

# AUSTRALASIAN ASSOCIATION FOR ENGINEERING EDUCATION

## NEWSLETTER

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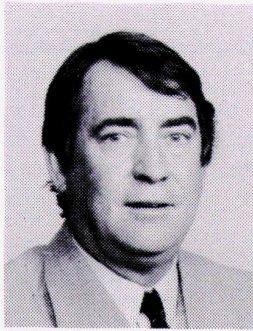


*By the time this issue is in circulation, the 3rd East-West Congress on Engineering Education will be well under way. This time, the Congress is being held at the Gdynia Maritime Academy, Gdynia, Poland, between 15 and 20 September 1996. The picture above shows the famous Polish tallship Dar Młodzieży (Gift of Youth), the flagship of the Academy. With favourable weather permitting she will sail participants of the Congress into a delightful night of fellowship on the Baltic Sea.*

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## FROM THE PRESIDENT



Prof. M. Wainwright

One of the great advantages of being appointed President of the AAEE is that I can write on pet topics that perhaps fall on deaf ears amongst many academic engineers in Australian universities. I read with interest the article *Engineering Business or the Business of Engineering* by Chris Martin (who is not an engineer by training) in the June issue of the AAEE Newsletter. In that article Chris Martin referred to three reports released in 1995 that recommended major changes to the education of professional engineers in the area of management. The article is one that reveals lost (but not totally lost) opportunities for faculties of engineering in Australia.

The August 20 Budget is awaited with great expectancy but one thing is certain: it will encourage major change in the way all faculties, including engineering, do business. This is particularly true in the area of postgraduate coursework education. Chris Martin's paper highlights the increasing need for training engineering managers, but not only in the areas covered by the MBA and Master of Commerce programs that emphasise financial and human resources management. Indeed the faculties of engineering have had a tremendous opportunity to develop programs in the management of technology but this has largely been ignored. This has enabled the IEAust, through Engineering Education Australia, and APESMA, through Deakin University, to establish programs conducted by distance education.

Why have the engineering faculties failed to meet a major demand for postgraduate training of engineers? The reason is that most engineering academics consider management of technology to be *soft* and prefer to teach advanced courses in their fields of research interest. These advanced courses in engineering science are not very popular with local students, although there is significant demand from international students from countries where manufacturing industries require high levels of technical skills.

The value of our postgraduate coursework programs will be put to the test when we are required to charge substantive fees. This will require that the course materials and service to the students will be at the level of the best management/business schools in the country. The clients will only pay for quality programs of direct benefit to their positions in industry. We will therefore see a shift from engineering science type postgraduate courses to so-called *soft* engineering courses such as maintenance management, energy management etc.

The real issue in postgraduate education of engineers is the extent to which the learning can be directly applied and adds value. We only need to look to which short courses are heavily subscribed in order to see the topic areas that should be taught in coursework postgraduate programs. The real productivity gains in Australian industry can be made by effective management of technology. A prime example is efficient maintenance of plant and equipment. This is not an area of engineering science but it is, nevertheless, an area that is of vital importance to the competitiveness of companies.

What has been discussed above is not a put down of engineering science research. On the contrary, many of those researchers are more than capable of putting together excellent subjects in management of technology related to their fundamental research. Such subjects will attract highly qualified engineering graduates who need the management of technology skills to enhance their performance and their career opportunities.

The cost of producing teaching and learning materials for effective postgraduate coursework programs is extremely high. The challenge is therefore to establish small numbers of subjects at many universities so that their quality can be shared. One positive outcome of the 1996 budget is that greater importance will be placed on collaboration in postgraduate education between universities.

The 8th Annual Convention and Conference of the AAEE will be an excellent opportunity



to discuss this issue and develop effective collaborations. We look forward to seeing you in Sydney.

Professor Mark Wainwright  
Dean, Faculty of Engineering  
The University of New South Wales  
President of AAEE

## DIARY OF THE PERIPATETIC FOUNDATION PRESIDENT

### Saturday May 11



Prof. T.W. Cole

Up early, walking through the Glasgow drizzle to catch the 7am bus to the airport after making sure that the lecture notes and overhead slides were, indeed, packed in the minimum amount of luggage I had allowed myself. Took the advice of British Midland airport staff and booked my bag all the way through to Warsaw, looking forward to a relaxed transfer at Heathrow to the British Airways flight.

This was about my seventh trip to Poland where, over the last five years, I have been associated with the setting up of an English language engineering degree program in the centre of Poland at the International Faculty of Engineering (IFE) at the Technical University of Lodz. It was the second time I had offered to give the small first year subject on graphical *Communication Skills and Design*.

Hydraulic leak on the scheduled BA aircraft! Change of plane and a one-hour delay. I thought of Jerzy (George) already on his way to Warsaw airport and of our plan to link up at Warsaw for the 120 kilometre bus trip to Lodz where he is a Vice-Dean at IFE. The new terminal at Warsaw was now a familiar sight but, horror of horrors, the baggage carousel emptied and the awful realisation hit me - no baggage! For the first time in more than a million kilometres of airtravel it had finally happened to me! At least my important papers were in the hand luggage and the Polish staff were most helpful to this annoyed passenger. The bag was traced to London and most assuredly would be delivered to Lodz tomorrow.

A slightly worried Jerzy and I took the next *Polski Express* bus and got to Lodz two hours late. A quick taxi ride to the University's house in *Tkacka* Street, collect the keys from a patient caretaker, dump the hand luggage, and off to Jerzy's house for a most pleasant Polish cold supper with his wife Anna and son Peter. With borrowed razor and toothbrush, return to *Tkacka* for a welcome sleep.

### Sunday May 12

A little concerned over the *freshness* of my clothes! Collected at 10am to join Jerzy and his family at his nephew's first communion. Being non-religious and non-Polish speaker felt somewhat as an outsider at the very crowded church. Discovered that more than 90 per cent of the children in Poland take communion. Then to a top restaurant for lunch where I was made very welcome and was amused to see, just as at weddings and funerals, relatives meeting each other for the first time for many years. Speech by the god-father and toasts were combined with relaxing walks in the sunny garden between courses. Then off to the nephew's house to be served an enormous range of cakes by the mother. Jerzy's son Peter given the task of setting up the computer - their gift to the nephew (a gift-giving tradition which I was told is only a recent development of what is essentially a spiritual occasion).

Return to *Tkacka* but no luggage. Finally a great sense of relief when discover it had been delivered to the Faculty building instead. This building was like an old friend - a small palace which had been built for an industrialist and stood at the edge of a park in which the fresh new leaves and grass shone in the evening sunshine. The plaques on the front wall proclaimed in Polish and English its new affiliation and, by also indicating an



*Australian Information Centre*, indicated the direct and financial support Australia had made in IFE's establishment.

Late evening phone calls from Tomasz, the Vice-Dean who runs IFE, with words of welcome and offer to collect me in the morning.

### **Monday May 13**

Collected by Tomasz at 8am for a rushed trip to the Faculty and my first lecture at 0815. For the first time I see the new lecture room created from an old garage using Australian government funding and am pleased with its atmosphere and equipment.

The 56 first-year students appear as bright, friendly and pleasant as the ones I got to know in previous years and who are now in their second and third year. It seems a long way from the early IFE planning meeting down in *Spala* and just one year from seeing the first students graduate.

Lecture followed by 2 hours of workshop as I get to know the students better and as their early skills in using graphical and visual communication in engineering emerge. Lunch at one of the many restaurants which have sprung up and enjoyed my *barszcz* soup and traditional main course accompanied by excellent beer, one of three brands now owned by Australian companies (Australia is about the third largest inward investor to Poland). Another lecture and tutorial set the pattern of a semester-long course being crammed into just 2 weeks.

### **Tuesday May 14**

Took the number 27 tram to IFE and reflected on the millions of people these trams carry each year but also the increasing population of cars placing stress on the infrastructure and replacing industrial pollution with vehicle exhaust pollution.

Great achievement! Found an excellent restaurant close to IFE and successfully identified and ordered the dishes. At long last I seem to be mastering the spelling and pronunciation rules of Polish. Five hours of contact with the students on this second day to expose them to the full range of concepts needed for the course. Set the assignment.

### **Wednesday May 15**

The opening day of the IX International Student Symposium - a regular conference aimed at international student contact and having the theme *Microcomputers in Engineering*. Joined Professor Jan Krynski, Rector of the Technical University of Lodz, in the opening ceremony at which I expressed how critical international contact and networking was to future careers.

Extremely pleased to hear from the Rector that the university had now bought the premises occupied by the IFE and had major aspirations to develop a dilapidated but potentially grand factory building into a major IFE site facing onto the delightful park setting. On other matters, the university imperatives on budget and quality sounded very familiar.

Just time to squeeze in one more lecture before joining the conference students on the bus for the seven-hour trip to *Szklarska Poreba* - high in the *Silesian* mountains. Intrigued again by the Germanic architecture of *Wroclaw (Breslau)* which reminds me of the major upheavals which took place here at the end of the last war.

At the lunch stop made first contact with the students from the University of Strathclyde who are part of the first one-semester exchange with IFE under the European Union TEMPUS program.

A late supper, then an unsettled night on a hard bed listening to noises emanating from the heating pipes!



#### Thursday May 16

Awoke to country noises and a sore back - felt envious of those who were staying in the lodge owned by the university rather than my company-owned lodge - a remnant of the old days when companies provided recreation holidays for their staff.

The mountain ridges still showed patches of snow but also the sad and tragic patches of many grey stumps of trees killed by acid-rain.

The first of the sessions where students presented in English with varying degrees of facility in the language. Overall though, there was a good comparison with the often halting presentations of some of our Australian students! Managed to practice a few words of Russian with 2 from *Novgorod* and was impressed with the electro-mechanical systems they had developed (and the cheap prices for which I could buy them).

Rain dampened enthusiasm for the afternoon excursion to the nearby *Kamienczyk's* waterfall. Instead I finished reading John Prebble's *Culloden* - placing flesh on my recent visit to Inverness and the bleak battleground on which the tragic battle took place 250 years ago this year. Drinks after the evening session gave an opportunity to talk in detail with the Scottish students from Strathclyde. Their settling in and concern over course equalities mirrored the views I had heard from the group of Polish students who had gone to Strathclyde!

#### Friday May 17

Up early for our bus trip over the mountains to the Technical University in Liberec in the Czech Republic. Endless reminders to us about passports/visas due to the stranding last year of an Australian who had gone to the Czech Republic without a re-entry visa to Poland.

University was of the same *standard* Eastern European style and with strong research strengths in surface physics. Introduced to a small start-up company in electrical instrumentation - a sign of the emergent entrepreneurial spirit reshaping Central and Eastern Europe. Lunch in the student *Mensa* compared poorly with the student union at home.

Afternoon spent in the town square looking at antique shops, drinking coffee, watching the tourists and reflecting on the tortuous history endured by this complex corner of Europe embracing Poland, Germany and the Czech Republic. Dinner in a small pub up in the hills amongst most beautiful forest and neat holiday/farm cottages. Enjoyed the cheaper beer before the bus trip home.

Border guards only interested in the Russian passports.

#### Saturday May 18

More presentations - including an unexpected talk by myself.

Enjoyed sitting in the afternoon sunshine until the thunderstorm came with an extraordinary roaring noise through the trees. Luckily the rain passed sufficiently to permit the planned traditional bonfire. Looked with interest at all the frustrated *boy scouts* fuelling the fire and cooking the sausage on the end of long sticks. More good, cheap Czech beer!

#### Sunday May 19

Sent the final postcards before the long bus trip back to Lodz.

On the way had a tragic reminder of the much too high road toll in Poland. A village cyclist had been killed by a car on the main highway running through the village. The sight of the very distraught wife placed a dampener on the bus for some time.

A few hours later and there we were sitting in a potato field watching the driver change a



burst tyre. This was not the first time I wondered what I was doing here! Home late with shops shut and no food in the house.

### **Monday May 20**

An 08.30 start to a three-hour lecture/tutorial. Collected the 55 assignments which needed to be marked that day. Solved the eating problem by going back to that excellent restaurant near IFE! Late to bed after listening to the BBC World Service on the small shortwave receiver I always have with me.

### **Tuesday May 21**

Final lectures to the students covering the economic context of engineering and the role of product design. Gave the first of my revision/practice sessions leading up to the exam on Thursday. In the evening, scanned the satellite TV channels in a desperate (and vain) search for something of interest. Instead, performed my domestic duties and washed some clothes before bed.

### **Wednesday May 22**

More practice for the students. Wrote the examination booklet and made 55 photocopies.

Introduced Tomasz and Jerzy to my restaurant and we discussed at length degree accreditation procedures and quality assurance in education. Many notes taken.

Made myself available until 8pm for late student assistance. Three students turned up for questions and revision. Returned to *Tkacka* to the sound of Japanese and the smell of Japanese food. Mr Habayayashe, the other occupant, was entertaining some fellow teachers of Japanese who, like him, had been sent from Japan for three-year stints in Central Europe.

### **Thursday May 23**

Reviewed the draft IFE student course questionnaire modelled closely on that from Sydney University. Became acutely sensitive to the cultural differences between universities - especially concerning questions about lecturer performance.

Students sit the exam in two groups. Most seem to do a reasonable job. Interrupted the marking to accept the invitation of Maria Kotelko to have icecream at a very nice and stylish icecream parlour on *Piotrkowska* Street amongst the many grand *Art Nouveau* buildings on this main street of Lodz.

Returned to *Tkacka* in time to meet Tomasz who had invited me to his home for dinner. Enjoyed again the honour of joining a family over a most pleasant dinner. Tried to encourage young daughter Susie to practice the English she, along with all her colleagues, had already been learning at school for several years.

### **Friday May 24**

Invited by the Rector and Senate to the university's fifty-first anniversary celebrations in the form of a special degree ceremony followed by a reception. Fascinated by the depth of the academic tradition as evidenced by the academic dress and chains of office which differ from that in Australia. Moved by the great degree of underlying commonality of academic tradition. Also impressed by the Polish cultural tradition of giving of flowers and the men's gallant greeting kiss just above the ladies' hand.

I was honoured to be officially welcomed along with representatives of the other universities in Lodz, the local Ministry representative, the city Mayor and many other dignitaries. Pleased to see the involvement of the supervisors in the award of the higher doctorates to their candidates and see the strong emphasis on advanced learning and research within an



international community of scholars.

When Professor Szosland received his honorary doctorate, even though I could follow little of the Polish citation and the corresponding one in Latin, the sense of his achievements were very apparent. This *honoris causa* doctorate as well as the lengthy process through *doktorow habilitowanych* to the full doctorate in Poland are given a greater degree of recognition and significance than is the case in Australia.

Unfortunately, local television imposed their presence in a way which destroyed much of the dignity of the occasion. This dignity as well as a sense of common tradition was, however, raised by the singing of *gaudeamus* by the university choir!

At the following reception, very much appreciated the variety and presentation of the food and drinks and felt much sympathy for the Rector as he tried to maintain quiet through a long stream of congratulatory speeches to Professor Szosland.

Had a good opportunity to meet and talk with Professor Janusz Turowski who hoped I would come back to Lodz in October to give a keynote address to his UNESCO-sponsored conference on university-industry interaction. Had to point out that other commitments may preclude this.

Later am invited to an entirely novel experience, that of *Juwenalia* '96 in which the authority in the university is passed by the Rector to the students for the duration of the weekend. Join the Deans, Vice-Rectors and Rector dressed up in courtier's cloaks at the head of a long and noisy student procession, along with horse carriages and a wide range of fancy dress, as we snake through the streets past the decorated student residences.

Had no indication of what was to follow as we entered an open-air entertainment area set up with stage and, before it, a table and benches laden with numbered cakes, bread, milk and pints of beer! At least it was only the Rector, Rector-elect and Vice-Rector (Student Affairs) who had to mount the stage. After a formal passing of University Mace (and hence authority) to the President of the Student Union, I was most pleasantly amazed and yet impressed at the good spirit in which these 3 university dignitaries submitted to their new position of being *subservient* to the students. They were led through a series of activities and actions which, with great humour and preparedness to join in the spirit of the occasion, caused great amusement and appreciation amongst the large student body and, in my view, did much to create a campus spirit so sadly lacking from much of Australian higher education.

As to those numbered cakes: we were the judges of competitions - for decorated residences, for cakes and for bread. As for the beer, the whole event was sponsored by a local brewery, local radio station and a cigarette company. After much cake, much beer, a lot of laughter, and deafening music from the rock band we older academics filtered away to leave the revelry to a most impressive group of fun-loving and mature students.

#### **Saturday May 25**

Taken by Tomasz and Susie to the 10.30 *Polski Express* bus to Warsaw airport. A few hours' wait, purchase of the duty free, and back to London. A few more hours for the connection to Glasgow gave me time to phone son Toby, in London, on the long and difficult path to become a counter-tenor opera singer. Home by 11pm.

Professor Trevor W. Cole  
18 June 1996

#### **BOOK REVIEW**

C. Baillie, P. McHugh and W. Davies, *Professional Engineering: Teaching for Better Learning, An Introductory Course*. Committee for the Advancement of University Teaching (CAUT), 1995. ISBN 0 646 24763 8.



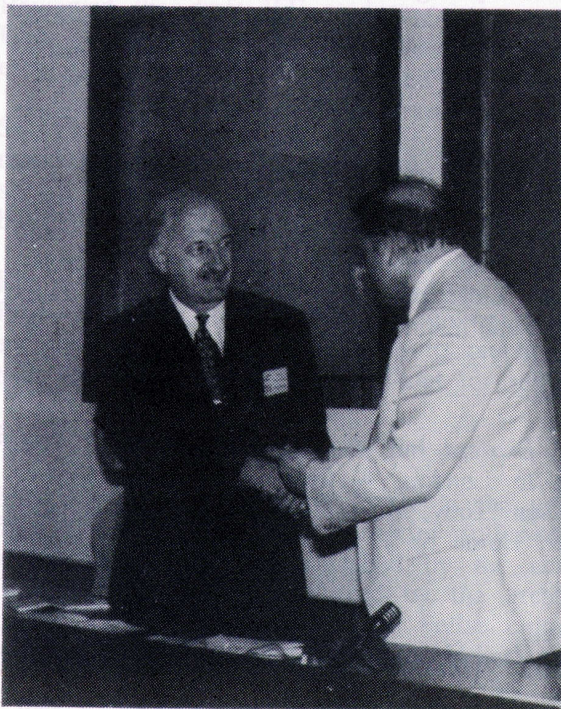
This book describes a first-year *Professional Engineering* course introduced into the Department of Mechanical and Mechatronic Engineering at the University of Sydney. The 28-hour course is covered in a 14-week semester and is assessed on the basis of attendance and participation (20%), essay on accessing information (20%), major report on a particular topic (30%), oral presentation (10%), engineering economics assignment (20%). As this assessment break-down suggests, the course focuses to a significant extent on communication skills and the benefits of creativity and broadly based thinking. The course is designed to facilitate learning rather than to impart knowledge, and does so by encouraging students to develop oral and literary skills, independence and creativity in learning and appreciation of wide-ranging issues of practical relevance to professional engineering.

The syllabus comprises the following topics: accessing information, engineering economics, environment, ethics, issues of quality, learning skills, liability, occupational health and safety, oral communication, project engineering and written communication. The book arranges its presentation of these topics alphabetically, providing relevant background information, lesson formats, desired outcomes, lists of references and class exercises. The course is designed to stimulate thought and discussion about issues that affect the professional conduct of engineers in the late-twentieth century. As is appropriate, the course is interactive in nature, requiring of students an ability to undertake work in a team environment as well as to defend their informed opinions and problem solutions in the presence of their peers.

This publication presents its material in an accessible and engaging way, and its appeal is enhanced by the use of photographs and quirky cartoons and by the adoption of a landscape format. The one aspect of the book that is distracting is the relatively large number of typographical errors that slipped through the net - a better job of proofreading could reasonably have been expected.

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#### AAEE 1ST VICE-PRESIDENT AWARDED AN HONORARY DOCTORATE IN UKRAINE



*A/Prof. Zenon Pudlowski receives his doctorate from Prof. A.A. Minayev, Rector of the DSTU in the Ukraine.*

The AAEE 1st Vice-President and Executive Director, Associate Professor Zenon J. Pudlowski, who is also Director of the UNESCO Supported International Centre for Engineering Education (USICEE) and Associate Dean (Engineering Education) in the Faculty of Engineering at Monash University, was awarded an honorary doctorate from the Donetsk State Technical University (DSTU) in Donetsk, Ukraine. The presentation of the award formed part of the May/June celebrations of the 75th anniversary of this famous Ukrainian technical university.

The doctorate was awarded in recognition of A/Prof. Pudlowski's academic achievements in general, and more particularly of his outstanding contributions to research and development in engineering education both in Australia and abroad. *This award is a reflection of the status and quality of engineering education in Australia, and especially at Monash University. Australian engineering education enjoys a very high reputation and respect in Central and Eastern Europe,* A/Prof. Pudlowski said.



*With this status, Australia has the potential to become one of the substantial providers of quality education to this market of over 400 million people, and education institutions should capitalise on that, he added.*

Australian education institutions have recently begun extending their involvement in Central and Eastern Europe, and A/Prof. Pudlowski's long-standing commitment to, and deep knowledge of, education in that part of the world has led to the development of engineering education ventures in Poland and the Ukraine. A/Prof. Pudlowski was appointed Honorary Dean of the *English Engineering Faculty* at the DSTU in May 1995 in order to lead the development of modern engineering education courses in the Ukraine. This appointment followed his leadership in the successful development of the International Faculty of Engineering (IFE) at the Technical University of Lodz in Poland, of which he has been Foundation Dean and Professor (in absentia) since 1992.

Work has been undertaken on the establishment of open universities in Poland and the Ukraine, with the Australian inputs coming from Open Learning Australia (OLA) and other associated education institutions, under the leadership of Monash University. *Joint commercial ventures of this kind will create a vehicle for the transfer of Australian expertise in higher education to countries in Central and Eastern Europe. These countries are in the transition period from a socialist to an open market economy, and are currently modernising their education systems. Such activities constitute an extension of our involvement in that part of the world,* A/Prof. Pudlowski added.

Associate Professor Zenon J. Pudlowski is one of 11 international figures to have been awarded an honorary doctorate by the Donetsk State Technical University.

*Dr David Parnham  
USICEE, Faculty of Engineering  
Monash University*

#### **FORTHCOMING CONFERENCES ON ENGINEERING EDUCATION**

**Austria, Vienna, 11-13 September 1996** - Educating the Engineer for Life-long Learning: SEFI Annual Conference'96. Organised by: University Extension Centre, Vienna University of Technology. Contact person: Mr Franz Reichl, Tel: +43 1 58801/4029, Fax: +43 1 5054961, e-mail: reichl@ecx.tuwien.ac.at

**Poland, Gdynia, 15-20 September 1996** - 3rd East-West Congress on Engineering Education. Organised by: USICEE/AAEE, Monash University, Clayton, Melbourne, Australia. Contact person: A/Prof. Zenon J. Pudlowski, Tel: +61 3 990-54977, Fax: +61 3 990-51547, e-mail: ZJP@eng.monash.edu.au

**Poland, Cracow, 22-24 September 1996** - International Conference on Quality Assurance in Higher Education. Organised by: University of Mining and Metallurgy, Cracow, Poland. Contact person: Dr Janusz Szpytko, e-mail: szpytko@uci.agh.edu.pl

**Poland, Lodz, 22-24 October 1996** - World Congress of Industry Leaders and Educators, Fair of Engineering Innovations and UNESCO-UNISPAR Seminar. Organised by: Technical University of Lodz and the Chamber for International Economic & Scientific Cooperation. Contact person: J. Golygowski, Tel/Fax: +48 42 819666 or 848722

**USA, California, Irvine, 5-6 December 1996** - 1st International Symposium on Energy and Environmental Management and Technology. Organised by: International Consortium for Research on Energy and Environmental Management and Technology (ICREEMT). Contact person: Prof. M.M. Mansouri, Tel: +1 714-509-1124, e-mail: mmansouri@ccmail.gsm.uci.edu

**Australia, Sydney, 15-18 December 1996** - 8th Annual Convention and Conference of the Australasian Association for Engineering Education. Organised by: USICEE/AAEE and the Faculty of Engineering at the University of New South Wales. Contact person: A/Prof. Zenon J. Pudlowski, Tel: +61 3 990-54977, Fax: +61 3 990-51547, e-mail:



ZJP@eng.monash.edu.au

**England, Sheffield, 24-27 March 1997** - 2nd Working Conference on Engineering Education, Professional Standards and Quality in Engineering Education. Organised by: The Engineering Education Research Group of Sheffield Hallam University. Contact person: Dr M. Bramhall, Tel: +44 114 253-3255, Fax: +44 114 253-3306, e-mail: ENG.EDF@shu.ac.uk

**Stockholm, Sweden, 14-17 June 1997** - Teaching Science for Technology at Tertiary Level. Organised by: Centre for Educational Research and Development, Royal Institute of Technology, Stockholm, Sweden. Contact person: Dr Soren Tornkvist, Tel: +46 8 790-8429, Fax: +46 8 790-6030, e-mail: tornkv@admin.kth.se

**Australia, Melbourne, 6-9 July 1997** - 1st Asia-Pacific Forum on Engineering and Technology Education. Organised by: USICEE, Monash University, Clayton, Melbourne, Australia. Contact person: A/Prof. Zenon J. Pudlowski, Tel: +61 3 990-54977, Fax: +61 3 990-51547, e-mail: ZJP@eng.monash.edu.au

**Philippines, Manila, 17-20 August 1997** - 5th International Conference on Engineering Education. AEESEAP. Organised by: College of Engineering, University of the Philippines, Diliman, Quezon City 1101, Philippines. Contact person: Dr Jonathan D.L. Salvacion, Tel/Fax: +632 928-3144 or +632 922-4714, e-mail: jonats@engg.upd.edu.ph

**Poland, Cracow, 16-20 September 1998** - Global Congress on Engineering Education, incorporating the *5th World Conference on Engineering Education*, the *4th East-West Congress on Engineering Education* and the *1998 International Congress of Engineering Deans and Industry Leaders*. Organised by: USICEE, Monash University, Clayton, Melbourne, Australia. Contact person: A/Prof. Zenon J. Pudlowski, Tel: +61 3 990-54977, Fax: +61 3 990-51547, e-mail: ZJP@eng.monash.edu.au

### 3RD EAST-WEST CONGRESS ON ENGINEERING EDUCATION

By the time this issue is in circulation, final preparations will be made for the *3rd East-West Congress on Engineering Education*. The Congress was initially planned for 1995, but the USICEE was asked to host and organise the *UNESCO International Congress of Engineering Deans and Industry Leaders* in July 1995, and it was impossible to stage the *3rd East-West Congress* at almost the same time. It will be held at the Gdynia Maritime Academy, Gdynia, Poland, between 15 and 20 September 1996.

The Congress is, undoubtedly, regarded as the showcase of Australian engineering education in Central and Eastern Europe. This time the Congress will concentrate its debates on *re-vitalising academia/industry links*, in a completely new situation, as countries in Central and Eastern Europe are endeavouring to restructure their economies. The Congress will present and discuss research and developmental activities in engineering education carried out throughout the world. Particular emphasis is being placed on the chosen theme in order to stress the importance and relevance of collaboration between university and industry in engineering education and industrial training in an era of advancing technology and modern production processes.

Several countries in this region are presently enjoying a period of dynamic expansion, and are making efforts to restructure and improve their engineering education in order to supply industries with highly skilled personnel. The paramount objective of the Congress is to devise ways of assisting these countries in their efforts by facilitating the transfer of information on engineering education, originating joint projects and fostering academic contacts between highly developed countries and those in Central and Eastern Europe.

The academic program of the Congress will include several keynote presentations and over 100 regular paper presentations. The paper presentations address almost all aspects of engineering education and industrial training and are included in a hardbound volume of Congress Proceedings. It is anticipated that over 150 delegates from 40 countries worldwide will attend the Congress, with Australians forming the largest national group after Poland,



the host country.

For the first time, the USICEE will present awards to the authors of the papers included in the Congress Proceedings that are considered to offer the most significant contribution to the field of engineering education. The award-winning papers will be selected by registered Congress participants in a popular vote. There will be five award categories: Diamond, Platinum, Gold, Silver and Bronze, selected on the basis of the greatest frequency of recognition.

Three major addresses will be presented at the Opening Ceremony by prominent international persons, representing large and diverse organisations. Professor Adnan Badran, currently Deputy Director-General of UNESCO, will present a talk on *Current Developments in Engineering Education at UNESCO and Their Relevance to the Situation in Central and Eastern Europe*. The second speaker, Professor Tadeusz Zoltowski, Vice-Minister in the Council of Ministers of the Republic of Poland and Director of the Directorate of Education, Science, Environment and Social Programmes, will present an address on *Science and Technology Developments in the Integration of Poland with the European Union*.

The third speaker will be Professor Michael L. Brisk, currently Dean of the Faculty of Engineering at Monash University. Professor Brisk leads an organisation which is the largest engineering faculty in the largest, and internationally focused, multi-discipline university in the Southern Hemisphere. Prof. Brisk brings to engineering education over 30 years' industrial experience in process control and process systems engineering. He will present his views on *Engineering Education for 2010: The Crystal Ball Seen from Down Under (An Australian Perspective)*.

Another highlight of the Congress will be the 9th Annual General Meeting of the *International Liaison Group for Engineering Education*. The ILGEE has strongly supported and promoted this Congress in the international arena, thereby strengthening international links and collaboration on engineering education.

The Congress has received several support grants. The most significant of these include a grant from the Australian Program of Training for Eurasia, Head of Mission Fund (APTEA HOM), through the generosity of His Excellency M. Jonathan Thwaites, Australian Ambassador to Poland, the Czech Republic and Slovakia, and an Australian Counterpart Fund grant administered jointly by the Australian Embassy in Warsaw and the Council of Ministers of the Republic of Poland through the Directorate of Education, Science, Environment and Social Programmes. The two grants will be used to subsidise the Congress registration fees of 59 academics from Central and Eastern Europe.

The Congress is included in the official program of celebrations of the 70th anniversary of the foundation of the City of Gdynia. The Lord Mayor of Gdynia, Ms Franciszka Cegielska, a mechanical engineer and a former academic staff member of the Gdynia Maritime Academy, will be the host and sponsor of the Congress's Cocktail Party in an exclusive restaurant located at Gdynia's highest point, called *Kamienna Gora (Rocky Hill)*. It is anticipated that the Deputy Lord Mayor of Gdynia, Dr Maciej Brzeski, also an engineer, will be the speaker at the Cocktail Party.

UNESCO, the umbrella organisation for the USICEE, is also interested in providing its resources and expertise for the development and modernisation of national education systems in Central and Eastern Europe. Much of this effort is concentrated on environmental issues and those leading to sustainable development for the preservation of the environment. These initiatives may provide new and useful experiences for the individuals involved, who are able to profit from such experiences in order to devise and develop more general approaches and models for their future application in developing countries. Also UNESCO, through the generosity of its Deputy Director-General, Dr Adnan Badran, has come up with a small grant to support the participation of seven academics from developing countries.

The Congress organisers are grateful for this financial support and wish to express, on behalf of all the beneficiaries, their sincere thanks to the granting bodies.



The Congress social program has been structured so as to provide a golden occasion for some relaxation and enjoyment for participants, accompanying persons and Congress guests. The Gdansk-Gdynia-Sopot agglomeration is one of the most important industrial and cultural regions of Poland. It will provide the visitor with an unforgettable insight into contemporary industrial developments, especially in the maritime industry, and also with an opportunity to visit various historical places and tourist attractions.

It is anticipated that Mr Lech Walesa, Former President of the Republic of Poland and the creator of *Solidarity*, the first free trade union in the former Soviet block, will attend the Congress Banquet, to be held on board of *Dar Mlodziezy* (*Gift of Youth*).



*During a visit to the Gdynia Maritime Academy (GMA) last June, the Congress General Chairman, A/Prof. Zenon J. Pudlowski, met Mr Lech Walesa, Former President of the Republic of Poland. Mr L. Walesa accepted an invitation to attend the Congress. It is anticipated that he will address Congress participants at the Congress Banquet. The picture above shows (l-r) Former President Lech Walesa; Professor Romuald Cwilewicz, Vice-Rector of the Gdynia Maritime Academy and A/Prof. Zenon J. Pudlowski.*

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For details of the Association and membership applications write to the Editor:

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*Association members and academic institutions are invited to contribute to the Newsletter on matters relating to membership and engineering education.*

*Send contributions to the Editor at the address above.*