

## Letter from the Editor

### The chemical industry at the edge of change?

It's grumbling in the chemical industry. The "Deepwater Horizon" drilling rig explosion and the resulting oil spill in the Gulf of Mexico underscore the resource and energy related challenges of the 21st century. In addition to the inevitably existing technical complexity, the situation will be further exacerbated through growing public pressure and simmering mistrust, impeding the companies' intention to access the last oil deposits. This development might accelerate the replacement of crude oil. Among others that depend on crude oil as their main resource, chemical companies are forced to rethink their future strategy more than ever before. Although the development of scenarios that outline an oil-free world, the existing value chain of the status quo has to be considered. New business models, new resources or new technologies: the whole industry is at the edge of a revolutionary change. Accordingly, this issue of the Journal of Business Chemistry tries to shed light on some of the mentioned aspects.

In his commentary "Bio products from bio refineries - trends, challenges and opportunities", Bhima Vijayendran distinguishes between three waves for bioderived chemicals: bioproducts produced through (1) the thermo-chemical/ catalytic conversion of feedstocks, (2) biochemical conversion technologies and (3) genetically engineered plants with designed functionality. The author highlights recent developments in each of the three waves.

In their research article "Analyzing the Direct Methanol Fuel Cell technology in portable applications by a historical and bibliometric analysis" Arho Suominen and Aulis Tuominen evaluate the opportunities provided by the new fuel cell technology. Focusing on portable applications, the authors use patent and publication databases to assess the inherent potential of the emerging technology. Based on this analysis, they argue that although the research interest in the new fuel cell technology has risen since the beginning of the 1990s, a reasonable commercialization has not taken place yet.

In the second research article "Multidisciplinary collaborations in pharmaceutical innovation: a two case-study comparison", Irina Saur-Amaral and Alexander Kofinas highlight how intra-organizational collaboration can be achieved across varying disciplines. Since multidisciplinary marks an important issue for both future research and innovation activities, the authors compare two pharmaceutical companies with different geographical strategies.

The practitioner contribution to this issue deals with a new research paradigm that may reshape the pharmaceutical industry. In their identically-named article "Pharma 3.0", Patrick Flochel and Frank Kumli introduce a new, health outcomes-oriented business model that incorporates the emerging need to deliver a sustainable value proposition. Besides contrasting prior business models with the new "Pharma 3.0" approach, the authors outline principal guidelines that may help pharmaceutical companies to adopt the new business model.

Moreover, we want to announce that Sebastian Kortmann will join our team as Executive Editor. He is one of our successors and will replace Irina and me in the near future. Now, please enjoy reading the third issue of the seventh volume of the JoBC. We would like to thank all authors and reviewers who have contributed to this new issue. If you have any comments or suggestions, please do not hesitate to

send us an email at [contact@businesschemistry.org](mailto:contact@businesschemistry.org).

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