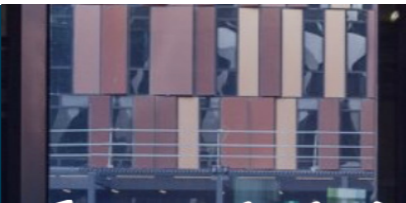


Engineering Practice Research Summit



Faculty of
Engineering
and Information
Technology
Teaching and
Learning Laboratory



Day 3 Wednesday 17 July, 2024

MORE TO ADDRESS
EMBRACING THE OPPORTUNITY

Venue

Woodwards Conference Centre
Melbourne Law School
Level 10, 185 Pelham Street
Carlton

Session 1

9.00 - 10.30am

Keynote

The Role of AI

- Iven Mareels Federation University

Session 2

11.00am - 12.30pm

Sustainable Engineering Workforce and Careers

Keynote

Engineering Supply and Demand Dynamics in Australia in 2024

- Bernadette Foley Engineers Australia
- Peter Briggs (Q&A) Engineers Australia

Research Presentation

Engineering Internship Feedback by Gender: Engineers Australia Student Placement Survey

- Jolanta Szymakowski University of Melbourne

Session 3

1.30 - 3.00pm

Workshop

Developing the Summit Position on Ensuring Sustainable Engineering Capability

- Sally Male (Chair) University of Melbourne
with David Heath University of Melbourne

Session 4

3.30 - 5.00pm

Conclusion

Summarising the Summit Position and Identifying Where to From Here to Ensure Sustainable Engineering Capability

Response

- Ampalavanapillai (Thas) Nirmalathas
Dean, Faculty of Engineering and Information Technology
University of Melbourne



Faculty of
Engineering
and Information
Technology

Teaching and Learning
Laboratory

15-17 July 2024

Engineering Practice Research Summit

Welcome

It is my great pleasure to welcome you to the inaugural Engineering Practice Research Summit.

The Summit brings together researchers and stakeholders of engineering practice. During the three days of the Summit, delegates will make brief presentations and provocations, and build on these in discussions, leading to positions on future research and support to inform engineering education and ensure sustainable engineering capability.

The vision for the Summit is sustainable engineering practice for society, achieved by a sustainable engineering workforce of competent engineers with sustainable engineering careers.

I am grateful to Engineers Australia, Australia's national body for engineering, for collaborating with us in hosting the Summit.

The combined contributions of all delegates will be critical to the success of the Summit.



Professor Sally Male

Director
Teaching and Learning
Laboratory
Faculty of Engineering and
Information Technology
Melbourne University
sally.male@unimelb.edu.au

Teaching and Learning Laboratory

The Teaching and Learning Laboratory in the Faculty of Engineering and Information Technology at the University of Melbourne provides research-informed enhancements to engineering and information technology.

We conduct a program of research on engineering and information technology education, and engineering and information technology practice. Our vision is that every engineering and information technology student is supported to develop the competencies to lead a successful life contributing sustainably to a high-functioning society.

Further Details

Engineering Practice Research Summit

<https://go.unimelb.edu.au/e9o8>

(Program updates, Abstracts, speaker biographies)

Teaching and Learning Laboratory

<https://eng.unimelb.edu.au/tll>

Contact

Melinda Sung
melinda.sung@unimelb.edu.au

We acknowledge and pay respect to the
Traditional Owners of the lands upon which
our campuses are situated.

Organising Committee:

- Professor Sally Male, FEIT Teaching and Learning Laboratory
- Josh Burridge, FEIT Teaching and Learning Laboratory
- Dr Helen Fairweather, Engineers Australia
- Dr Shannon Rios, FEIT Teaching and Learning Laboratory
- Melinda Sung, FEIT Teaching and Learning Laboratory

Technical Committee:

- Professor Sally Male, FEIT Teaching and Learning Laboratory
- Dr Helen Fairweather, Engineers Australia
- Professor James Trevalyan, The University of Western Australia
- Associate Professor Enda Crossin, Canterbury University, New Zealand

Engineering Practice Research Summit

Faculty of Engineering and Information Technology
Teaching and Learning Laboratory



Day 1 Monday 15 July, 2024

CALL TO CHANGE

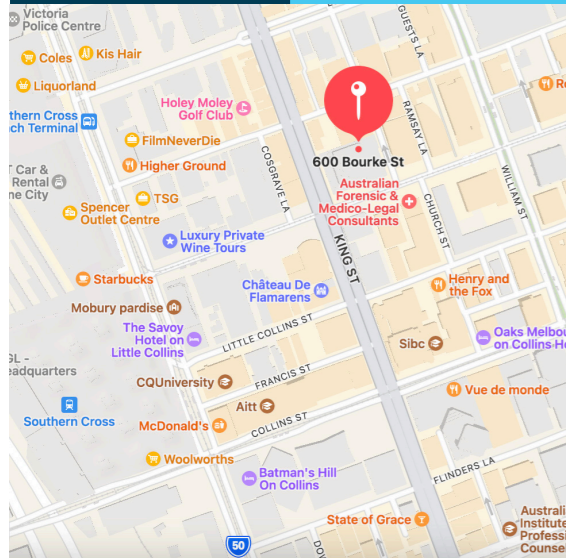


ENGINEERS AUSTRALIA

Venue

Engineers Australia
Level 31, 600 Bourke Street
Melbourne VIC

Location



Session 1

9.00 - 10.30am

Welcome & Introduction

- Sally Male University of Melbourne
- Joseph West University of Melbourne
Acknowledgment of Country and Opening
- Bernadette Foley Engineers Australia

Keynote:

Reframing Notions of Engineering Practice

- James Trevelyan The University of Western Australia

Session 2

11.00am - 12.30pm

Workshop

Developing a Position on Ensuring Sustainable Engineering Capability

- Sally Male University of Melbourne
- Juliana Kaya Prpic University of Melbourne

Session 3

1.30 - 3.00pm

Keynote

Navigating the Engineering Path: PREFER-tools to Support Choice

- Greet Langie KU Leuven, Belgium

Session 4

3.30 - 5.00pm

Industry Panel

Challenges Evolving Engineering Practice & Ensuring Engineering Capability

Panel Members

- Helen Fairweather (Chair) Engineers Australia
- Bernadette Foley Engineers Australia
- Sally Glen IPA Asia Pacific
- Alan Goodridge Peracon
- Iven Mareels Federation University
- Francis Norman Centre of Decommissioning Australia
- Nee Nee Ong GHD Group

Engineering Practice Research Summit

Faculty of Engineering and Information Technology
Teaching and Learning Laboratory



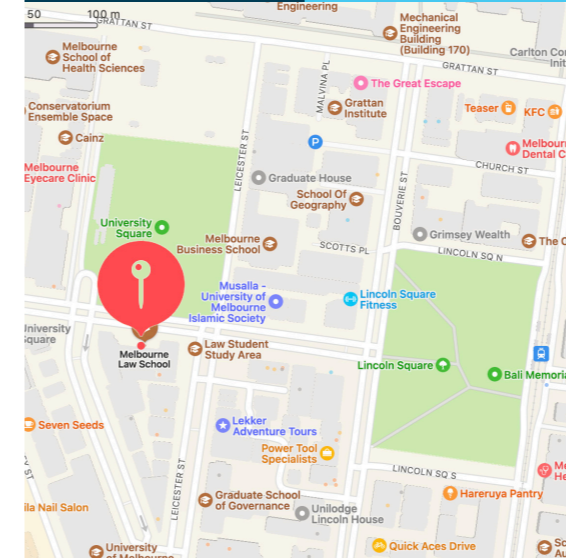
Day 2 Tuesday 16 July, 2024

POSSIBLE FUTURES

Venue

Woodwards Conference Centre
Melbourne Law School
Level 10, 185 Pelham Street
Carlton

Location



Summit Dinner

6.30 for 7.00pm

Upper East Room
University House
112 Professors' Walk
University of Melbourne

Session 1

9.00 - 10.30am

Research Presentations

Understanding Practice

Identifying Core Engineering Activities Using Exploratory Factor Analysis

- Enda Crossin University of Canterbury

Preliminary Findings From Observations of the Sociotechnical Nature of Early Career Engineers in Practice

- Robert McHenry Deakin University

Bridging the Communication Gap

- Brice Shen University of Melbourne

Session 2

11.00am - 12.30pm

Indigenous Panel

A Vision for Indigenous Values in Engineering Practice and Implications for Education in an Australian Context

Panel Members

- Juliana Kaya Prpic (Chair) University of Melbourne
- Susan Beetson University of Queensland
- Craig Cowled Queensland University of Technology
- Josh Loyd AECOM
- Grant Maher Jabin Group
- Joseph West University of Melbourne

Session 3

1.30 - 3.00pm

Research Presentations

Engineering Education for Sustainable Engineering Practice and Careers

Exploring Sustainable Development in Chemical Engineering Practice: A Scoping Review and Keyword Co-occurrence Network

- Naomi Bury University of Melbourne

Understanding the Interplay of Reproduction and Career Cycle Among Australian Female Engineers from a Sustainability Perspective

- Maharti Triharta University of Melbourne

Session 4

3.30 - 5.00pm

Keynote

An Industry Perspective on Challenges Associated With Effective Practice and Ensuring Engineering Capability

- Sally Glen IPA Asia Pacific
- James Trevelyan (Chair) University of Western Australia