Sunday, 9th November

07:30  breakfast  Al-Silia 3

08:30  W-1  Workshop: Pursuing ABET Accreditation  Al-Silia 1

08:30  Pursuing ABET Accreditation
   » K. Jamie Rogers and Edwin C. Jones Jr.

10:00  coffee break  Al-Silia 2

12:00  lunch and welcome  Al-Silia 3

13:15  PL-1  Engineering Leaders for Grand Challenges  Al-Silia 3

13:15  Engineering Leaders for Grand Challenges
   » John H. Lienhard (moderator), M. Katherine Banks and Balraj Sehgal

14:45  1A  Engineering Education I  Chair: R. Natarajan  Sidra

14:45  The Deliberative and Dynamic Model for Engineering Education Curriculum Renewal
   » Karlson 'Charlie' Hargroves, Cheryl Desha

15:05  Curricular Innovation to Integrate Sustainability for Global Grand Challenges
   » Manoochehr Zoghi

15:25  Integrating Teaching of Contemporary Issues into Engineering Education — A Case Study
   » Tasneem Pervez, Arif Malik

14:45  1B  Engineering Education II  Chair: Marcelo Castier  Al-Aqool

14:45  Applying Dale’s Cone of Experience to Increase Learning and Retention: A Study of Student Learning in a Foundational Leadership Course
   » Michele Summers, Beverly Davis

15:05  Successfully Mentoring Diverse Students in Engineering: North Carolina State University
   » Olpha Davis, Christine Grant, Tuere Bowles, Rex Jeffries

15:25  Argument for the practice of evidence-based teaching in engineering education for developing countries — focus on Nigerian universities
   » Gordon Monday Bubou, Ibebiete Temple Offor, Seigha Gumus

15:45  Proficiency in Technical Report Writing Skills among the Bachelor of Engineering and Bachelor of Technology Streams in Nigeria
   » Abubakar Sadiq Bappah, Babangida Ibrahim Yarima
Sunday, 9th November

14:45 Mentor Professors: How Faculty Members May Become Good Mentors
» Waddah Akili

"Examination and Defining the Role of Engineering Education in the Workplace"
» Kevin Chang

15:25 A Design-Based Apprenticeship Approach to Transform Freshman Chemistry for Engineering Students
» Kent Crippen, Chang-Yu Wu, Treavor Boyer, Trisha De Torres, Philip Brucat, Maria Korolev

15:45 Designing a Sustainable Liberal Arts Pedagogy for the Engineers of Tomorrow
» Maria Lombard, Mark Sidey

Monday, 10th November

08:00 Breakfast

08:00 Engineering Leaders via STEM Enrichment
» Johannes Strobel (moderator), Wail Benjelloun, Jan Morrison and Cary Sneider

09:30 Strategic Trends I

09:30 From Internationalization to Globalization: Exporting Application-Oriented Master Programmes
» Helmut Dispert, Christine Boudin

09:50 Awareness of Non-Technical Skills of Future Engineers: An Assessment
» Nihad Dukhan

10:10 Service Leadership Community — A Seedbed for Nurturing a Service Leadership Mindset in Engineering Student Learning
» Leo K.W. Hui, Neil Mickleborough, Ben Y.B. Chan

10:30 Strategic Trends II

11:30 At the intersection of the humanities and engineering: Building a strong communication foundation for student success
» Bernadette Longo, David Kmiec


» Waddah Akili

Intellectual property teaching as part of an engineering degree
» Achilles Vairis

Change Strategies and Leadership Frames for Advancing Engineering Education
» Jeffrey Froyd

Developing Global and Regional Sustainability Engineering Skills Through a Successful Study Abroad Program
» Heidi Taboada, Jose Espiritu, Noe Vargas-Hernandez, Carlos Chang Albitres, Ruey Cheu, Carlos Ferreaut, Susana Vegas, Eduardo Sanchez, Gerardo Chang, Valeria Quevedo, Daniel Marcelo

Application of Critical Path Method Scheduling to Research Plan and Management of Graduate Students’ Research Project in Education Engineering
» Michael Daramola

NAE Grand Challenges for Engineering in the 21st Century — Implications for Industrial and Systems Engineering Discipline: Research, Education and Practice
» Waldemar Karwowski, Hamid Parsaei

Addressing Critical Needs in Technical Energy Workforce: Focused Certificate and Degree Programs beyond the Associates
» Heidar Malki

The University of Texas Faces the 21st Century Engineering Grand Challenges: Driving Local and Global Economies with Innovation and Entrepreneurship
» Christina White

Development of a Surveying Engineering Technology Program: From the Certificate to a BS Degree
» Hassan Moghaddam

The Role of a “Caring” Professor in Developing a Proper Learning Environment
» Waddah Akili

On the Worldwide Engineering Students’ Meager Performance in Thermodynamics
» Nihad Dukhan

EAP or ELF: The Case of Technical Writing Engineering Students
» Mira Alameddine

Engaging Students via Failure Case Studies and Problem-Based Learning
» Manoochehr Zoghi

Nanotechnology: Ethical and Social and Implications
» Ahmed Khan

The Role of Physics and Mathematics Courses in Influencing Students’ Performance in Engineering Programs
» Ahmed Imran, Mohamed Nasor, Faihar Hayati
Enhancing student learning: using design-based learning in a bridging program to improve critical thinking skills
  > Ashraf Al Sharawi, Shima Abdalla, Mohammad Hossein Ghamary, Ahmad Amra, Nisa Ulumuddin, Mohammed Ayub, Ghada Salama, Beena Ahmed

Building the Right Way: The Need and Importance of an Ethicist in Construction Engineering
  > Nicole J. Johnson, Kenneth Sands, Christine M. Fiori, Annie Pearce

Innovations in the Civil Engineering Education: A Capstone Case Study in a Malaysian University
  > Noor Amila Wan Abdullah Zawawi, M.S. Liew, Hairuzila Idrus

Team and Project Based Learning: A critical instructional strategy for engineering education
  > Pradeep Waychal

A prospective amalgamative effort of Industry and Education (IEd) towards Inventive Research
  > Raja Sarath Kumar Boddu

Using Online Moodle Quizzes to Support the Teaching of Mathematics to Foundation Engineering Students
  > Abbes Berrais

Using Technology in Engineering Education
  > Kailash Bafna

African American Female Engineering Students’ Experience with Stereotype Threat: A Narrative Inquiry
  > Stacie Gregory

Factors Pertaining to Academic Probation of Engineering Students: A Case Study
  > Abdullah Al-Badi, Joseph Jervase, Saleh Sanussi, Adel Gastli

Effect of Feedback Mechanisms on Students’ Learning in the Use of Simulation-based Training in a Computer Engineering Program
  > Usman Ghani

11:15  ST-1  Special Topic: Preparing ABET Self-Study Reports  Sidra
      > Preparing ABET Self-Study Reports
      > K. Jamie Rogers and Edwin C. Jones Jr.

      > TBA
      > TBA

11:15  ST-3  Special Topic: Engineers Without Borders USA  Samr
      > Engineers Without Borders USA
      > Catherine Leslie Engineers Without Borders USA

11:15  ST-4  Special Topic: Innovating With Instructional Technology  Qurm
      > Innovating With Instructional Technology
      > Nasser Aleaddine Texas A&M University at Qatar

12:30  lunch  Al-Silia 3

13:00  PL-3  Engineering Leaders for a Diverse World  Al-Silia 3

13:00  Engineering Leaders for a Diverse World
14:30 3A  Engineering Ethics

14:30  Ethical Issues in Teaching at an American University in the Middle East
   » Sami Tabsh, Hany El Kadi, Akmal Abdelfatah

14:50  A possible instrument for measuring ethical behavior of engineering students
   » Pradeep Waychal

15:10  Engineering Ethics and Tort Law: The need for an Integrated Approach
   » Sikander Shah

14:30 3B  STEM I

14:30  A Framework for K-12 Engineering Education at Low Budget Institutions
   » Arturo Miguel-de-Priego

14:50  Increasing the STEM Pipeline: Impact of a Multi-Faceted STEM Organization
   » Jim Morgan, Robert M. Capraro, Mary M. Capraro, Sandra B. Nite

15:10  Global STEM: Opportunities and Challenges
   » Saeed Farokhi

14:30 3C  STEM II

14:30  Afterschool STEM Mentoring Programs Helping to Develop K-12 Students for the STEM Workforce
   » Wesley Fondal

14:50  Spatial Skills of Students in the United Arab Emirates
   » Sheryl Sorby, Samuel Cubero, Nausheen Pasha-Zaidi, Hamad Karki

15:10  Transportation Systems STEM Summer Academy for Teachers
   » Shashi Nambisan, Jennifer Richards

14:30 3D  STEM III

14:30  Puzzles Principles and Engineering Education
   » Kamran Abedini

14:50  A Multifaceted Approach to Supporting STEM/SBE Students with Learning Disability for Enhancing their Academic Achievements: Highlights of Engineering Student Participants
   » Consuelo Kreider, Anthony Delisle, Mei-Fang Lan, Sharon Medina, James Gorske, Chang-Yu Wu, Susan Percival, Charles Byrd, William Mann

15:10  Bridging the gap: using design based activities to develop problem-solving skills in Qatari high school students
   » Hanaa Loutfy, Abdullah Najjar, Meera Abu Soufah, Yossra Osman, Abdul Salam Abd, Siba Moussa, George Haleem, Maream Daey, Moustafa Selim, Ghada Salama, Beena Ahmed

19:00  Maersk Engineering Leaders Banquet

Tuesday, 11th November
08:00  PL-4  Engineering Leaders for Qatar's National Vision  
Al-Silia 3

08:00  Engineering Leaders for Qatar's National Vision
Mark Weichold (moderator), Khalid Al-Jallabi, Mohammed Yousef Al-Mulla and Khalifa Al-Suwaidi

09:30  4A  Chemical Engineering Education in Europe and Beyond, Part I  
Chair: Rafiqul Gani

09:30  Chemical Engineering Education in the European Higher Education Area
Zdravko Kravanja

09:50  Chemical Engineering Curricula and Challenges, resulting from Global Megatrends
Norbert Kockmann, Philip Lutze, Andrzej Górak

10:10  Developments in the Provision of Chemical Engineering Teaching and Training to Industry and Academia
Jaromír Klemeš, Simon John Perry

09:30  4B  Industry I  
Chair: Bruce Tatarchuk  Al-Aqool

09:30  A report on a University-wide internship scheme in higher education
Achilles Vairis, Kostas Loulakakis, Markos Petousis

09:50  An effective framework for Industry-Academic collaboration
Sudheer Reddy Kola, Srinagesh Chatarajupalli

10:10  Industry-Academe Linkages In Education, R&D and Innovation
R. Natarajan

09:30  4C  Industry II  
Chair: Fadwa ElJack  Samr

09:30  Towards a Sustainable Collaboration Between Oil and Gas Industry and University
M.S. Liew, Lee Hsiu Eik

09:50  Enhancing Quality of Engineering Education via Industrial Training: a proposed strategy for South African Universities
Michael Daramola

10:10  Preparation of Engineering Professional: The Role of Pre- and Post-College Education
Edriss Ali

09:30  4D  Industry III  
Chair: Saeed Farokhi  Qurm

09:30  Developing a Professional Skills Matrix for Engineering Students
Nausheen Pasha-Zaidi

09:50  Beyond Professional Development: The Value Proposition of Multi-Disciplinary Networks for Creating Global Engineers
Alexander Dale, Justin Hess, Robert Best, Erin Lennox

10:10  Engineering Ethics and Professionalism Education for a Global Practice
Nael Barakat

10:45  coffee break  Al-Silia 2

07:00  5A  Chemical Engineering Education in Europe and Beyond, Part II  
Sidra
11:15 Post-MSc technological design (PDEng) traineeships by Dutch universities of technology catalyse industrial innovation
   » Pieter Swinkels

11:35 Greening Chemical Engineering Laboratory at Bradford University
   » Iqbal Mujtaba, Raj Patel, Nazira Karodia

11:55 Foundation Coalition: Impact on Chemical Engineering Education at Texas A&M University 20 Years Later
   » Mark Holtzapple

11:15 Active engineering learning in a simulated environment
   » Luis A. Godoy

11:35 Leveraging Digital Platform for Teaching and Learning Process
   » Sudheer Reddy Kola, Kantha Reddy Muthangi

11:55 Developing the Engineering Talent Pipeline using Work Based Learning
   » Robin Clark, Bill Glew, Jane Andrews

11:15 Patent Practitioners — Global Insight into Early-Stage Technology and Future Engineering Skills
   » Austin Talley, Stephen Mason

11:35 Virtualization of engineering laboratory experiments – opportunities and limitations
   » Isaac Wait, Andrew Nichols

11:55 Comparison of Simulation-based and Hands-on Teaching Methodologies on Students' Learning in an Engineering Technology Program
   » Mohammed Taher, Ahmed Khan

12:30 lunch

13:00 Engineering Leaders for Industry and Academia
   » Jihad Nader (moderator), Kamel Hawwash, J.P. Mohsen and Bruce Tatarchuk

14:15 closing