

Guest editorial: “Miraculous and Almost Godlike Tasks”?

*“Knowledge is power, and
the right knowledge lets man perform miraculous,
almost godlike tasks”*

- Prof Robert Langdon

(The main character in Dan Brown’s novel “The Lost Symbol”)

It is an honour to write the guest editorial for this special edition of our Journal. This edition commemorates 25 years of academic publishing. It contains articles that are an expansion of a selection from two conferences in 2011. And, our conferences have the same proud heritage. The first one took place in 1986 at the Burgerspark Hotel in Pretoria. As a post-graduate student at the University of Pretoria, I was there, and I participated, under the expert guidance of Proff Kris Adendorff and Paul Kruger, who both instilled the love for Industrial Engineering in me, and who made sure that I realise just how important activities such as the Journal and our annual conferences are for the continued growth of our discipline.

We, as engineers, are involved in a continuous search for knowledge and, through our activities, we are expanding the existing pool of knowledge. The fact that you are reading (and maybe publishing in) this Journal confirms the fact. Why? Refer to Robert Langdon’s quotation above. Knowledge is one of the elements of the foundation that makes us engineers. We, as engineers, use this foundation, together with our skills and experience to create wonderful products and services which improve life for our communities every day. And, if we want to remain relevant as individuals and as a discipline, we need to be active participants in the process of collecting, creating, disseminating and applying knowledge, so as to strengthen this foundation.

An exceptional characteristic of an Industrial Engineer is the fact that we are integrators of multiple disciplines. We apply our unique skills to identify those opportunities in separate disciplines, integrating them and thereby providing a new solution not previously attempted. However, we therefore need to continually explore those new horizons, by understanding the other disciplines, identifying the similarities and differences, and thereby expanding our abilities to leverage these realisations into new solutions for the community. This is why we have been expanding our conference footprint to other disciplines. Recent examples include:

- In 2005, SAIE organised a joint conference with ORSSA.
- In 2011, SAIE partnered with INCOSE and the Engineering Management fraternity to create the ISEM conference.
- And, by 2012, we had expanded our footprint internationally to involve noted academics in an international conference (CIE42), in collaboration with the internationally accredited Computers and Industrial Engineering journal.

We realised in 2006 that we needed to create a motivation for academics to participate in SAIE’s annual conferences. We thus started with a paper peer review process at the 2009 conference, giving conference participants an option to either simply present and share knowledge as in the past, or to also have a more formal process where you can submit a paper, have it reviewed by peers and then present it. This made it attractive for academia to become involved, and by bringing industry and academia together, new opportunities were created.

The academic and research environment in South Africa requires academics to publish in journals, or to present academic and research papers at peer reviewed conferences. This publication opportunity successfully complements this highly regarded accredited academic and research Journal (the *South African Journal of Industrial Engineering*), and it often

serves as a first opportunity for academics and their students to expose their research to the community at large. As a result, our conferences became a popular choice for academics and other researchers in our discipline over the last four years - in 2009 there were 21 papers in the Proceedings, and by 2011, there were nearly 80 papers. It is expected that the 2012 CIE42 conference will have more than 120 papers published in the proceedings.

But, conferences are held primarily because we want to share new information and our experience in applying our knowledge in practice, and also to “network”. The primary focus of our conference is not to deliver high quality research outputs, but rather to use this as a first sounding board for sharing our new ideas. The quality expectation of a paper in the conference proceedings is therefore lower than for an academic journal. But, what about those papers that do have the potential for further publication? We decided in 2011 to create this special edition, where papers from the ISEM 2011 and RAPDASA 2011 conferences were evaluated, and the authors invited to develop those papers further so as to satisfy the quality and review requirements of the Journal. This edition is thus the result of successful collaboration between the editorial panels of the conferences and our Journal.

It is yet another vehicle whereby the Southern African Industrial Engineering community can document and share new knowledge, thus further expanding our foundation so as to enable us to perform Robert Langdon’s “miraculous, almost godlike tasks”!

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Organising committee CIE42
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