

# Letter from the Editor

## Innovation Management Challenges for the Chemical Industry

Starting 2025, the chemical industry is undergoing significant transformations, marked by major players implementing cost reductions and shutting down plants in response to evolving market dynamics and economic pressures.

As companies navigate these challenges, it becomes increasingly clear that innovation is essential for long-term success. In this first issue of the Journal for 2025, we are mentioning these developments, and we are pleased to present a collection of five insightful articles that offer valuable perspectives on innovative management. This issue of the Journal of Business Chemistry can be categorized into two overarching themes: Innovation Approaches and Sustainability.

The paper "Frugal Innovation in Oncology: Tracing the Arc of Microchip Technology in Early Cancer Detection and Treatment" by Abhijeet Chaturvedi, Janvee Garg, and Anil Kumar Singh highlights the role of microchip technology in enhancing early cancer detection and treatment, particularly in low-resource settings through the use of 'Lab on a Chip' technologies. The paper evaluates the technical specifications and cost-efficiency of these systems, emphasizing their potential for timely intervention.

Continuing with the innovation management approaches, the paper "Strategic Corporate Venturing to Design Targeted Innovation Initiatives" by Vinzenz Zauner and Philip Emmerich discusses how corporate venturing can enhance innovation capabilities in high-tech multinationals by integrating internal and external stakeholders through a structured initiative. The authors present best practices and propose a corporate venturing initiative aimed at boosting innovation and providing a competitive advantage.

Additionally, the authors Niklas Huber, Daniel Eggart, and Arko Graf-Bürk offer insights into the use of artificial intelligence (AI) in the article "Leveraging Generative AI for Rapid Competition Landscape Analysis: A Feasibility Study for the Chemical Industry." This paper explores the application of generative AI to automate competitive analysis in the chemical industry, improving accuracy and efficiency in strategic decision-making. Their methodology links market data to historical growth rates, revealing strategic opportunities and market risks for selected companies.

In the Sustainability section, we highly recommend the paper by Prof. Thomas Lager, Cali Nuur, and Andreas Feldmann, titled "The Illustrative Case of the HYBRIT Fossil-Free Steel Production Initiative in the Perspective of Industrial Symbiosis." This article examines the HYBRIT initiative as a case study to bridge the concepts of industrial symbiosis and industrial convergence in the context of sustainable steel production. The authors advocate for the development of a specific transformation model to address unique industrial conditions for product and process innovation.

Finally, the last paper of this issue, "Environmental Impacts of Pyro- and Hydrometallurgical Recycling for Lithium-Ion Batteries - A Review" by Luca Stegemann and Moritz Gutsch, provides a comparative analysis of the environmental impacts of different recycling methods for lithium-ion batteries. The authors highlight the benefits of hydrometallurgical recycling in reducing emissions and energy demand while offering recommendations for future research in this critical area.

Please enjoy reading the first issue of this year; we are grateful for the support of all authors and reviewers for this enlightening edition. If you have any comments or suggestions, please do not hesitate to contact us at [contact@businesschemistry.org](mailto:contact@businesschemistry.org). For more updates and insights on management issues in the chemical industry, follow us on LinkedIn: [www.linkedin.com/company/jobc/](https://www.linkedin.com/company/jobc/) and subscribe to our newsletter.

We wish you all a successful and inspiring year ahead!

Andrea Kanzler, (Executive Editor)