A letter from the Editor

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Dear Readers,

With this first issue of Volume 14, the Journal of Print and Media Technology Research again brings together contributions that speak to both rigorous science and day-to-day production realities.

The opening paper by Amélie Brogly and colleagues addresses a persistent reliability question in industrial inkjet: nozzle latency with water-based inks. The authors present two complementary quantitative methodologies – one based on test-form analysis, the other on drop-ejection observation – that enable consistent detection and comparison of latency effects under defined idle times, supporting more robust jetting in production environments.

The second article, a review by Alyssa A. Wroniak, Yen-Hsun Huang and Patrick J. Smith, examines why formulations that print cleanly in the laboratory may falter at scale. By contrasting research set-ups with industrial print conditions, the authors outline an evaluation pathway from fluid characterization and waveform optimization through to long-run stability, and they argue convincingly that familiar scalar descriptors (such as the Z-number) should be treated only as a starting point once viscoelasticity, printhead geometry, and duty cycle come into play.

We close the research section with a production-focused study on heat-set web offset. Gülhan A. Büyükpehlivanoğlu and co-authors track plate wear over a 180 000 impression run on uncoated stock, combining microscopic/topographic surface analysis with print quality assessment. Their results recommend plate replacement around 150 000 impressions.

In Topicalities, curated by our Associate Editor Markéta Držková, this issue [...] on the Bookshelf and Academic dissertations. The Bookshelf highlights Shaping Tomorrow: Thin Films and 3D Printing in the Fourth Industrial Revolution (two volumes), which maps fundamentals and applications and explicitly covers solution-based and printed routes – including inkjet – for flexible devices; Computational Color Imaging (IW-CCI 2024, Milan) on colour theory, spectral/hyperspectral methods, halftoning, perceptual quality, and emerging AI uses in print workflows; Female Printmakers, Printsellers, and Print Publishers in the Eighteenth Century, an open-access study reframing women's roles from studio to trade; Understanding Color: An Introduction for Designers (6th ed.), reorganised with an updated downloadable workbook; and The Elements of Polymer Science and Engineering (4th ed.), expanded with sustainability, controlled radical polymerisation, thin-film topics, and newer manufacturing methods such as 3D printing.

The dissertations featured this quarter likewise mirror the field's breadth.

Agnieszka Helena Ciochon analyses how 3D-printing defects and surface roughness influence the acoustic performance of periodic materials, linking confocal/CT characterization and simulation to improved unit-cell design; Mohsen Mohammadi advances stretchable electronics using wood-based functional materials, demonstrating CNF-based sensing foams, lignin-based high-resolution masks for ultra-soft conductors, and a fluid-based organic battery concept; and Tobias Enk introduces a spatial-frequency approach to analog information transfer in roll-to-roll value chains, enabling causal tracing of web-run and register disturbances in gravure packaging printing.

As ever, I would like to thank our authors, reviewers, and the editorial team for their sustained commitment, and our readers for their continued engagement with the journal. I hope the selection presented here will prove both useful and inspiring in your research and practice.

Wuppertal, September 2025

Wuppertal, June 2025

Daniel Bohn