

EDITORIAL

This issue contains the first in a series of papers by EO Tuck medalists. In 2013, ANZIAM introduced the *EO Tuck medal* to celebrate the contributions of the late Professor Ernest Oliver Tuck (1939–2009), FAustMS, FTSE, FAA. This is a mid-career award for outstanding research in and distinguished service to the field of applied mathematics.

We would like to note a few words about Ernest (or Ernie as most knew him). He joined The University of Adelaide for his honours degree under the supervision of the late Professor Renfrey Potts. After completion of his degree with first-class honours, he wished to broaden his horizon. Soon he was the proud winner of a “Legacy Scholarship” (being a descendant of a World War II veteran) to pursue his post-graduate study at the University of Cambridge. Ernie then took a long voyage to meet his supervisor, Professor Fritz Ursell, at Cambridge, who later nurtured his new focus on hydrodynamics to apply “slender-body theory” to ships. His PhD thesis “The steady motion of a slender ship” caught the attention of US Naval Research, which was keen to hire him at the David Taylor Model Basin. Ernie also worked at The California Institute of Technology, before returning to his alma mater, The University of Adelaide. There, with his profound depth of knowledge in technology, science and engineering applications, he steered diverse fields of applied mathematics as the Chair and Elder Professor of Applied Mathematics until his retirement.

With his primary expertise in fluid mechanics, Ernie supervised 25 PhD students and had over 170 papers published in eminent journals; his research covers a vast area including hydrodynamics, aerodynamics, bio-fluid mechanics, acoustics, analysis and many more. In 1999, Ernie was awarded the prestigious ANZIAM medal, the highest honour for an applied mathematician in our society. He was also the recipient of the Thomas Ranken Lyle medal from the Australian Academy of Science and the Centenary medal from the Federal Government, to name but a few.

ANZIAM duly decided to honour this devoted researcher, teacher and scientist for his leadership and contribution, with the introduction of the EO Tuck medal. More information on nomination of this award can be found at [The EO Tuck Medal](#). Since its inception in 2013, the recipients of this medal have been:

- 2013 Shaun C. Hendy, Victoria University of Wellington, New Zealand;
- Late Geoffry N. Mercer, Australian National University;
- 2015 Troy W. Farrell, Queensland University of Technology;
- 2017 Kate A. Smith-Miles, The University of Melbourne;
- 2018 Yvonne M. Stokes, The University of Adelaide;

2019 Scott W. McCue, Queensland University of Technology;
2020 Matthew J. Simpson, Queensland University of Technology.

As co-chief editors of the *ANZIAM Journal*, we have invited all recipients of the EO Tuck medal to contribute a paper to the journal, which will be subject to the usual reviewing process. This issue contains the first in this series by our most recent medalist, Matthew J. Simpson. We hope to see more papers by the past medalists in due course.

ANDREW BASSOM,
The University of Tasmania, Australia

GRAEME HOCKING,
Murdoch University, Australia