO <sub>4</sub> <sup>-</sup> , TPAP: A Catalytic Oxidant for Organic Synthesis	S. V. Ley	1994, 639 (Review)
741	Umpolung of the Reactivity of Carbonyl Compounds Through Sulfur-Containing Reagents	D. Seebach	1977, 357 (Review)
643	Electrophilic Substitution of Organosilicon Compounds – Applications to Organic Synthesis	T. H. Chan	1979, 761 (Review)
609	Perfluoroalkanesulfonic Esters: Methods of Preparation and Applications in Organic Chemistry	M. Hanack	1982, 85 (Review)
604	Nucleophile Acylierung mit 2-Lithium-1,3-dithianen bzw. -1,3,5-trithianen	D. Seebach	1969, 1 (Review)
588	Palladium-Catalysed Reactions of Organotin Compounds	T. N. Mitchell	1992, 803 (Review)
566	Tri- <i>n</i> -butyltin Hydride as Reagent in Organic Synthesis	W. P. Neumann	1987, 665 (Review)
563	Synthetically Useful Reactions of Epoxides	J. Gorzynski Smith	1984, 629 (Review)
526	Recent Advances in Catalytic Enantioselective Michael Additions	N. Krause	2001, 171 (Review)
505	Baker's Yeast as a Reagent in Organic Synthesis	S. Servi	1990, 1 (Review)
490	“Cascade”- and “Nonskid-Chain-like” Syntheses of Molecular Cavity Topologies	F. Vögtle	1978, 155 (Communication)
480	The Specific Synthesis of Pyridines and Oligopyridines	F. Kröhnke	1976, 1 (Review)
469	Advances in the Chemistry of Mannich Bases	M. Tramontini	1973, 703 (Review)

*Most Cited Papers in Synthesis 2003–2007*

Citations	Title	Corresponding author(s)	Citation, article type
257	Palladium Catalysts for the Suzuki Cross-Coupling Reaction: An Overview of Recent Advances	R. Rossi	2004, 2419 (Review)
246	Recent Advances in Solution-Phase Multicomponent Methodology for the Synthesis of Heterocyclic Compounds	R. V. A. Orru	2003, 1471 (Review)
231	Enyne Metathesis Catalyzed by Ruthenium Carbene Complexes	R. Madsen	2003, 1 (Review)
143	Indium in Organic Synthesis	J. Podlech	2003, 633 (Review)
110	Synthesis of the Pyrrole-Imidazole Alkaloids	T. Lindel	2003, 1753 (Review)
94	Catalytic Direct Asymmetric Michael Reactions: Addition of Unmodified Ketone and Aldehyde Donors to Alkylidene Malonates and Nitro Olefins	C. F. Barbas III	2004, 1509 (Paper)
78	Asymmetric Friedel–Crafts Reactions: Catalytic Enantioselective Addition of Aromatic and Heteroaromatic C–H Bonds to Activated Alkenes, Carbonyl Compounds, and Imines	K. A. Jørgensen	2003, 1117 (Feature)
76	Recent Advances in Asymmetric [3,3]-Sigmatropic Rearrangements	U. Nubbemeyer	2003, 961 (Review)
73	Catalytic Enantioselective Construction of All-Carbon Quaternary Stereocenters	B. M. Trost	2006, 369 (Review)
66	Applications of Lawesson’s Reagent in Organic and Organometallic Syntheses	M. Jesberger	2003, 1929 (Review)

*Most Downloaded Papers in Synthesis until November 2008*

Downloads	Title	Corresponding author(s)	Citation, article type
23335	Palladium Catalysts for the Suzuki Cross-Coupling Reaction: An Overview of Recent Advances	R. Rossi	2004, 2419 (Review)
6614	The Use of Diethyl Azodicarboxylate and Triphenylphosphine in Synthesis and Transformation of Natural Products	O. Mitsunobu	1981, 1 (Review)
4133	Tetrapropylammonium Perruthenate, Pr <sub>4</sub> N <sup>+</sup> RuO <sub>4</sub> <sup>-</sup> , TPAP: A Catalytic Oxidant for Organic Synthesis	S. V. Ley	1994, 639 (Review)
3557	The Conversion of Phenols to the Corresponding Aryl Halides Under Mild Conditions	W. Huffman	2005, 547 (Paper)
3345	Memory of Chirality: An Emerging Strategy for Asymmetric Synthesis	P. R. Carlier	2005, 1 (Review)
3223	Further Improvements of the Synthesis of Alkynes from Aldehydes	G. J. Roth	2004, 59 (Paper)
3221	Click Chemistry - What’s in a Name? Triazole Synthesis and Beyond	M. V. Gil	2007, 1589 (Review)
2934	α,β-Dehydroamino Acids	B. König	2006, 1 (Review)
2739	Selective Deprotection of Silyl Ethers	T. D. Nelson R. D. Crouch	1996, 1031 (Review)
2697	Tandem and Domino Catalytic Strategies for Enantioselective Synthesis	C. G. Frost	2007, 1 (Review)

2009 marks a key year for *Synthesis*, and this event offers the opportunity to look back and take stock of the progress and advances that both the field and the journal have made. At this point we would like to express our thanks to the former editors of *Synthesis* – G. Schill, M. Schlosser, G. Sosnovsky, H. J. Ziegler, the late H.-J. Bestmann, M. Regitz, K. P. C. Vollhardt, I. Kuwajima, the late K. Koga, V. Jäger, D. Hoppe, P. Wender and K. C. Nicolaou.

The 40<sup>th</sup> birthday of *Synthesis* is also an opportunity to look towards the future. The number of exciting discoveries in synthetic methods that are of mechanistic and practical importance remains unabated. This is manifest in the innovative new methods and approaches to access structures that constitute the vastness of chemical space. It is also evident in the advances in synthetic strategies for preparing complex natural and anthropogenic molecules.

Along with *Synthesis* and its sibling journal *Synlett*, Thieme provides wide support to the community through various other modalities, such as *Synfacts*, *Synform* and the Thieme Chemistry Journal Awardees to young academics. The successes that led to the launching of *Synthesis* can be seen in the evolution of other highly acclaimed Thieme products, most notably the reference work *Science of Synthesis*.

As usual, Thieme Chemistry will also be present at various conferences in 2009, for example, the two ACS National Meetings, as well as OMCOS 15, the 22<sup>nd</sup> ICHC, the 16<sup>th</sup> ESOC, and many more. At these meetings, we are happy to invite you to join our staff at the Thieme Chemistry booth for little get-togethers to celebrate the 40<sup>th</sup> birthday of *Synthesis*.

Finally, we have taken the opportunity to reconstitute our Editorial Advisory Boards. Thus, with our colleagues from *Synlett*, we decided to merge all into one common board, with a much smaller and more intensely active composition. We are greatly indebted to the members of our past boards for their help, support, and valuable advice, without which we would not be where we are now. We would also like to welcome the members of our new board, the composition of which is shown in the imprint and look forward to a productive association in the future.

Happy Birthday *Synthesis* ...and many more!

Erick M. Carreira, Special Issue Editor

Dieter Enders, Editor in Chief

January, 2009



The Stuttgart Editorial Office Team (from left to right: Sabine Heller, Susanne Haak, Helene Deufel, Selena Boothroyd, Thomas Loop, Stefanie Baumann, Thorsten Schön, Christiane Kemper with the newest "team member")

On behalf of all members of the *Synthesis* Editorial Office in Stuttgart I would like to join Dieter Enders and Erick Carreira in thanking you, our readers, authors, referees and former Advisory Board members for your continued support over the past four decades, and in welcoming the new Advisory Board members. We look forward to a fruitful and intense collaboration with you all to build together on a long and bright future of *Synthesis*! With my best wishes for a successful, peaceful and happy New Year!

Susanne Haak, Managing Editor

January 2009