

SYNTHESIS

Editorial

Dear Readers,

The word that all of us have probably heard or read the most in the past year is “crisis”. Fortunately, here at SYNTHESIS, we had the pleasure of celebrating the journal’s 40th birthday and still had plenty of work thanks to our productive authors. Therefore, words such as “manuscripts”, “publication times”, “eFirst publication”, or “editing” found much greater use in the daily conversations of our editors, authors and the Stuttgart editorial office. Often, critical times bring out the best in people – innovative ideas and additional creativity – probably a very human reaction in order to fight the problems on at least a personal level, even if an obvious global impact cannot be achieved.

Organic chemists have yet again synthesized new molecules, discovered new synthetic methodologies and mechanisms, optimized catalytic and stereoselective reactions and invested a lot of time and energy in practical applications of various processes. A substantial amount of synthetic research was published in SYNTHESIS last year, leading to a new record of 4281 published pages, an increase of almost 10% compared to 2008, while not lowering the former rejection rate of above 50%.

A very popular issue in 2009 was the 40th birthday issue in January. Many of the most popular papers up to November were published in that issue, even when the effects of later publication and therefore lower absolute download numbers during the year are taken into account. As all of the contributing authors to that issue are as old (or as young) as SYNTHESIS, it indicates that their work already has a significant influence that will certainly rise further in the future. A list showing the top 5 papers, reviews and PSP articles by November 2009 is summarized in Table 1.

Table 1 Top 5 Most-Downloaded Articles from 2009 (January to November), DL = Downloads

DL	Article
FULL PAPERS	
683	The Thermal Amidation of Carboxylic Acids Revisited L. J. Gooßen et al. 2009 , 160
634	Synthesis of Novel Halogenated 4(<i>1H</i>)-Quinolones by Thermolysis of Arylaminomethylene-1,3-dioxane-4,6-diones P. Langer et al. 2009 , 69
581	A Method for the Selective Protection of Aromatic Amines in the Presence of Aliphatic Amines B. Zacharie et al. 2009 , 283
475	Synthesis of Benzo[<i>b</i>]furans by Palladium-NHC Catalyzed Ring Closure of <i>o</i> -Bromobenzyl Ketones A. Kotschy et al. 2009 , 85
402	Inverse-Electron-Demand Diels–Alder Reactions of <i>N</i> -(Heteroarylsulfonyl)-1-aza-1,3-dienes Catalyzed by Chiral Lewis Acids R. Gómez Arrayás, J. C. Carretero et al. 2009 , 113
REVIEWS	
1264	Selected Synthetic Strategies to Spirocyclics S. Kotha et al. 2009 , 165
1080	Organocatalytic Formation of Quaternary Stereocenters M. Bella, T. Gasperi 2009 , 1583
1066	Enantioselective Preparation of β^2 -Amino Acid Derivatives for β -Peptide Synthesis D. Seebach et al. 2009 , 1
799	Asymmetric Syntheses of Oxindole and Indole Spirocyclic Alkaloid Natural Products B. M. Trost, M. K. Brennan 2009 , 3003
768	Discoveries from the Abyss: The Abyssomicins and Their Total Synthesis K. C. Nicolaou et al. 2009 , 33
PSP ARTICLES	
643	A Convenient Preparation of Di- <i>p</i> -chlorobenzyl Azodicarboxylate (DCAD) for Mitsunobu Couplings B. H. Lipshutz et al. 2009 , 332
444	One-Pot Curtius Rearrangement Processes from Carboxylic Acids O. Leogane, H. Lebel 2009 , 1935
410	Palladium-Catalyzed Cross-Couplings of Unsaturated Halides Bearing Relatively Acidic Hydrogen Atoms with Organozinc Reagents P. Knochel et al. 2009 , 681
400	Suzuki–Miyaura Cross-Couplings Mediated by <i>trans</i> -PdBr(<i>N</i> -Succ)(PPh ₃) ₂ : A Convenient Synthetic Method for Diarylmethanes and Aryl(heteroaryl)methanes I. J. S. Fairlamb, R. J. K. Taylor et al. 2009 , 508
348	A Simplified Synthesis of Takemoto’s Catalyst A. Berkessel, B. Seelig 2009 , 2113

Not surprisingly, above-average download figures were also observed for articles from the Special Issue on "Natural Product Synthesis". As download figures and the numbers of citations generally correlate, this issue is predicted to be one of the highlights of 2009. Most of the articles collected in Table 2, particularly in the Review section, support this assumption. They have been within the top 20 of articles in terms of popularity in their respective years of publication and account for the most-cited SYNTHESIS papers in 2009.

Table 2 Most-Cited Articles from 2007 and 2008 in 2009 (January to November), CT = Citations

CT	Article
FULL PAPERS	
24	A Rapid and Efficient Synthesis of Benzimidazoles Using Hypervalent Iodine as Oxidant L.-H. Du, Y.-G. Wang 2007 , 675
24	A Simple and Efficient One-Pot Synthesis of 2-Substituted Benzimidazoles K. Bahrami, M. M. Khodaei et al. 2007 , 547
21	Generally Applicable Organocatalytic Tetrahydropyranulation of Hydroxy Functionalities with Very Low Catalyst Loading M. Kotke, P. R. Schreiner 2007 , 779
21	N-Substituted Ureas and Thioureas in Biginelli Reaction Promoted by Chlorotrimethylsilane: Convenient Synthesis of <i>N1</i> -Alkyl-, <i>N1</i> -Aryl-, and <i>N1,N3</i> -Dialkyl-3,4-Dihydropyrimidin-2(1 <i>H</i>)-(thi)ones D. M. Volochnyuk et al. 2007 , 417
20	Chlorotrimethylsilane-Mediated Friedländer Synthesis of Polysubstituted Quinolines D. M. Volochnyuk et al. 2007 , 1214
REVIEWS	
114	Organocatalytic Enantioselective Michael and Hetero-Michael Reactions J. L. Vicario et al. 2007 , 2065
84	Recent Advances in Metal-Catalyzed Asymmetric Conjugate Additions J. Christoffers et al. 2007 , 1279
80	Click Chemistry – What's in a Name? Triazole Synthesis and Beyond M. V. Gil et al. 2007 , 1589
80	Tandem and Domino Catalytic Strategies for Enantioselective Synthesis C. J. Chapman, C. G. Frost 2007 , 1
64	Transition-Metal-Catalyzed Carbon–Carbon Bond Formation via Carbon–Hydrogen Bond Cleavage F. Kakiuchi, T. Kochi 2008 , 3013

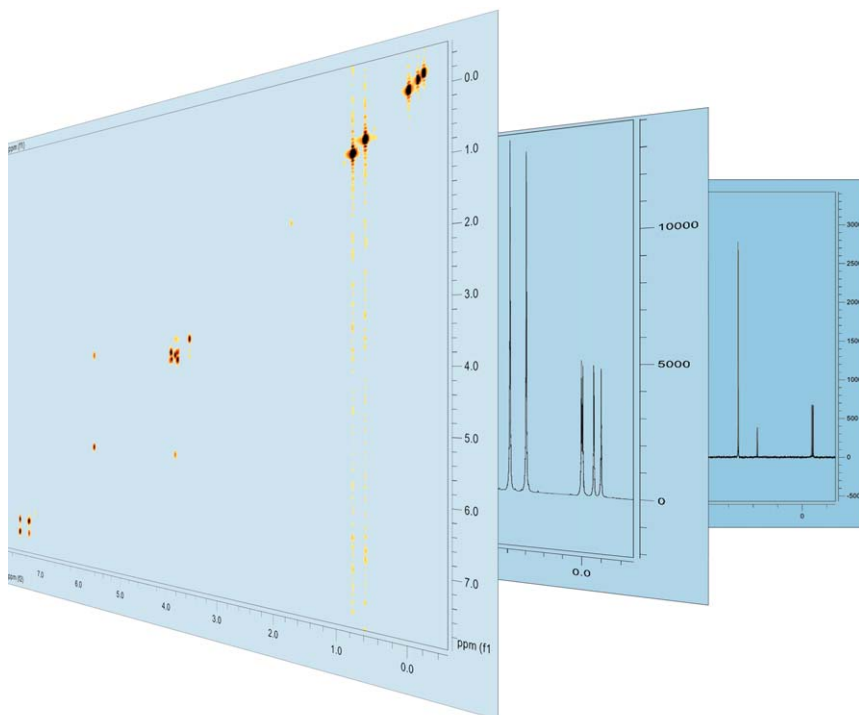
One highlight in the upcoming year will be a Special Issue dedicated to Rolf Huisgen on the occasion of his 90th birthday in June. Although the planning is already in an advanced stage, if you still wish to contribute with an article to celebrate the life and career of one of the most outstanding German chemists, please submit your manuscripts directly to our Special Issue editor Erick M. Carreira by the middle of March.

In addition to all the services you are used to receiving from SYNTHESIS, we are delighted to announce that Thieme is the first publisher worldwide to make primary experimental chemistry data available at your desktop. As already communicated through a press release in early October 2009, Thieme and the German National Library of Science and Technology (TIB) in Hanover have started a collaboration regarding the publication and durable storage of such data.

You know it from your daily experience – millions of experimental data sets are collected when chemists characterize compounds, intermediates and new products, or test their properties for further applications. Analytical data, spectra of all kinds (NMR, IR, MS, GC, UV-Vis, etc.) and structure information from X-ray analyses are produced and usually stored locally at the institution's or company's servers. But what happens to those data in the long run? Since the workup of such data currently receives no credit, primary data are often poorly documented, insufficiently maintained, and difficult to access. They are thus unused beyond their initial acquisition purpose – and cursory representation in research articles or supporting information files – and their existence is known only to a small group of scientists.

Together with the TIB, Thieme has developed a uniform structure for publishing such primary experimental data. Through clear structuring and central data registration – a unique, Germany-wide service provided by the TIB – valuable knowledge will be harnessed. With immediate effect, primary data submitted by authors will be registered and made available online through Thieme's e-journals web site www.thieme-connect.com/ejournals using digital object recognition. Currently, the TIB is the only official registration agency for primary research data worldwide and therefore entitled to assign digital object identifiers (DOI) to such data. Thus, primary data sets are, in the same way as published research papers, not only easily accessible and searchable but also permanently saved and citable, even independently of the original article to which they belong.

Who will benefit from this new service? Everyone involved, from author to reader. Authors can give clear proof for the accuracy of their research results, referees can bet-



Primary experimental data now available online

ter evaluate the presented research during the peer-review process, and the scientific community as a whole will profit from the easy traceability of articles that include accompanying experimental data and a more productive use of scientific content by comparing their own results with the accessible original data directly on their computers.

Hence, we encourage our authors to supply, in addition to the regular manuscript, primary experimental data in a logically structured form that allows users to correctly assign data sets to specific compounds. Enriched with additional information describing the software that allows the data to be processed, as well as giving the structures and corresponding compound numbers for all provided data sets, the data will be published online in zip format, linked to the corresponding article but with its own DOI.

More details on the preparation and submission of primary data can be found in the Instructions for Authors at the end of this first 2010 issue of SYNTHESES as well as on our web site http://www.thieme-chemistry.com/primary_data. You are also invited to check out the first such article by Philip Kocienski and co-workers

on www.thieme-connect.com/ejournals/toc/synthesis: Jarowicki, K.; Kilner, C.; Kocienski, P. J.; Komsta, Z.; Milne, J. E.; Wojtasiewicz, A.; Coombs, V. *Synthesis* **2008**, 2747.

Dear readers, authors, and referees – on behalf of the Editorial Board members and the Stuttgart Editorial Office staff, I thank you for your ongoing support and excellent contributions to SYNTHESES over the past year. We look forward to continued fruitful collaborations and wish you all the best for a successful, peaceful and happy New Year!

Susanne Haak
Managing Editor
January 2010