

Letter from the Editors

Balancing Innovation, Responsibility, and Boundaries: Navigating the Business Chemistry Landscape

After almost two years, it is time to move on to new challenges and say goodbye as Executive Editor of the Journal of Business Chemistry. Looking back on many successful issues, I am very grateful for the support of all authors and reviewers for this and previous issues. I would like to hand over to Friederike Woltmann, who will be the next Executive Editor, and I could not be more confident that the Journal of Business Chemistry will continue to publish excellent articles from the intersection of Chemistry and Business.

As we move through 2025, industries at the intersection of chemistry, management, and innovation are facing unprecedented demands. The need for sustainable transformation, talent retention, competitive resilience, and planetary responsibility continues to shape strategic agendas worldwide. The current issue of the Journal of Business Chemistry reflects these multifaceted challenges through a diverse set of contributions that bridge environmental, technological, and organizational themes.

In this second issue of the year, we begin with the paper by Niklas Kronemeyer, Jens Leker, and Moritz Gutsch, who explore a fundamental question in their article “Can a Growing Battery Industry Remain Within Planetary Boundaries?”. Addressing the rising demand for critical raw materials and the environmental impacts of battery production, this study links the development of circular battery value chains to the planetary boundaries framework. Their analysis calls for innovations in battery technologies, recycling, and energy sourcing to align the industry with safe environmental operating limits.

Additionally, the research paper “Ethylene Production in the Petrochemical Industry: Competitive Risks and Impacts of the EU Emission Trading Scheme” by Bernd Selting and Giorgia Carratta presents a comparative cost analysis between EU and US producers. With a focus on ethylene production, it reveals how the EU Emissions Trading Scheme and global overcapacities are creating substantial competitive pressures for European producers. The study underscores the need for policy adjustments and industrial adaptation in the face of rising production costs and regulatory constraints.

Continuing with the innovation management approaches, the research paper “Corporate Social Responsibility and Sustainable Human Resources Management Practices Among the Millennial Workforce in the Chemical Industry in Ireland” by Tamara Florez and Andrea Kanzler examines how CSR and sustainable HRM practices influence employment choices among Millennials in Ireland. Grounded in Social Identity Theory and employer branding, their findings have practical implications for organizations striving to attract and retain talent in an increasingly sustainability-conscious labor market.

Finally, in the Practitioner’s Section, Andreas Dreiling investigates how artificial intelligence can influence innovation processes in start-ups. His contribution, “The Impact of Artificial Intelligence on Innovation Speed in Startups”, provides a practical framework for integrating AI into innovation management. Highlighting both opportunities and integration challenges, the paper offers guidance for start-ups seeking to increase competitiveness through agile, AI-enhanced innovation strategies.

We hope these thought-provoking contributions will inspire further discussions on the evolving challenges and opportunities within business chemistry. As always, we thank all authors and reviewers for their valuable work and dedication to the journal.

Please enjoy reading the second issue of our journal in 2025. If you have any comments or suggestions, please do not hesitate to contact us at contact@businesschemistry.org. For more updates and insights on management issues in the chemical industry, follow us on LinkedIn: <http://www.linkedin.com/company/jabc/> and subscribe to our newsletter.

Warm regards,

Andrea Kanzler
(Executive Editor)

Friederike Woltmann
(Executive Editor)