Synlett

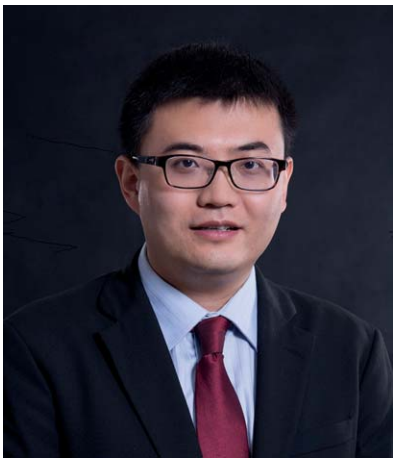
Editorial

Thirty Papers Celebrating Thirty Years of SYNLETT

Dear Readers,

Thirty years ago, a group of talented researchers led by our inaugural and long-standing Editor-in-Chief Peter Vollhardt set out to establish a journal with a steadfast commitment to young scientists. Peter and his crew of co-editors, Bernd Giese, Steve Ley, and Hisashi Yamamoto, envisioned a journal 'for the students', and as such stipulated that students would be given easy (and cheap!) access to papers published in SYNLETT. Through the years, with an ever-growing (including initial additions of Vic Snieckus, Hak-Fun Chow, and Henry Wong) and ever-evolving Editorial Board (with Laurence Harwood and Yas Uozumi succeeding Steve Ley and Hisashi Yamamoto, respectively), this core commitment has indeed remained. In fact, the value placed in young scientists since the journal's inception has created a youthful *flavor* to SYNLETT, a journal with a now long-standing reputation for high-quality reports that range a myriad of chemical synthesis disciplines. To celebrate these achievements, we have invited some of the top research teams from all over the world to join us in honoring three decades of commitment to scientific excellence and publish herein 30 papers describing exciting, practical, and innovative chemistry.

It was in 2011 that I was honored to succeed Bernd Giese as an Associate Editor, following his more than two-decade commitment to the journal. A year later, the Editorial Board was again expanded with the addition of Tomislav Rovis, now at Columbia University in New York. Since that time, we have continued to evolve our Editorial Board with the recent additions of Rubén Martín (ICIQ, Tarragona) and David Nicewicz (University of North Carolina, Chapel Hill) in 2018. Today, I am happy to announce the latest addition to our Associate Editor team, Ang Li from the Shanghai Institute of Organic Chemistry.



Prof. Ang Li

In 2015, I was approached with the exciting opportunity to succeed Peter Vollhardt as Editor-in-Chief. Peter and I not only share common ancestors (probably), and the family saying 'better lose a good friend than leave out a good joke' (maybe), but also a passion to continuously advance SYNLETT into the leading journal publishing Communications and Accounts in chemical synthesis (definitely!). So, it was with very little hesitation that I agreed in serving in this role. Fortunately, Peter continues to be an influential protagonist on our Editorial Board, staying on to manage all Accounts and Synpacts, which as you can see below, are real success stories, providing some of the journal's most highly cited articles.

Table 1: Most Cited SYNLETT Articles in the Last Five Years (2013–2017)

Citations	Title	Corresponding Author(s)	Source Article Type
117	Experimental and Calculated Electrochemical Potentials of Common Organic Molecules for Applications to Single-Electron Redox Chemistry	David A. Nicewicz	**2016**, 714 New Tools
116	Manganese-Mediated C–C Bond Formation via C–H Activation: From Stoichiometry to Catalysis	Congyang Wang	**2013**, 1606 Synpacts
108	Cross-Coupling of Amides by N–C Bond Activation	Michal Szostak	**2016**, 2530 Account
100	Mono- and Oligocyclic Aromatic Ynes and Diynes as Building Blocks to Approach Larger Acenes, Heteroacenes, and Twistacenes	Qichun Zhang	**2013**, 686 Account
95	Expanding Structural Diversity; Removable and Manipulable Directing Groups for C–H Activation	Yong Huang	**2013**, 145 Synpacts
94	Hypervalent Iodine Reagents as Powerful Electrophiles	Thomas Wirth	**2013**, 424 Account

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88	Diaryliodonium Salts in Organic Syntheses: A Useful Compound Class for Novel Arylation Strategies	Zoltán Novák	**2016**, 1456 Account
84	Visible-Light-Induced Photoredox Catalysis: An Easy Access to Green Radical Chemistry	Takashi Koike and Munetaka Akita	**2013**, 2492 Account
74	Formic Acid Derivatives as Practical Carbon Monoxide Surrogates for Metal-Catalyzed Carbonylation Reactions	Kei Manabe	**2014**, 1971 Account
72	Hypervalent Iodine(III) in Direct Carbon–Hydrogen Bond Functionalization	Andrey P. Antonchick	**2015**, 1785 Account

Table 2: Most Cited SYNLETT Articles Since the Journal's Inception in 1989:

Citations	Title	Corresponding Author(s)	Source Article Type
707	Renaissance of Ullmann and Goldberg Reactions - Progress in Copper Catalyzed C–N-, C–O- and C–S-Coupling	Klaus Kunz	**2003**, 2428 New Tools
624	An Improved One-pot Procedure for the Synthesis of Alkynes from Aldehydes	Hans Jürgen Bestmann	**1996**, 521 Letter
609	Recent Advances in Direct Arylation via Palladium-Catalyzed Aromatic C–H Activation	Zhang-Jie Shi	**2008**, 949 Account
571	A Stereoselective Synthesis of *trans*-1,2-Disubstituted Alkenes Based on the Condensation of Aldehydes with Metallated 1-phenyl-1*H*-tetrazol-5-yl Sulfones	Philip J. Kocieński	**1998**, 26 Letter
541	Discovery of New Multi Component Reactions with Combinatorial Methods	Lutz Weber	**1999**, 366 New Tools
484	Asymmetric Aminocatalysis	Benjamin List	**2001**, 1675 Account
440	Transition Metal Catalyzed Cycloisomerizations	Barry M. Trost	**1998**, 1 Account
361	Synthetic Use of Molecular Iodine for Organic Synthesis	Hideo Togo	**2006**, 2159 Account
357	A Reactivity-Driven Approach to the Discovery and Development of Gold-Catalyzed Organic Reactions	F. Dean Toste	**2010**, 675 Account
356	Enantioselective Phosphine Organocatalysis	Angela Marinetti	**2010**, 174 Account

One way that Thieme has supported younger scientists is through the Thieme–IUPAC Prize, which, since 1992, has been awarded biennially to a chemist under the age of 40 with an excellent track record of innovative research. Fortunately, we have been able to continue this tradition, and in the last 10 years Seth Herzon (2018), Neil Garg (2016), Martin Burke (2014), Melanie Sanford (2012), and Phil Baran (2010) have been recognized for their significant impacts on the synthetic organic chemistry community. In continuation of such efforts, for the first time this year, Thieme will award the Dr. Margaret Faul Women in Chemistry Award for outstanding contributions in chemistry by a young, female scientist. The first award ceremony and lecture will be held at the 2019 European Symposium on Organic Chemistry in Vienna.

By virtue of this original vision of the inaugural Editorial Board, when I came on as Editor-in-Chief, there were already many traditions within SYNLETT to support the development and careers of young chemists. Consider for example our Thieme Chemistry Journals Award, which is becoming ever more prestigious among independent academic researchers during the early phase of their career.

Two years ago, I wondered if we could go even one step further by involving the younger generation in one of the most historic scientific procedures (which they were often left out of): the reviewing process! And most importantly, do so while actually improving the system. After all, the then generally applied method was merely a technologically advanced version of how peer reviews were conducted when this journal was born, which was already a technologically advanced version of how peer review was done in its own infancy, centuries ago. So, yes, peer review is time-proven; but not all time-proven processes are immune to deficiencies. Is it still the best way for our community to evaluate the manuscripts of our peers?

In the last two years here at SYNLETT, we have tried to answer that question, or at least provide some insight within a fundamentally imperfect world. I, alongside my then-PhD student Dr. Denis Höfler, built a diverse 'crowd' of approximately 100 chemists, ranging from highly qualified PhD students and postdoctoral researchers to experienced experimental chemists in industry and tenured professors

who came with years of practice as traditional peer reviewers. In fact, we estimate that the average age of our crowd is 35 years old, judging from the career level of the reviewers.

Here's how it works: we send our crowd a link to a manuscript, which has been uploaded to an online platform called *Filestage*. They follow this link and *anonymously* make interactive comments throughout a manuscript and the corresponding supporting information. On average, the manuscript is 'live' for 3-4 days and already at this point, we have collected enough substantive opinions and perspectives to make an editorial decision. We have now used *Select Crowd Review* to evaluate more than 150 manuscripts submitted to SYNLETT, and our authorship who can choose between either peer review and/or crowd review has been generally happy with this process and is making more and more use of this rapid and deep reviewing format. Their papers are improved, and often so in areas they have not been forced to consider using traditional peer review. After all, it is the younger generation that is really in 'the trenches' of the research – so we should give them a platform to speak alongside the more experienced reviewers, who (ideally) hold a broader perspective. What I have personally found with the inclusion of younger chemists in the review process is that they are eager to check even the small details within the supporting information, a trait that you often only see from the top-of-the-top peer reviewers. *We publish better science*. And we do so with a reviewing process of *less than one week*. For more information on this approach, please see my personal account published in *Nature* **2017**, *546*, 9 or a write-up published this year in *C&EN* **2018**, November 26, Vol. 96, issue 47, entitled, 'The case for crowd peer review'.

Scientists, of all people, should be willing to evolve with the times and with the advancing technology. I have made it a goal, as Editor-in-Chief, to continually focus on improving the peer-review process. Maybe our crowd will not solve all the problems, but I think our journal's 'founding fathers' would support a system that improves the science we publish *and* provides a platform for young scientists to be involved in that process. In fact, to help with the ever-evolving tactics of our method, our Editorial Board has recently brought on a Crowd-Review Editor, Dr. Manuel van Gemmeren, an assistant professor at the University of Münster, who is as passionate about crowd review as we all are. We are excited to see how this reviewing format will grow and develop and we are constantly looking for new, qualified, and highly motivated crowd members!

Dr. Manuel van Gemmeren

Within a similar sphere as our crowd-review system, there has recently been an uptick in preprint publishing – *before* any reviewing. The underlying concepts are fundamentally different from our approach to peer review and preprint publishing has its own advantages and challenges. In any case, we are very open to submissions to SYNLETT of such manuscripts that have previously been posted on a preprint server.

When I am not thinking about crowd review, one of my favorite tasks as an Editor is to, at the end of the year, look back at the stellar manuscripts that we have published in that year and recognize the stand-out papers. As the Editorial Board, along with the members of our Advisory Board, we each propose papers from a given year for the SYNLETT Best Paper Award. One of these recommendations will receive this distinction, along with a nice cash prize. This year, we were excited to award James P. Morken and his team for publishing in SYNLETT their development of a method for the stereospecific conversion of primary, secondary, and even tertiary boronic esters into the corresponding alkylamines.

Table 3: SYNLETT's 'Best Paper Award' Winners from 2015–2018

Year	Title	Corresponding Author(s)	Source Article Type
2018	A Protocol for Direct Stereospecific Amination of Primary, Secondary, and Tertiary Alkylboronic Esters	James P. Morken	**2018**, 1749 Letter
2017	Synthesis of Tetraarylmethanes by the Triflic Acid-Promoted Formal Cross-Dehydrogenative Coupling of Triarylmethanes with Arenes	Masakazu Nambo and Cathleen M. Crudden	**2017**, 2936 Letter
2016	Helically Twisted Tetracene: Synthesis, Crystal Structure, and Photophysical Properties of Hexabenzo[*a,c,fg,j,l,op*]tetracene	Kenichiro Itami	**2016**, 2081 Cluster
2015	Asymmetric Homogeneous Hydrogenation of 2-Pyridones	Frank Glorius	**2015**, 1557 Letter

In 2018, five well-received clusters and special sections have been published in SYNLETT on alkene halofunctionalization (Tomislav Rovis and Jeff Johnston), C–C activation (Yasuhiro Uozumi and Masahiro Murakami), atropisomerism (Victor Snieckus and Laurence Harwood), synthesis of materials (Timothy Swager) and a special section on the 9th EuCheMS Organic Division Young Investigator Workshop.

For 2019, several new Clusters on hot topics are planned, including metathesis beyond olefins (Benjamin List and Bill Morandi), biocatalysis (Tomislav Rovis and Todd Hyster), electrochemical synthesis and catalysis (Benjamin List and Phil Baran), organoselenium chemistry (Hak-Fun Chow and Y.-Y. Yeung), iterative synthesis (Rubén Martin and Varinder Aggarwal), radical-based methods for C–H functionalization (Dave Nicewicz and Corey Stephenson) and a Special Issue on the International Symposium on Synthesis and Catalysis 2019 (Anthony Burke). A big thank you to all enthusiastic editors and guest editors that join us for this successful initiatives.

Great news also comes with the report of our increased impact factor (2.369 in 2017). In fact, of all the chemical journals, right after *The Journal of the American Chemical Society* and *Chemical Science*, the biggest gain has been made by SYNLETT! As we celebrate 30 years of SYNLETT, I would particularly like to thank Peter Vollhardt, Bernd Giese, Steve Ley, and Hisashi Yamamoto for not only establishing a journal committed to excellency in science, but for envisioning a journal that would support the young scientist. I too benefitted from their efforts as a young assistant professor, and now, as Editor-in-Chief, I am dedicated to carrying on such an important tradition. Another big thank you goes to our authors for continuously sending us exciting work to publish, to our referees, especially to our enthusiastic crowd members, and last but not least, to you, our readers!

Benjamin List
Editor-in-Chief
Mülheim/Ruhr
February 2019