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## EDITORIAL

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### Footsteps on the Sustainability Trail

Matthias Beller,<sup>[b]</sup> Gabriele Centi,<sup>[c]</sup> Daniel G. Nocera,<sup>[d]</sup> Guido M. Kemeling,<sup>\*[a]</sup> and Peter Göltz<sup>\*[a]</sup>

In 1979, Professor Herbert C. Brown of Purdue University (USA) was one of two recipients of the Nobel Prize in Chemistry, awarded "for his development of the use of boron-containing compounds into important reagents in organic synthesis" [the other recipient was Professor Georg Wittig of Heidelberg University (Germany), who received the award with the same citation but for phosphorus-containing compounds].

Professor Brown summarized his work and career development in his Nobel Lecture as well as in a review article written several years earlier, entitled "Footsteps on the Borane Trail."<sup>[1]</sup> The review is not only an interesting overview of the chemistry involved, with thoughtful personal perspectives on scientific education and research, but also describes the background against which the motivation for the initial work on boranes was formed. Already in 1943, with the world in a grim state, the US government suggested to Professor Brown that he con-

tinue his research on boranes to enable the in situ generation of hydrogen.

This research need is as topical today as it was back then, albeit for different reasons. Literature on borane-based energy carriers is plentiful, and in a broader sense the awareness of how critical the continuity of the global energy supply is for established and emerging nations is rapidly growing. Sustainable development and energy supply are the responsibility of every government and, ultimately, citizen. Society will look towards science for answers and towards technology for solutions, and chemistry will play an essential role.

With these considerations in mind, *ChemSusChem* was launched in January 2008. Our aim was and is to provide a forum for the latest scientific developments in "Energy & Materials, Chemistry & Sustainability." Directly from the start, *Chem-*

**Table 1.** The 10 most-downloaded manuscripts from the first 18 issues of *ChemSusChem* (based on downloads in 2009).

Author(s)	Title	Type <sup>[a]</sup>	Citation
A. Jacobi von Wangelin et al.	Coming of Age: Sustainable Iron-Catalyzed Cross-Coupling Reactions	R	<i>ChemSusChem</i> <b>2009</b> , 2, 396–417.
M. K. Nazeeruddin et al.	Recent Developments in Solid-State Dye-Sensitized Solar Cells	M	<i>ChemSusChem</i> <b>2008</b> , 1, 699–707.
M. Mascal et al.	Towards the Efficient, Total Glycan Utilization of Biomass	C	<i>ChemSusChem</i> <b>2009</b> , 2, 423–426.
R. Luque et al.	Sustainable Preparation of Supported Metal Nanoparticles and Their Applications in Catalysis	R	<i>ChemSusChem</i> <b>2009</b> , 2, 18–45.
V. Balzani et al.	Photochemical Conversion of Solar Energy	R	<i>ChemSusChem</i> <b>2008</b> , 1, 26–58.
F. Cavani et al.	Sustainability in Catalytic Oxidation: An Alternative Approach or a Structural Evolution?	R	<i>ChemSusChem</i> <b>2009</b> , 2, 508–534.
M. Hara	Environmentally Benign Production of Biodiesel Using Heterogeneous Catalysts	M	<i>ChemSusChem</i> <b>2009</b> , 2, 129–135.
M. Pagliaro et al.	Flexible Solar Cells	R	<i>ChemSusChem</i> <b>2008</b> , 1, 880–891.
S. Miertus et al.	Catalytic Applications in the Production of Biodiesel from Vegetable Oils	R	<i>ChemSusChem</i> <b>2009</b> , 2, 278–300.
J. Liu et al.	Oriented Nanostructures for Energy Conversion and Storage	R	<i>ChemSusChem</i> <b>2008</b> , 1, 676–697.

[a] R: Review, M: Minireview, C: Communication.

*SusChem* has been growing at a steady pace. In 2009 we have seen an increase in manuscript submissions by 14% compared to 2008. Your interest in reading the journal has been equally strong: Table 1 lists the 10 most-accessed papers published in the first 18 months of the journal's existence. We are very pleased with the interest from the scientific community and also look forward to receiving our first ISI Impact Factor later this year. We are confident that this figure-of-merit will be highly competitive and rank us at a level similar to other journals of the Wiley-VCH/ChemPubSoc Europe family of journals.

There have been developments on other fronts as well: In August 2009 the first issue of *ChemCatChem* appeared. This sister journal is particularly close to *ChemSusChem*, and when it comes to catalysis-related topics we can together offer a full picture of all aspects of catalysis, ranging from their fundamental synthesis and structure up to their function and requirements for processes in which they are applied.

As a result of this growth, we have been expanding the journal, adding new content and new staff. In July of 2009, we welcomed Dr. Emily S. Seo to our editorial team. After obtaining her Ph.D. from the University of British Columbia in Vancouver



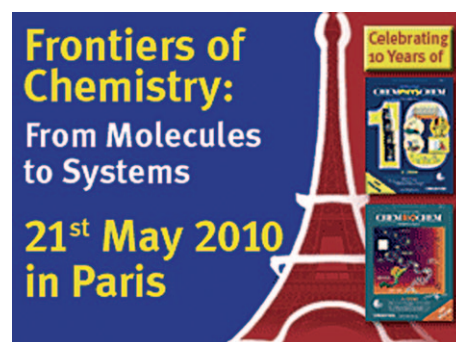
Emily Seo

(Canada) on protein design, synthesis, and characterization, she completed a post-doctoral stay at the University of Edinburgh (UK), researching antimicrobial peptides. Also forming part of the editorial team of *ChemCatChem*, Emily has made an impressive start with her knowledge and enthusiasm, and together we are keen to provide you with high-quality content and an excellent service.

2009 also saw several excellent Special Issues of the journal. Most recently the "Chemistry of Renewables" issue (December 2009), with our board members Claus H. Christensen and Birgit Kamm as guest editors, was published. Earlier in the year there were the Special Issues on "Chemistry and Energy in

the 21st Century" by Emilio Palomares (April 2009), and on "Catalysis & Sustainable Development" with our Editorial Board Chairmen Matthias Beller and Gabriele Centi (June 2009).

Other journals within Wiley-VCH have also seen encouraging growth and development. Picking a few highlights, *Chemistry: An Asian Journal* continues to grow rapidly and is building its reputation as an important journal for keeping up to date with the latest in chemistry from Asia, as well as featuring excellent content from other regions of the world. *ChemPhysChem* and *ChemBioChem* celebrated 10 years of existence, to be rounded off with the "Frontiers of Chemistry" symposium in Paris (France), on May 21.<sup>[2]</sup> The impressive line-up of speakers includes four Nobel Prize winners: Gerhard Ertl, Jean-Marie Lehn, Roger Tsien, and Ada Yonath; a member of *ChemBioChem*'s editorial board and recipient of the most recent Chemistry prize in 2009. There will also be lectures by Alan Fersht, Michael Grätzel (*ChemSusChem* Board Member), Luisa De Cola, and other influential scientists. Sustainability is certainly one of the frontiers of chemistry, making this an event not to be missed!



According to popular wisdom, you have to learn to walk before you can run. Over the last two years these first few footsteps have taught us to walk, and for 2010 and beyond we want to step up the pace with more high-level, innovative science. We have several Special Issues in the pipeline, with which we strive to highlight the many, diverse aspects of sustainability. Also, from this issue onwards, you will find news on sustainability-related topics every month in our special News section. Dr. Alina Leson, of the Center for Nanointegration Duisburg-Essen (Germany), will keep you up to date by reporting exciting research results, interesting conferences, funding calls, and other information for scientists active in research relevant to a sustainable world.

Last but not least, we are grateful to our readership and authors for the warm welcome that the journal has received. We also place high value on the great level of expertise that our

reviewers contribute to the journal, and we acknowledge their efforts here.

In the initial paragraphs we concluded that chemistry, as a fundamental science, will be instrumental in providing solutions for the manifold problems we face today and in the future. These will require innovation, but in the words of H. C. Brown, with whom we started this Editorial: "There is no evidence that it is any more difficult now than it was [then] to uncover interesting new areas of study." Accordingly, we look forward to learning from you exactly which scientific developments lie ahead on this trail, but we are already certain of one thing: it is the only true way forward.

[1] H. C. Brown, *J. Organomet. Chem.* **1975**, *100*, 3–15.

[2] For more information, see <http://www.chembiophyschem.org>.



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