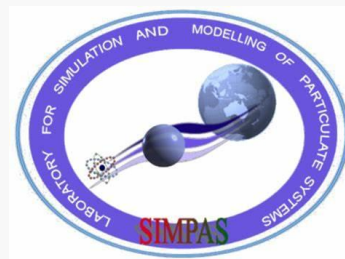


# Call for Papers (SIMPAS-2023)

## SIMPAS International Symposium

*for Commemorating Prof Aibing Yu's 60<sup>th</sup> Birthday and His  
Over 35 Years' Research on Particle Technology*

25 - 28 Aug 2023, Suzhou, China



**Simulation and Modelling of Particulate Systems (SIMPAS)** aims to model and understand the fundamentals governing particle and particle-fluid flows which is of paramount importance to the design, control and optimisation of particulate and multiphase processes in many industries. This often involves a multiscale approach at different length and time scales, including at the molecular/sub-particle scale to determine the particle-particle/particle-fluid interaction forces; at the micro/particle scale to understand particle flow and force structures; at the meso/macro scale to formulate governing equations, constitutive relations and boundary conditions for continuum-based process modelling and simulation; and at the process equipment scale to quantify flow and process performance for control and optimisation. In the past two decades or so, many advanced computational technologies, either discrete or continuum-based, have been developed and applied to tackle problems of various types, which can be evidenced by some established dedicated international symposia. For example, following the spirit of SIMPAS, the ARC Research Hub for Computational Particle Technology (CPT) initiated the CPT symposium series since 2016. The SIMPAS and CPT symposia have provided an outstanding forum to discuss the frontier and challenging problems in the modelling and simulation of complex particulate and multiphase processes, covering a wide spectrum from fundamental research to industrial application. The symposium series also offers outstanding opportunities for idea exchange, networking and research collaboration.

**SIMPAS Centre/Lab** is an internationally recognized research facility in particle science and technology, established by Professor Aibing Yu at Univ of New South Wales (UNSW) and then at Monash University (MU) since 1992. Its research theme is to understand the fundamentals governing particulate flow and packing through rigorous simulation and modelling of the particle-particle and particle-fluid interactions at different time and length scales, with its application oriented to the mineral/metallurgical/material and related industries. It is a key player for a number of significant initiatives in Australia, including: ARC Centre of Excellence for Functional Nanomaterials, Australia-China Joint Centre for Minerals, Metallurgy and Materials, and ARC Hub for Computational Particle Technology. In the past 30 years or so, SIMPAS has established its leading position through extensive publications in a number of areas, including: macroscopic modelling and microscopic simulation of particle packing, structural analysis and transport properties, granular and multi-phase flows, and computer simulation and modelling of particulate systems. SIMPAS at UNSW and MU has graduated >50 postdoc fellows and >130 PhD students, plus >100 visiting academics/scholars from different countries. SIMPAS members have spreading worldwide, including Australia, China, Japan, Netherlands, UK, USA and other countries.

**SIMPAS symposium** this time is to be held in Suzhou on 25-28 Aug 2023 to commemorate Professor Yu's 60<sup>th</sup> birthday and his over 35 years' research in particle technology. As before, it aims to showcase new achievements, discuss the frontier and challenging problems in SIMPAS. At the same time, it provides a forum to celebrate the achievements of Professor Yu and his research team SIMPAS in the past. The symposium is to be organized by the SIMPAS teams at the following institutions:



### Key Dates and Venue:

- ◆ **Abstract submission:** All abstracts should be submitted to [arc.hub.secretariat@monash.edu](mailto:arc.hub.secretariat@monash.edu). A submission should include an abstract and short biography (of its presenter), up to ONE A4 page in MS Word. Submission due date: **30 June 2023**
- ◆ **Symposium dates:** 25-28 Aug, 2023 (registration/reception on 25 Aug; meeting on 26-28 Aug).
- ◆ **Registration fee:** regular RMB3000 (or A\$700) & student RMB2000 (or A\$500), covering the costs for conference attendance, tea/coffee breaks, lunch and dinner (formal reception on 25 Aug, symposium dinner on 27 Aug), and a city/lab tour on 28 Aug afternoon.
- ◆ **Symposium venue:** Monash Suzhou Research Institute (Suzhou Industrial Park, China)

### Symposium General Information:

- ◆ **Symposium booklet** will be published at the Symposium. It includes symposium program, abstracts, and biographies (of presenters).
- ◆ **Presentations** will consist of keynote and oral/poster presentations. The former is for invited speakers only, and the latter, open to all, is a combined short oral and poster presentation. There will be the best poster awards for postgraduates.
- ◆ **Publication:** Selected papers will be published as normal articles in **Powder Technology**, with online submission open in June 2023 and closed in October 2023. They will later be collected/listed as a virtual special issue in the journal website.