## **Letter from the Editors**

## Global Trends – Emerging Challenges for the Chemical Industry

The chemical industry is facing various challenges that derive from global trends such as demographic changes, increasing globalization and urbanization, emerging technologies, or energy and resource scarcity. In order to appropriately respond to such changes in the firm's environment, firms may be forced to exploit and reinforce existing capabilities as well as explore new opportunities to create value. For instance, many chemical companies have strengthened their market positions in fast growing markets such as China or India. Considering the impacts of global trends on the chemical industry, we would like to draw attention to a forthcoming study that is jointly conducted by the University of Muenster and the Provadis School of International Management and Technology. Apart from examining current as well as emerging global trends that concern chemical companies, the study also aims to derive resulting managerial implications. Thus, we are pleased to provide some more detailed insights on this study in our next issues

With regard to the present issue, we kindly welcome Frank Spiegel and Karl-Martin Schellerer. In their commentary on "Hidden Markets in the Chemical Industry - Illusion or Growth Opportunity?", the authors discuss how chemical companies may make use of existing products while exploring new markets. Here, the authors specifically discuss current trends and fields of application and, thereby, support firms in identifying potential sources of future sales. Furthermore, the authors present success factors for identifying and developing hidden markets.

The research paper of the present issue "Proactive R&D Management and Information Disclosure: Ramifications for Innovative Chemicals Companies" by Tim Swift examines the relationship between R&D expenditure volatility and firm performance in the context of information asymmetry. With R&D expenditure volatility representing a form of information disclosure, the author proposes that investors may place greater emphasis on R&D expenditure volatility under conditions of higher information asymmetry. More specifically, the author outlines the following determinants of corporate opacity as being highly relevant to firm investors: firm's level of R&D intensity, firm age, accuracy of investment analyst earnings forecasts, and bid-ask spread.

The first paper of our Practitioner's Section "Improving R&D productivity requires a balanced approach" by Fang X Zhou and Thomas Bertels uses a case study to illustrate the challenges and characteristics of R&D processes in the pharmaceutical industry that may enhance the firm's productivity. More precisely, the authors suggest to apply a balanced approach by integrating process management with organization's project management capability within a PDCA cycle. Here, the authors emphasize the importance of tailoring these approaches to each companies' unique conditions, particularly regarding process and project management maturity, in order to provide for a current as well as for a long-term productivity improvement in pharmaceutical R&D.

In the article "Bioplastics Tipping Point: drop-in or non-drop-in?", Fabio De Almeida Oroski, Flávia Chaves Alves and José Vitor Bomtempo discuss why non-biodegradable biopolymers, so called drop-ins, have revealed higher growth rates in production capacity than non-drop-in solutions. By comparing the adoption rates of different bioplastics, the authors identify revelant factors that lead to the tipping point of the emerging bioplastics sector. Whereas non-drop-in plastics like polylactic acid are niche products facing several barriers on the demand side, biobased drop-in materials such as polyethylene are well accepted by end users.

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