

Paste 2025

Proceedings of the 27th International Conference
on Paste, Thickened and Filtered Tailings

8–10 April 2025 | Swakopmund, Namibia



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The Australian Centre for Geomechanics (ACG) was formally established in 1992 as a University of Western Australia not-for-profit research centre in order to promote research excellence and continuing education in geomechanics, with particular emphasis on its application to the mineral and energy extraction sections of Australia's resources industry.

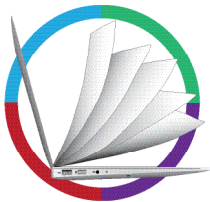
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At the heart of Knight Piésold's expertise is a commitment to advancing tailings management. Knight Piésold's engineers and scientists pride themselves in taking part in developing cutting-edge filtered tailings storage, paste thickening technologies, and water recovery systems that innovate industry standards. From arid regions in Africa to high-rainfall environments in South America, Knight Piésold's tailored solutions seek to address the unique challenges of each mining operation, ensuring long-term stability and environmental compliance.

Knight Piésold's work extends beyond engineering – they are thought leaders, problem solvers, and trusted partners in responsible mining. Knight Piésold actively contributes to research, industry best practices, and policy development, ensuring clients stay ahead in an evolving regulatory landscape. At Paste 2025, Knight Piésold experts will share insightful case studies, technical innovations, and real-world applications that have successfully transformed tailings disposal strategies across the globe.

Through collaboration, research-driven solutions, and technical excellence, Knight Piésold continues to lead the way in shaping the next generation of sustainable mining practices. This is affirmed by Knight Piésold's involvement in Paste 2025 which shows Knight Piésold's dedication to engineering a future where mining and environmental stewardship go hand in hand.

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The dedicated efforts of the peer reviewers have resulted in the high quality of the technical program and the papers compiled for this publication. The editors thank the following people who contributed their time and expertise as reviewers of manuscripts for the proceedings of the 27th International Conference on Paste, Thickened and Filtered Tailings. A technical and critical review of each paper was undertaken by a minimum of two reviewers for the production of these proceedings.

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Preface

The 27th International Conference on Paste, Thickened, and Filtered Tailings (Paste 2025) marks a significant return to Southern Africa, following previous sessions in Cape Town (2019, 2004), Pilanesberg (2001), Botswana (2008), and Rustenburg (2012). Paste 2025 takes place in Swakopmund, Namibia, and highlights the industry's commitment to advancing sustainable tailings management solutions and fostering collaboration among global experts.

Hosting Paste 2025 in Namibia is particularly meaningful given the country's vast mineral wealth, arid climate, and increasing emphasis on responsible mining. Namibia, a beacon of stability in Africa's mining sector, is home to significant uranium, diamond, and base metal operations. As water scarcity continues to challenge mining operations across the region, innovative tailings management strategies, such as paste and filtered tailings, are becoming essential for reducing environmental impact, improving resource efficiency, and enhancing the long-term safety of tailings storage facilities.

Across Africa, mining remains a key driver of economic development, but it also presents challenges related to environmental stewardship and sustainability. The adoption of advanced dewatering techniques provides an opportunity to change how the industry approaches tailings disposal, offering solutions that could optimise water recovery, increase geotechnical stability, and reduce closure liabilities. The return of Paste 2025 to the continent signals a renewed focus on leveraging best available technology, operational experience, and engineering expertise to shape the future of mining in Africa and beyond.

This year's conference proceedings include a good mix of presentations covering the tailings management process from tailings characterisation to operations of tailings facility. As a co-host of Paste 2025, Knight Piésold brings decades of experience in tailings, water management, and geotechnical engineering. Our team has also actively contributed to technical presentations, expert panels, and workshops, sharing insights into the latest advancements in paste thickening, filtered tailings deposition, and water recovery.

By facilitating dialogue on innovative solutions tailored to the region's unique climatic and geological conditions, Paste 2025 serves as a platform to drive meaningful engagement toward safer, more responsible tailings management. We welcome mining professionals, engineers, researchers, and policymakers from around the world to Swakopmund.

Véronique Daigle
Paste 2025 Conference Chair and Co-editor

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