Editorial

Jurgen Schulte

SciMERIT School of Mathematical and Physical Sciences P.O. Box 123, Broadway NSW 2007 E-Mail: Jurgen.Schulte@uts.edu.au **DOI:** http://dx.doi.org/10.5130/pamr.v5i0.1503



PAM Review is the peer-reviewed student research journal of the School of Mathematical and Physical Sciences at the University of Technology Sydney. It was born out of the desire to create a practical student centered, authentic learning experience in a highly theoretical course that is exciting and challenging and facilitates to promote the desired graduate attributes.

The student journal was first introduced into the second-year physics course Energy Science and Technology (68412) in 2014. Energy Science and Technology is a one-semester course (class) open to students in Science and Engineering that covers the thermodynamics of macroscopic and microscopic processes in the context of energy production and efficiency.

The compilation of this research journal provides 350 students with an authentic, practical learning 300 experience in applying scientific methods to produce 200 a peer-reviewed original research paper in the form of 150 a meta-study that reaches well beyond a mere 100 literature review. Each student's self-selected 500 research project is expected to contribute new knowledge to the body of science and engineering. The research task has been designed to create an



environment similar to the creation of a real scientific research and publication process, including: working in a research team with a range of expertise; gaining expertise in a variety of scientific disciplines; consulting professional scientific databases; researching peer-reviewed scientific papers; synthesizing relevant information; producing a professionally written scientific paper for publication in a widely indexed journal. While learning about the theoretical physics concepts of energy production, here students have the opportunity to acquire discipline specific professional skills of lasting impact.

Published by with UTS ePRESS, the university online publishing house, the peer-reviewed student research presented in this journal is read in over 60 countries, registered over 30,000 unique downloads and is cited in major science journals, and has been part of a UTS short video <u>documentary</u> recently.

PAM Review is a UTS ePRESS Student Journal showcasing outstanding student works.

Copyright 2018 by the authors. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 Unported (CC BY 4.0) License (<u>https://creativecommons.org/licenses/by/4.0/</u>), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license. **Citation:** Schulte, J. 2018. Editorial, PAM Review: Energy Science & Technology, Vol. 5, p. 1. http://dx.doi.org/10.5130/pamr.v5i0.1503