

Letter from the Editors

Systemic Transformation in Process Industries: Innovation, Circularity and Competitiveness

With this first issue of the Journal of Business Chemistry in 2026, we continue to explore how chemical, pharmaceutical and energy-related industries are navigating an era of profound structural change. Across sectors, firms are confronted with the simultaneous challenges of ecological transformation, technological acceleration and increasing competitive pressure. The contributions brought together in this issue illustrate that responding to these challenges requires more than isolated technological advances. Instead, it demands a rethinking of business models, innovation processes and the broader ecosystems in which firms operate.

We open this issue by a Call for Papers for a forthcoming Special Issue of the Journal of Business Chemistry focusing on Innovation and Production Management in the Process Industries. The Special Issue invites conceptual and empirical contributions that address the close interconnection between product and process innovation, particularly in the context of eco-industrial transformation. By encouraging interdisciplinary perspectives and collaborative contributions from academia and practice, the Call for Papers highlights the journal's continued commitment to fostering dialogue on systemic innovation challenges in process industries.

The research section is complemented by a contribution in the Practitioner's Section. In "Accelerating Industrial Innovation under Time Pressure: Platform-Based Lessons from Specialty Chemicals", Heiko Brunner presents an anonymized case study from the specialty chemicals industry. The article examines how companies can respond when critical inputs suddenly become unavailable and development timelines are severely constrained. The analysis highlights the limitations of strictly sequential Stage-Gate® models in such contexts and shows how parallelized development structures and modular platform strategies can enable faster and more resilient innovation processes. By focusing on organizational design and managerial decision-making rather than technical details, the contribution provides practical insights for managing innovation under conditions of uncertainty, high interdependence and acute time pressure.

We then turn to the first research paper of this issue. In "Actors and Supply Chain Strategies in the Circular Economy: A Guideline for Circular Business Model Design and Innovation", Jannis Wesselkämper and Sina Mortazavi address a central yet underexplored question in circular economy research. The authors develop a comprehensive conceptual framework that links different actor roles within circular ecosystems to distinct supply chain strategies. By deriving nine circular business model patterns and complementing them with innovation approaches that vary in openness and intensity, the article offers a structured orientation for companies seeking to reposition themselves in emerging circular value networks. The illustration of the framework through the transformation of the electric vehicle battery industry further underlines its practical relevance and demonstrates how circularity fundamentally alters established business logics.

The following contribution shifts the focus to industrial competitiveness and cost structures. In "Profitability and Cost Structure in the Battery Cell Industry: A Comparative Analysis of CATL and Key Competitors", Jan-Hendrik Richter, Tim Niklas Franke and Simon Lux analyze why certain battery cell manufacturers remain economically resilient despite global overcapacities, declining prices and intensified international competition. By examining differences in cost structures, production locations, vertical integration and market exposure, the article sheds

light on the strategic and structural factors that shape profitability in one of today's most capital-intensive and strategically important industries. The analysis offers valuable insights for both industry practitioners and policymakers concerned with the future of battery value chains.

The issue concludes with a contribution that highlights the importance of spatial contexts for sustainable innovation. In "Does Geographic Proximity to Startups Drive Green Innovation?", Alexandra Wenning and Jan-Luca Evers examine how local startup environments influence the green innovation activities of established firms. Drawing on proximity theory and the knowledge spillover literature, the authors provide a nuanced empirical analysis showing that the effects of geographic closeness are far from uniform. While proximity to green startups can stimulate green innovation for firms with lower R&D intensity, it may also intensify competition and appropriation concerns for firms with higher R&D intensity. By differentiating between green and non-green startups and by considering first-time green patenting, the study deepens our understanding of how regional ecosystems, firm capabilities and sustainability-oriented innovation interact.

Taken together, the contributions in this issue demonstrate that contemporary industrial transformation is inherently systemic. Circular economy strategies reshape supply chains and business models, regional innovation ecosystems influence the direction and intensity of green innovation, organizational choices determine the speed of technological response, and global market structures condition economic viability. The articles underline that sustainable and competitive industrial development depends on aligning technological innovation with thoughtful managerial and strategic design.

We hope you enjoy reading this issue of the Journal of Business Chemistry. Should you have any comments or suggestions, please feel free to contact us at contact@businesschemistry.org. For ongoing updates and insights, we invite you to follow us on LinkedIn (www.linkedin.com/company/jobc) and subscribe to our newsletter.

We sincerely thank all authors, reviewers and readers for their continued support and engagement.

Warm regards,

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