
Editorial

It is my real pleasure to write this editorial to this second issue of the *Global Journal of Engineering Education* (GJEE), published in the eighth volume of this Journal. This is especially so because this issue consists of the UICEE Best Paper Awards presented at the two recent international gatherings of engineering educators organised by the UICEE. I am referring to the successful 7th UICEE Annual Conference on Engineering Education, which was carried out by the UICEE in Mumbai, Maharashtra State, India, between 9 and 13 February 2004, and the likewise successful 4th Global Congress on Engineering Education that was held at Menam Riverside Hotel, Bangkok, Thailand, between 5 and 9 July 2004, with King Mongkut's University of Technology Thonburi (KMUTT), Bangkok, a Partner institution of the UICEE, as the principal co-sponsor and co-organiser.

The two events provided the perfect settings for the academic debate on critical issues and challenges in engineering and technology education for the 21st Century.

It was clear from formal and informal discussions carried out during the two events that universities are preoccupied with the debate on the future of higher education at a time of global instability, changing societal needs, rapidly advancing technology, changing production processes and steadily increasing globalisation. This occurs when the world is preoccupied with war, serious and contagious diseases, the limping global economy, the total shift in national and international priorities, and many other worldwide problems. The prevailing question was, and still is, how can modern academia cope in this situation?

We were extremely lucky, indeed, to have a leading international educationalist based in Australia, Prof. Michael J. Osborne, Vice-Chancellor and President of La Trobe University, Melbourne, Australia, as well as President of the International Network of Universities (INU), who addressed participants at the Congress Gala Banquet and endeavoured to answer many critical questions and burning issues in his invited occasional address. In particular, the speaker presented and discussed two models of academia, namely; the traditional model, where the objective of university education is to engage in pure academic discourse, and is grossly a way of life, whose protagonists claim that it upholds so-called *traditional values*, as well as the most contemporary model, whose underlying objective is to prepare students for their professional life by developing utilitarian knowledge and skills. The speaker aired and debated many important issues that international academia faces these days. Indeed, the address stimulated a considerable debate at the time on how engineering and technology education fits into these models of higher education institutions, and what should be the role that engineering educators play in current and future developments. Our readers will find the full text of Prof. Osborne's address presented in Bangkok in the opening article of this Edition.

Numerous exceptional papers were presented at the 7th UICEE Annual Conference on Engineering Education. As at prior UICEE conferences, participants were asked to select the top papers included in the Proceedings and presented at the Conference to receive the UICEE Best Paper Awards. Based on the highest frequency of votes, the chosen award papers were announced at the Conference Banquet.

The 2004 UICEE Diamond (First Place) Award for a distinguished contribution in delivering an outstanding paper to the 7th UICEE Annual Conference was won by Ö. Göl, A. Nafalski, Z. Nedic and K.J. McDermott, of the University of South Australia, Adelaide, Australia, for their paper titled: *Peer tutoring in high schools to increase engineering awareness*. The Platinum (Second Place) Award was given to S.S. Mathew and J. Earnest of the Technical Teachers' Training Institute, Bhopal, India, for their paper entitled: *Innovations in the laboratory for competency development*. The Gold (Third Place) Award was bestowed upon K.J. McDermott, A. Nafalski and Ö. Göl, of the University of South Australia, Adelaide, Australia, for their paper called: *The quality assurance of engineering programmes at the University of South Australia*. Two papers received the same number of votes and both were awarded the 2004 UICEE Silver (Fourth Place) Award. The first paper, titled: *Defining, teaching and assessing problem solving skills*, was written by N.J. Mourtos, N. DeJong Okamoto and J. Rhee all of San José State University, San José, USA, whereas the second paper called: *The application of new simulation techniques in marine engineering education*, was a collaborative work of R. Cwilewicz and L. Tomczak, both of Gdynia Maritime University, Gdynia, Poland, and Z.J. Pudlowski of the UICEE. It should be mentioned that the latter, being the UICEE Director, did not accept

the award. Although two papers received the Silver Award, based on the same frequency of votes, the Awards Committee decided to award the next paper with the highest number of votes with the 2004 UICEE Bronze (Fifth Place) Award. The lucky recipients of this award were A.S. Patil and M.J. Riemer, both of the UICEE, for their paper entitled: *English and communication skills in engineering undergraduate courses in the Indian State of Maharashtra*.

Again, many extraordinary papers were presented at the 4th Global Congress on Engineering Education. As at previous UICEE conferences, participants were asked to select the top papers included in the Proceedings and presented at the Congress to receive the UICEE Best Paper Awards. Based on the highest frequency of votes, the chosen award papers were announced at the Congress Closing Ceremony.

Two papers received equal first place. The Diamond (First Place) Award for a distinguished Congress contribution was accorded to T. Goodliffe, from the Caledonian College of Engineering, Muscat, Oman, for her insightful lead paper entitled *Introducing personal development planning: educating engineers for the workplace of the future*, as well as to P.D. Chidgupkar and M.T. Karad of the Maharashtra Academy of Engineering and Educational Research, Pune, India, for their perceptive keynote address called *Vedic mathematics in engineering education and its applications*. It should be noted at this point that both papers come from Partner institutions of the UICEE. As there were two Diamond Awards, no Platinum (Second Place) Award was given. Two other papers received equal next placing. The Gold (Third Place) Award was bestowed upon L.N. Green of the University of New South Wales, Sydney, Australia, and E. Bonollo of the University of Canberra, Canberra, Australia, for their noteworthy lead paper titled *The importance of design methods to student industrial designers*. The other Gold Award was presented to Ö. Göl, A. Nafalski, Q. Tran and T. Nguyen, of the University of South Australia, Adelaide, Australia, for their engaging paper covering *A Web-based conference management system as a design project*. As no other paper gained the sufficient number of votes to meet the requisite minimum level, the Awards Committee decided not to allocate any further award.

On the occasion of the 4th Global Congress, the Director was invited by the Awards Committee to allocate two Director's Choice Awards to papers also considered to make a significant contribution to the Congress. The two equal awards were presented to C. Hacker of Griffith University, Gold Coast, Australia, for his very interesting lead paper on *Implementing a software teaching module for the real-time simulation of digital logic circuits*; and to K. Rochford, J. Baxen and A. Inal from the University of Cape Town, Cape Town, South Africa, for their notable lead paper entitled *Student research conferences for developing countries*.

On behalf of the UICEE members, staff, students and associates and, indeed, myself, I wish to congratulate the awardees for their noteworthy efforts and look forward to their continuous collaboration with the UICEE.

I trust that this particular Issue of the GJEE, with the award papers included, will stimulate considerable interest and will become a useful source of information on new and exciting undertakings in engineering education.

Zenon J. Pudlowski