



THE GLOBAL BULLETIN OF ENGINEERING EDUCATION

Successful 2014 World Engineering Education Forum in Dubai

Last month, from December 3-6, engineering education stakeholders from over 100 countries gathered in Dubai to exchange ideas, create collaborations, and learn about best practices in engineering education.

The American University in Dubai (AUD) was a grand host to this fruitful event, and participants went home enriched by the experience.

A main highlight of the event was the Opening Ceremony Keynote Addresses by the Director-General of the Dubai Health Authority, HE Eng. Essa Al Haj Al Maidoor, an engineer and leader in Dubai, and HE Elias N. Bou Saab, the Minister of Education and Higher Education of Lebanon and Executive Vice President of AUD. HE Al-Maidoor emphasized the role of engineering in civilization and development – in days past and the future. HE Saab stressed the importance of events like WEEF, which promote the development of engineering education.

The weekend before the WEEF officially started, SPEED held its 10th annual Global Student Forum (GSF) during the preceding weekend, during which industry representatives were judges of their Action Plan contest.

IFEES once again held its annual Awards dinner, recognizing Luiz Scavarda, Krishna Vedula, and Yury Pokholkov, for their leadership in engineering education globally and regionally. At the annual General Assembly, members elected Uriel Cukierman to serve as the next IFEES President (2014-2016), and five new executive committee members (2014-2016): Alaa Ashmawy, Michael Auer, Stephanie Farrell, Michael Milligan, and Khairiyah Mohd-Yusof.

The GEDC announced Marita Cheng as the recipient of the 2014 GEDC Airbus Diversity Award on 3rd December.



IGIP held their annual conference during the WEEF, providing the opportunity to submit papers for the Forum. IGIP reviewed over 500 papers, and selected about 200 to be presented at the Forum.

The venue for the 2016 World Engineering Education Forum was announced at the Closing Ceremony. The Korean Society for Engineering Education will host the 2016 WEEF in Seoul, South Korea in November 2016.

Look out for a WEEF Conference Report, with summaries of technical sessions and social events, which will be published in the first quarter of this year.



Canada's engineering leaders launch design innovation partnership

The world needs a new kind of engineer to solve our greatest challenges, said Lassonde School of Engineering Dean Janusz Kozinski today as he launched a new partnership with Quanser, one of Canada's most innovative companies.

"Our country needs engineers with passion and perspective, or as we call them Renaissance Engineers™. This bold collaboration with Quanser will give our students and researchers the opportunity to develop design-focused solutions to the emerging global challenges we all face," said Kozinski.

The new Chair in Design Engineering for Innovation has been created by the Lassonde School of Engineering and Quanser with the support of the Natural Sciences and Engineering Research Council of Canada (NSERC).

Markham-based Quanser is the world leader in the design and manufacture of advanced systems for real-time control design and implementation used in education, research and industry.

Quanser Chief Executive Officer Paul Gilbert said, "Quanser is thrilled to be the lead partner for this amazing adventure. We see in the Lassonde School of Engineering an institution of vision and creativity, and we look forward to world leading collaborations that will change the way we prepare the leaders of tomorrow."

Prof. Kozinski and Mr. Gilbert were joined at the launch of the new partnership today by NSERC Chief Operating Officer Janet Walden, Markham Mayor Frank Scarpitti, and York University's Vice-President, Research & Innovation Robert Haché.

"This partnership is not about research in ivory towers or developing IP. This is all about giving everyone at the Lassonde School of Engineering the opportunity to apply the principles of design to solve real world problems: whether they are a first year undergraduate or an advanced researcher

with Quanser's exceptional team," added Kozinski.

"Innovation happens when talented people collaborate with unpredictable outcomes. That's what we believe at Lassonde and our partners at Quanser believe the same thing. We can't wait to see sparks of creativity fly as we work closely together."



The inaugural holder of the Chair in Design Engineering for Innovation will be Professor Alex Czekanski, who brings extensive experience at the intersection of industry and academic research.

Czekanski joins the Lassonde School of Engineering at York University from a senior position at Magna International Inc. He holds an MBA in Management Science and Strategic Management from York's Schulich School of Business and a PhD degree in Mechanical Engineering from the University of Toronto.

Original article:

<http://lassonde.yorku.ca/articles/canada%E2%80%99s-engineering-leaders-launch-design-innovation-partnership>

Transformations in the Ecuadorian Education System

Authors: Karina Monteros and Jorge Luis Jaramillo from Universidad Tecnica Particular de Loja, Ecuador

Editor Ramiro Jordan from ISTECH Inc. and University of New Mexico



Ecuador's economy has an unequal exchange with international markets. Exported raw materials suffer from price fluctuations and substitutions, while imported goods and services experience sustained growth in price. Transforming the economic model of the country requires transforming the production matrix.

Product diversification, value added from the incorporation of technology and knowledge, selective import substitution, and export promotion of new products - these require human resources that are trained and have potential for innovation and entrepreneurship. A "production revolution through knowledge and talent,"

arises (SENPLADES, 2012) from implementing "support mechanisms for nurturing talent in priority areas" (SENESCYT, 2012), like the transformation of the education system (<http://www.educacionsuperior.gob.ec/>). *Continued on Page 6*

Ishik University Hosts International Engineering Conference

From November 24-26, 2014, Ishik University in Erbil, Iraq, hosted its 1st International Engineering Conference (IEC 2014). This academic conference focused on the development of Civil and Computer Engineering Programs at Ishik University.

Paper proposals were submitted on the following issues: Structural Materials; Structural Engineering, Earthquake Engineering, Fluid Mechanics, Transportation Engineering, Restoration and Rehabilitation of Historical Buildings, Construction Management.

The coordination of IEC 2014 was led by Associate Professor Doğan Özdemir, the Dean of Engineering, and Mustafa Albay, PR Manager and Secretary.

The conference took place in Kurdistan, one of the most vibrant regions of Iraq. The city of Erbil (also written Arbil, or Irbil, and known as Hewler), located in Northern Iraq, is the capital of Kurdistan, with a population of

approximately 1.3 million; it is the fourth largest city in Iraq after Baghdad, Basra and Mosul.

Ishik University was established in 2008 by Fezalar Educational Co. Originally sharing a space with Ishik High School, Ishik University has expanded to have its own building, with possibilities of growing to include Master's programs. Local authorities have lauded the university for its successes, as the University has had a pioneering role in the many fields of science.

The University also has international ambitions, with a majority of their academic faculty being international.

The President of Ishik University, Dr. Ahmet Oztas, says, "Our university aims to elevate the standards of higher education and provide

professionals to the institutions in the country. We expect that our graduates shall not only be in great demand in the country but all over the world."

Students at Ishik University are given one year of English language preparation courses if they have not passed the English Proficiency Exam. Depending on individual interest, students are offered the chance to continue their preparation courses in the USA.

For more about this university, please visit their official website: <http://www.ishik.edu.iq/>



UAE Engineering Deans - Newest GEDC Chapter

Formed in 2012, UAE Engineering Deans Council officially became a GEDC Chapter in 2014.

The UAE Engineering Deans Council (UAE-EDC) was established to promote collaboration between higher education institutions in the UAE, in an effort to advance engineering, information technology, and computer science education and research in the UAE.

The UAE Chapter includes representation from 15 institutions: Abu Dhabi University, Ajman University of Science & Technology, Al Ghurair University, Al Hosn University, American University in Dubai, American University of Sharjah, Higher Colleges of Technology, Khalifa University, Masdar Institute, the Petroleum Institute, New York University Abu Dhabi, UAE University, University of Sharjah, University of Wollongong in Dubai, and Zayed University.

The Chapter worked closely with the GEDC 2014 Conference Program Committee (including GEDC program chair Peter Jimack and other distinguished engineering deans), which was held in their country this year, in Dubai, UAE.



AWARDS

2014 GEDC Airbus Diversity Award

Airbus, the leading aircraft manufacturer, and the Global Engineering Deans Council (GEDC), the leading international organisation for engineering education, announced Marita Cheng as the recipient of the 2014 GEDC Airbus Diversity Award at the World Engineering Education Forum (WEEF) in Dubai on 3rd December 2014. She receives 10 000 USD to support and develop her work in this field.

Marita Cheng, from Australia, is the founder of Robogals Global, an initiative designed to inspire girls aged 10-14 to choose engineering and technical careers, and to create a global community of engineering students committed to the cause of greater diversity. Through a varied programme of workshops, training, student challenges, a Robogal Ambassador programme and a dedicated outreach programme for rural and regional areas, Robogals has so far reached over 20,000 girls worldwide, utilising a largely volunteer workforce of university students. In six years, it has grown from a single university chapter to an international organisation.

The world needs more engineers. Airbus and the GEDC believe that people from every background should have the opportunity to play their part in our shared future. However, there is still much work to be done to ensure that the engineering industry reflects the diversity of the communities it supports. Initiatives like this Award signal Airbus and the GEDC's strong commitment to achieving a truly diverse global engineering talent pipeline.

Charles Champion, Airbus Executive Vice President Engineering led the evaluation committee, said, "At Airbus, we are constantly looking for new ways to innovate. That means building more diverse teams, for higher performance and an inclusive culture that builds on everyone's strengths. Our 2014 Award recipient not only impressed us with her initiative, but also inspired us with her understanding that the best way to increase diversity is by creating a clear roadmap for others to follow."

The three 2014 finalists were selected from over 20 candidates from 12 countries. This

prestigious award is given to individuals who have been proactive in bringing more diversity into engineering schools and universities. It rewards initiatives around the world which encourage young people of all profiles and backgrounds to study and succeed in engineering.

The finalists presented their ideas before a distinguished evaluation committee at the World Engineering Education Forum (WEEF) in Dubai earlier this week. John Beynon, (Executive Dean, Faculty of Engineering, Computer & Mathematical Sciences at the University of Adelaide and Chair of the GEDC), Rana El Chemaitelly (Founder, The Little Engineer) Prof. R Natarajan (Former Chairman, All India Council for Technical Education, and former Director, Indian Institute of Technology, Madras) and Dr. Khairiyah Mohd-Yusof (Director, Centre of Engineering Education, Universiti Teknologi, Malaysia) joined Charles Champion on the Committee. Their selection criteria focused on the measureable success of the initiative, the transferability of the idea and the potential to inspire others.

"All three of our finalists are to be congratulated for the real difference that they have made," said John Beynon, chairman of the GEDC. "Their achievements are testimony to their hard work and commitment. Now we hope that engineering leaders from around the world will be inspired to follow their example, and replicate their initiatives in order to build a more diverse global community of engineers."

For more on the 2014 Award finalists, Marita Cheng, Bryan Hill, and Bevlee Watford, please visit www.diversityinengineering.com



© AIRBUS S.A.S. 2014 - photo by Plamen GALABOV

IEOM Society Awards Siemens' IFEES Representative Hulas King

Hulas King, IFEES representative of Corporate Member Siemens, has recently been awarded the 2015 Distinguished Community Leadership Award for his exceptional community service and many contributions to the industrial engineering and operations management profession.

In a letter from the IEOM Society, King has "contributed and supported the values, objectives and mission of the engineering profession. Many value his advice, counsel and friendship."

Hans J. Hoyer, Secretary General of IFEES, was also honored by the IEOM Society, for the 2015 Outstanding Educator Award.

Awards will be given at the IEOM Awards Banquet during the IEOM 2015 Conference in Dubai, United Arab Emirates on March 4th.

IFEES Celebrates Luiz Scavarda as 2014 Duncan Fraser Award Recipient Krishna Vedula and Yury Pokholkov Receive IFEES President's Award

The IFEES Community held their annual Award Ceremony at the WEEF 2014 Dubai at the Emirates Towers on the evening of Thursday, December 4, celebrating the recipient of the IFEES Duncan Fraser Global Award, and the two recipients of the IFEES President's Awards. The evening was sponsored by IFEES Corporate member, Total S.A.

Luiz Scavarda was honored as the 2014 IFEES Duncan Fraser Global Award recipient, for his extensive and great work in the Latin American region. He was a founding member of the INOVA program of modernization of Engineering in Brazil, a program backed by the Brazilian Industry, Government, Civil Associations and several Schools of Engineering. He also helped to found NECE (Nucleus for Education in Science and Engineering), which fosters interaction with Professors of several areas, discusses new educational methodologies and maintains a long discussion on the reward mechanism of the career of Professors. His efforts resulted in an increase of engineering graduates in Brazil from 16,000 in 1996 to 65,000 in 2013.

That evening, IFEES members also celebrated Krishna Vedula and Yury Pokholkov as recipients of the 2014 IFEES President's Awards. Krishna Vedula, former IFEES President and Executive Director of the Indo-US Collaboration for Engineering Education, received the IFEES President's Award for Global Visionary. Yury Pokholkov, President of the Association for Engineering Education of Russia, was awarded with the IFEES President's Award for Pioneering Regional Leader.



Transformations in the Ecuadorian Education System

Continued from Page 2

The regulation of higher education, built around the LOES¹, seeks the inclusion of the Ecuadorian university in the regional and global academic and scientific community. In order to fill the lack of trained Fourth Level specialists (graduate level, MS and PhD), several initiatives have been established, such as providing doctorate and PhD scholarships for university teachers; open calls for Level Four (graduate level, MS and PhD) training in universities and centers of excellence in higher education abroad; and GAR² scholarships for students with high ENES³ scores. With nearly 9000 Fellows abroad, Ecuador ranks first in Latin America and third in the world (SENESCYT, 2014) for scholarships per capita. Moreover, the PROMETHEUS (student and faculty international mobility program) program for foreign researchers and Ecuadorians living abroad, has recruited nearly 500 experts from fifty nations.

Higher education has also promoted university assessments, evaluation, accreditation of educational programs, and the creation of flagship universities. In 2013, as a result of evaluations, 14 universities closed for "not meeting the minimum quality requirements", and 44 extensions were suspended for the same reason (CEAACES, 2013). In the last quarter of 2014, universities are evaluating and accrediting the first set of programs, including medicine and education; and by 2015, it is expected that universities will have implemented the harmonization of qualifications and the redesign of academic offerings according to RRA⁴'s model of curriculum management. In 2013, 4 new universities were created: a University for the Arts in Guayaquil, a University of Education in Azogues, the Ikiam⁵ University of biodiversity in Tena, and Yachay⁶ University for applied engineering in Urucuquí. Yachay

aims to develop and manage a knowledge city under international standards, integrating scientific, academic and economic activity, encouraging research, transferring and breaking down technology and innovation (YACHAY, 2014). Private and public companies will operate in Urucuquí, such as the recently reorganized 11 public research institutes, which have been grouped into 4 clusters: life sciences, earth sciences, energy and transport, and land and culture.

Another important aspect is the transformation of primary and secondary education, as articulated in LOEI⁷. This process is supported by initiatives such as the specialization of teachers at the Fourth Level (graduate level, MS and PhD), the specialization of English language teachers, programs for student meals, processing and delivery of textbooks, and the construction of schools and colleges of the millennium.

The required changes are not possible without adequate training in engineering, which involves transforming the spectrum of current academic offerings. According to the Ministry of Education⁸ and SENPLADES, 34% of undergraduate degrees are issued in careers in administration, commerce or law, while only 23 per 1,300,000 Ecuadorians achieves a postgraduate degree. As part of the strategy to remedy the situation, the RRA⁴ commissioned engineering as "the application of basic science and the use of methodological tools for solving specific problems"; open calls for scholarships abroad prioritize technical training related to strategic sectors; and an ambitious program of megaconstructions¹⁰ and dissemination of results is being carried out.

A copy of this article can be found on the IFEES website at [http://www.ifees.net/transformations-in-the-](http://www.ifees.net/transformations-in-the-ecuadorian-educational-system/)

[ecuadorian-educational-system/](http://www.ifees.net/transformations-in-the-ecuadorian-educational-system/)

¹ LOES, Ley Orgánica de Educación Superior, que entró en vigencia en octubre de 2010. (*Higher Education Reform Law*)

² GAR, Grupo de Alto Rendimiento. (*High Performance Group*)

³ ENES, Examen Nacional de Educación Superior. (*National Examination for Higher Education*)

⁴ RRA, Reglamento de Régimen Académico, emitido por el Consejo de Educación Superior, y vigente desde noviembre de 2013. (*Policies and Procedures for Academia, developed by the Council of Higher Education*)

⁵ Ikiam es una palabra shuar que significa selva. (*Ikiam in the shuar language translates to jungle/forest*)

⁶ Yachay es una palabra kichwa que significa conocimiento. (*Yachay in the kichwa language translates to the knowledge*)

⁷ LOEI, Ley Orgánica de Educación Intercultural, vigente desde marzo de 2011. (*Law for Intercultural Education*)

⁸ MinEduc, Ministerio de Educación. (*Ministry of Education*)

⁹ En el nivel de educación superior de grado o tercer nivel, se incluyen las licenciaturas y afines, ingenierías y arquitectura; y medicina humana, odontología y ciencias veterinarias. (*In higher education at the third level, all undergraduate areas are included such as engineering, architecture; medicine, dentistry, and veterinary*)

¹⁰ En el grupo de megaconstrucciones se incluyen proyectos de saneamiento (agua potable y alcantarillado), electrificación y telecomunicaciones, hidrocarburos, vialidad, etc. (*In the group of megaprojects the areas of water, power grid, telecommunications, oil and gas, and highways are included*)

Indian Engineering Educators Gather to Develop Action Points for the next 10 Years

As part of the Second International Conference on Transformations in Engineering Education, Kurt Larsen, World Bank Education Specialist, and Krishna Vedula, Executive Director of the IUCEE, held a workshop on “Implementing Strategies for Engineering Education in India Towards 2025.” The Workshop was very interactive with frank discussions between representatives from the engineering institutions; industry representatives and the regulatory bodies for engineering institutions. The Workshop focused on developing recommendations and action points for engineering education in India to be undertaken over the next 10 years in the areas of:

1) Strengthening Governance, Leadership and Management at Engineering Institutions; 2) Improving the Quality of Teaching, Learning and Research at Engineering Institutions; 3) Fostering Stronger Industry/Institute Collaboration; 4) Building Innovation and Entrepreneurship in Engineering Education.

The EEI 2025 Workshop culminated in a web-cast where Ashok Shettar, Director of BVB Hubli and Venkatesh Valluri, President of Ingersoll Rand delivered presentations of what they heard and learnt from the discussions at the Workshop. The web-cast is available at:

<http://EEI2015Workshop.wstream.net>.

Leading up to the ICTIEE was another important event—the Second Indian Student Forum, a regional extension of SPEED’s Global Student Forum. The ISF took place from January 4-6, and attracted over 160 participants who participated in hands-on activities, seminars, a community service project, and development of action plans, much like at the GSF. Participants could choose to further explore challenges and opportunities in one of three tracks: 1) sustainable and economical energy; 2) infrastructure; and 3) access to clean water.

The ISF culminated in an action plan competition, where teams gave a final presentation on their plans, and a panel of judges provided valuable feedback for improvement and implementation of those plans. Judges chose one best plan from each track.

For the full reports on both the EEI 2025 Workshop and the ISF, please contact the IFEES Secretariat, or find them on the IFEES website under News Archives.



GLOBAL ENGINEERING DEANS COUNCIL (GEDC) CONFERENCE 2015

30 November – 2 December 2015
Intercontinental Adelaide, South Australia
www.aomevents.com/gedc2015



GEDC2015
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Leaving a Legacy

In July 2014, the IFEES community said farewell to a dear friend and colleague, Duncan Fraser, of South Africa. Duncan was IFEES's President-Elect, and would have started his 2-year IFEES presidency at the end of this year. Over the last year as President-Elect, he had already begun to shape a vision for his term, focused on the providing opportunities to the disenfranchised. While we never got to witness what he had envisioned, we may find solace that he lived his life to the fullest, guided by his convictions, and with a passion that left an impression on people all over the world.

In South Africa

The latter days of apartheid were the backdrop for the beginning of a young Duncan Fraser's career. In increasingly diverse classroom, he was devoted to the success of all students - particularly those from poor educational backgrounds. Early in his teaching career, he tried every method he could devise to see those student succeed (extra sessions, more teaching

assistants), but with little impact. It was only when he discovered literature on minority engineering programs in the US and the concept of collaborative study groups that he reached a breakthrough with his students. The success rates of all his students had improved - but that of black Africans had improved the most. The success of this unconventional approach to classroom teaching, which Duncan had implemented with much trepidation, marked the beginning of Duncan's journey in transforming the engineering classroom. Duncan would soon be invited to advise on the design of all UCT's engineering programs, and to play a key role in its curriculum overhaul. He would also become a mentor to many newer academic staff members, and spearhead the establishment of UCT's Centre for Research in Engineering Education.

On the African Continent

His work expanded beyond the boundaries of Cape Town at a fortuitous meeting with Funso Falade at the Global Congress on Engineering Education in Krakow, Poland in 1998. African



representation at that conference was extremely sparse, but Funso and Duncan had the vision to bring the conversations back to Africa. In 2002, they, along with other African engineering education leaders, organized a sub-Regional Workshop on New Engineering Curriculum at the University of Lagos. This would later become the African Regional Conference on Engineering Education, which has met successfully five times since 2002. By the end of the 3rd ARCEE in 2006, these leaders, including Duncan, had established the African Engineering Education Association (AEEA), of which Duncan was elected to be Secretary General. Duncan faithfully and devotedly would coordinate activities, link up with stakeholders, draw up timelines for the Association's activities, and more. In 2008, because of Duncan's global links, he was able to bring the 2nd International Federation of Engineering Education Societies (IFEES) Summit to Africa which he hosted at his home university, the University of Cape Town.

Internationally

Duncan's eagerness to continue learning about the best practices in engineering education would take him beyond the borders of South Africa and even beyond the continent of Africa. He attended and led workshops worldwide, from Manila to Budapest. Duncan was



a visiting professor at the Universiti Teknologi Malaysia, as part of their young PhD program in engineering education.

Though we said goodbye to Duncan earlier this year in July, the impact of his 40+ years career is not lost. His work has already been cemented into the foundation of our IFEES community - in his hosting of the 2008 IFEES Summit in Cape Town, his contributions to strategic planning, and his representation of the African engineering education community to a global audience. IFEES is also honoring his memory by officially changing the name of our IFEES Global Award for Excellence in Engineering Education to the IFEES Duncan Fraser Global Award. Duncan's was a life well-lived, and we can all aspire to leave a legacy like the one he did.

Many thanks to Jenni Case (AEEA) and Richard Felder (UNC) for their stories of Duncan, without which, this article would not have been possible.



Opposite page, from top: Duncan and wife, Jenny; 2013 African Regional Conference on Engineering Education

This page: Duncan providing instruction to students in Malaysia.

IFEES Welcome New Members

The IFEES Community welcomes two new members to our global community.

Canadian Engineering Education Association (CEEA)

Representative: Susan McCahan, CEEA President

The Canadian Engineering Education Association (CEEA) is a new organization whose mission is to “enhance the competence and relevance of graduates from Canadian Engineering schools through continuous improvement in engineering education and design education.” This first annual CEEA conference integrated and grew on the previous efforts of the Canadian Design Engineering Network (CDEN) and the Canadian Congress on Engineering Education (C²E²).

The membership driven organization will “enhance the competence and relevance of graduates from Canadian Engineering schools through continuous improvement in engineering education.

For more information about CEEA, please visit www.ceea.ca



The **International Society of Service Innovation Professionals (ISSIP)** joins IFEES as an Observer. ISSIP (pronounced iZip), is a professional association co-founded by IBM, Cisco, HP and several Universities with a mission to promote Service Innovation for our interconnected world. The five main objectives of ISSIP are to promote service innovation in...



1. Professional development and enhance career path opportunities of members.
2. Education and life-long learning opportunities of members.
3. Research and access to open data sets for all types and levels of service systems.
4. Practice, especially new tools and standards for the global community of practice.
5. Policy advocacy to enhance safety, security, sustainability, resiliency, etc. of service systems.

WEEF 2015

World Engineering Education Forum

Florence, Italy
20-24. 09. 2015**Engineering Education
for a Resilient Society**

*Climatic change adaptation
Natural disasters
Growing population
and urbanization
Energy transition
Biotechnologies
Water crisis
Food crisis*

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Recent Events

2014 SEFI Annual Conference in the University of Birmingham, United Kingdom

The 2014 SEFI Annual Conference was hosted by the University of Birmingham, with input from several Midlands universities, in Birmingham, United Kingdom from September 15-19, 2014. The theme of the conference was focused on the need for highly educated engineers and will touch upon global competitiveness.

For information on the full program, registration, and other updates, please visit the official website at www.sefi2014.com

Latin American Engineering Deans Council Meeting

The Latin American Chapter of the GEDC held its annual meeting from September 28-30 at the University Andres Bello in Viña del Mar, Chile. This meeting was aimed at strengthening and giving continuity to the four main objectives that the GEDC has set in its strategic plan: leadership in curriculum, accreditation, political and institutional. Activities included the election of three new board members for 2015, as well as 2015 President, Angela Laguna, and 2016 President-Elect, Alejandro Jadresic; an ABET workshop, and featured speakers who spoke on trends in entrepreneurship, innovation, interdisciplinarity and more. For a fuller report, please contact the IFEEES Secretariat.

ACOFI's 2014 International Conference on Engineering Education

With a participation of 437 professors, deans and engineering students, ACOFI organized the International Conference on Engineering Education -EIEI ACOFI 2014- in the city of Cartagena de Indias last October. Six international conferences and more than 130 papers were presented by university professors and students, who led discussions, reflection and analysis on different scenarios of engineering education in the world. Participants confirmed through conference evaluations the relevance and strategic importance of the conference topics. ACOFI prioritizes the quality of Workshops, lectures, student meeting, exhibition Poster and social activities in this important academic space in order to fulfill its mission as an Association. Details of the event can be found at: www.acofi.edu.co/eiei2014.

IMCL2014 – 2014 International Conference on Interactive Mobile Communication Technologies and Learning

On November 13-14 in Thessaloniki, Greece IGIP hosted the 8th International Conference on Interactive Mobile Communication Technologies and Learning, IMCL2014, part of an international initiative to promote technology-enhanced learning and online engineering world-wide. The IMCL2014 conference will cover all aspects of mobile learning, mobile business, mobile government, mobile society as well as the emergence of mobile communication technologies, services, implementation and implications for education, business, governments and society. Please visit the official website for more details: <http://www.imcl-conference.org/imcl2014/>

Grant/Award/Contest/Employment Opportunities

World Bank Robert S. McNamara Fellowship. *The RSM Program provides grants of up to \$25,000 to PhD candidates from developing countries to conduct innovative, development-related, PhD research under the supervision of a research advisor at a host institution abroad.* Contact IFEEES Secretariat for details. Application Deadline: **February 11, 2015.**

Engineering for You 2 Video Contest. *A contest highlighting how engineering will create a more sustainable, healthy, secure and/or joyous world by addressing the NAE Grand Challenges for Engineering.* Grand Prize: **\$25,000 USD.** For details, visit: <http://www.nae.edu/e4u2/> Submission Deadline: **March 2, 2015, U.S. Eastern Standard Time.**

GEDC Airbus Diversity Award. *It's not too early to start thinking about candidates for the 2015 GEDC Airbus Diversity Award.* Bookmark <http://www.diversityinengineering.com/> and check back later for this year's deadline.

Would you like to post about an event or opportunity in the next IFEEES Bulletin?
Please contact Stephanie Cheng at s.cheng@ifees.net

Upcoming Events

Also remember to check our IFEES website for more upcoming events at <http://ifees.net/Calendar.php>

Fifth International Conference on Industrial Engineering & Operations Management

March 3-5, 2015 at the Hyatt Regency in Dubai, UAE

Keynote speakers include Don Taylor, Virginia Tech and Past IIE President, Chris Smith, VP & Managing Director of Boeing Saudi Arabia, Hulas King, Director GO PLM & Global Community Relations, SIEMENS, Chris Backhouse, Loughborough University, UK, Leland Blank, American University of Sharjah, and Past IIE President Syed Mohammed Aumir, Senior Executive Vice President, Digital Factory, Siemens Middle East. Funso Falade and Hans J. Hoyer will speak on the Global Engineering Education Panel. <http://iieom.org/ieom/>

12th International Conference on Remote Engineering and Virtual Instrumentation (REV2015)

February 25-27, 2015 at the Novotel in Bangkok, Thailand

The REV conference is the annual conference of the International Association of Online Engineering (IAOE), www.online-engineering.org and the Global Online Laboratory Consortium (GOLC), www.online-lab.org. REV 2015 will take place in Bangkok, Thailand and will be organized in cooperation with Burapha University's Informatics Faculty. The main goal of this conference is to demonstrate and discuss fundamentals, applications and experiences in the field of Remote Engineering and Virtual Instrumentation. With the globalization the interest in teleworking, remote services and collaborative working environments is increasing rapidly. Another objective of the conference is to discuss guidelines for the education in university level courses for these topics. <http://www.rev-conference.org>

IEEE EDUCON2015

March 18-20, 2015 at the Tallinn University of Technology in Tallinn, Estonia

The IEEE Global Engineering Education Conference is the sixth of the series of conferences that rotates among central locations in IEEE Region 8, Europe, Middle East and North Africa.

Keynote speakers include Stephanie Farrell (IUCEE's IFEEES Representative), Tarmo Soomere, President of the Estonian Academy of Sciences, and James Uhomobhi, Faculty E-Learning Coordinator at University of Ulster, UK.

<http://www.educon-conference.org/educon2015/index.php>



6th NAMES - North American Materials Education Symposium

March 26-27, 2015 at The Ohio State University in Columbus, OH, USA

The Materials Education Symposia are a unique opportunity to focus on materials teaching in universities and colleges across the range of disciplines in engineering, science, and design. Join us for two days of talks, discussion, interactive sessions, and plenty of opportunity for networking and informal conversation. <http://www.materials-education.com/2015/na/index.htm>



7th International Materials Education Symposium

April 9-10, 2015 at Clare College, Cambridge University in Cambridge, UK

The International Symposium will include: Around 15-20 presentations from an speaker panel selected by the Symposium Advisory Committee (Talks will cover teaching in the following topic areas: materials science, manufacturing and processes, mechanical engineering, industrial design, aerospace and nuclear engineering, bio engineering, plastics, and sustainable engineering); Interactive discussion sessions; Socializing and networking over lunches and the Symposium dinner; Two days of Poster sessions, with 'Poster Teasers' sessions allowing presenters to briefly introduce their work in the main lecture theater; Other activities on the including a Presenters' dinner, networking, and the CES EduPack development meeting. <http://www.materials-education.com/2015/cambridge/program.htm>

2015 ABET Symposium

April 23-24, 2015 at the Hyatt Regency in Atlanta, GA, USA

The ABET Symposium is the premier event in quality assurance and innovations in technical education worldwide. It brings together hundreds of leaders in academe, industry, and government, while promoting peer-to-peer and expert interaction around continuous quality improvement and ABET accreditation. <http://www.abet.org/symposium/>

Would you like to announce an upcoming event in the next IFEEES Bulletin?

Please contact s.cheng@ifees.net.

Links of Interest

Measuring the impact of university-business cooperation (a report by the EU)

http://ec.europa.eu/education/news/2014/20140604-cooperation_en.htm

Germany's Grass-Roots Energy Revolution

<http://www.nytimes.com/video/science/earth/100000003107024/germanys-grass-roots-energy-revolution.html?playlistId=1194811622277>

What the Best Education Systems are Doing Right

<http://ideas.ted.com/2014/09/04/what-the-best-education-systems-are-doing-right/>

Colleges Reinvent Class to Keep More Students in Science

http://www.nytimes.com/2014/12/27/us/college-science-classes-failure-rates-soar-go-back-to-drawing-board.html?emc=edit_ae_20141226&nl=todaysheadlines&nid=57471793&_r=1

Stop the Mushrooming of Engineering Colleges (editorial)

<http://www.newindianexpress.com/editorials/Stop-the-Mushrooming-of-Engineering-Colleges/2014/07/29/article2353110.ece>

A matter of honours: China is trying to reverse its brain drain

<http://www.economist.com/news/china/21633865-china-trying-reverse-its-brain-drain-matter-honours>

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<https://plus.google.com/u/0/108364628751315333875/photos>

And for WEFF 2014 Dubai photos, visit: <http://weef2014.org/gallery>