Report on Attendance at the 18th International Clay Conference (ICC), Trinity College Dublin 13–19 July 2025

Daniel Dodoo, PhD Candidate
Department of Chemical Engineering, University of Melbourne, Australia

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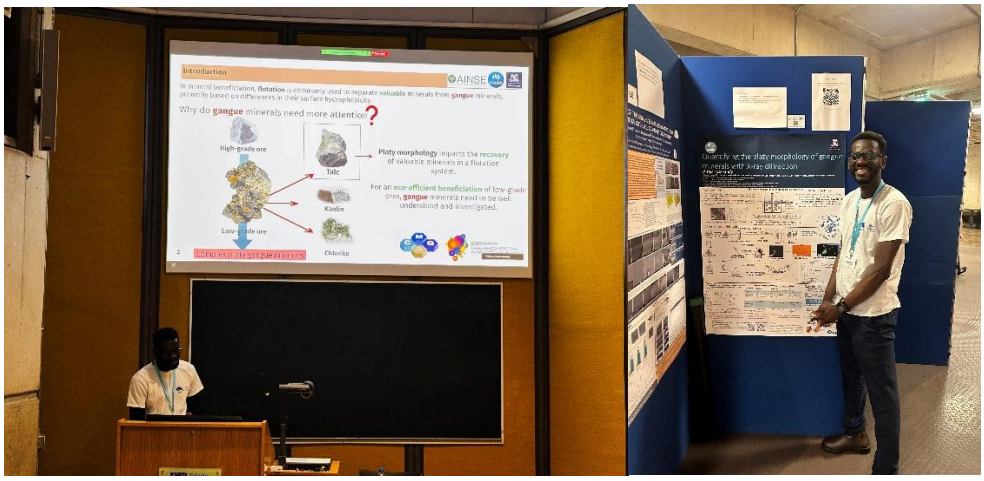
As part of the conference, I had the honour of sharing my PhD research through both oral and poster presentations:

- Oral Presentation: Characterising and Predicting the Floatability of Gangue Minerals Using X-ray Diffraction Patterns
- Poster Presentation: Quantifying the Platy Morphology of Gangue Minerals with X-ray Diffraction: A Talc Case Study

I acknowledged the support of CMG and included the CMG logo on both my oral presentation slides and poster. These presentations showcased the outcomes of my collaborative project between the University of Melbourne, University of Queensland, and CSIRO under the ARC Centre of Excellence for Enabling Eco-Efficient Beneficiation of Minerals. The focus was on using X-ray diffraction to understand the flotation behaviour of talc, an issue of growing concern in mineral processing.



I was delighted to be awarded the Best Student Poster Award at the conference. This recognition affirmed the scientific contribution of my work and provided motivation to continue exploring new directions in mineral characterisation and flotation prediction. The feedback I received from experts and fellow researchers was both constructive and encouraging.

In addition to presenting, I actively contributed as a conference volunteer. I assisted in various logistical roles, including session management and supporting attendees. This experience enhanced my appreciation for the behind-the-scenes efforts that go into running a successful international conference and provided further opportunities to interact with professionals and students from across the globe.

Attending the ICC was a highly enriching experience. I was able to attend numerous high-level presentations on clay science, mineralogy, and advanced characterisation techniques. The event significantly expanded my technical knowledge and exposed me to emerging trends and challenges in clay-related research. Importantly, I had the opportunity to engage with academics and industry professionals working on talc and clay minerals, many of whom offered valuable insights relevant to my work. The conference facilitated networking and potential future collaborations, some of which are already being followed up. The generous CMG bursary not only made this experience financially possible, but also ensured I could focus fully on learning, presenting, and engaging with the scientific community. I am already integrating several ideas and recommendations from the conference into the next stage of my research.