Letter from the Editors

The ecosystem perspective

Research around how to organize activities inside and outside of firm boundaries is well established in strategy and innovation management literature. As new customer needs evolve, companies can no longer rely solely on their own capabilities but instead on partners within the framework of ecosystems. Ecosystems are composed of interconnected and interdependent network actors, which simultaneously create a value proposition for the customer by combining complementary skills and assets. Similarly, individual companies benefit from the ecosystem by developing superior products and services which outperform their competitors or by entering new markets. Through their partners, companies gain access to customers, competencies and resources which they usually don’t possess and therefore need to build up by themselves at high costs. Due to the complex character of value chains in the chemical industry, an active engagement in ecosystems provide ample opportunities for chemical companies to growth and to gain competitive advantages. In order to enrich the ‘knowledge ecosystem’ of our readers the Journal of Business Chemistry is proud to present the following articles.

In spotlight “Lessons from “Goodbye Hoechst”” Hermann Simon shares his opinion on why the former Hoechst AG failed. His contribution is a reply to the book “Goodbye Hoechst” by Karl-Heinz Seifert and covers lessons learned from the company’s decline which are still highly relevant today.

In their commentary “The Digital Revolution is coming to chemical laboratories” Michael Ulbrich and Vikas Aggarwal describe how chemical companies can harness the potential of digital R&D. While digital R&D is already state-of-the-art in industries such as healthcare and life-sciences, chemical companies can increase their organizational and innovation performance by transforming R&D operations into a “Laboratory 4.0”.

The article “The relation of energy value chains, global GDP and CO2 taxes” by Andreas Otterbach illustrates how the global energy consumption is linked to economic activity, CO2 generation and well-being. The author opts for a significant increase of renewable energy and transparency in CO2 consumption.

The first contribution in our Practitioner’s Section comes from Thorsten Bergmann, Carola Cuyot-Phung and Delphine Antoniucci. Their article “How digital tools make circular economy operational in industrial areas: The example of BE CIRCLE” deals with the outcomes and learnings of three case studies where the digital tool BE CIRCLE has been used to optimize resource flows and close loops.

Steffen Wasmus and Marius Chofor Asaba explore critical success factors for improving the sustainability of communication devices. Moreover, their article “Challenges and opportunities in the sustainability of communication devices - an operator perspectives exemplified by Deutsche Telekom AG” provides circular economy implementation strategies for communication devices.

In his article “The smart-up ecosystem: Turning Open Innovation into smart business”, Maarten van Gils introduces the smart-up ecosystem concept, which supports SMEs for the smart industry transformation. The article summarizes the author’s multiple project experience and provides insights from the Dutch chemical industry.

The Research Paper “Managing product variety under operational constraints: A process-industrial outlook” by Peter Samuelson and Thomas Lager introduces a conceptual framework on “platform-based design of non-assembled products”. The authors empirically test it in the Nordic process industries and their findings acknowledge the applicability of many components of the framework.

Now, please enjoy reading the second issue of the sixteenth volume of the Journal of Business Chemistry. We are grateful for the support of all authors and reviewers for this new issue. If you have any comments or suggestions, please do not hesitate to contact us at contact@businesschemistry.org.

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