

# CROSSWINDS

KCT International Partnerships Newsletter August 2016



We find ways to engage globally with authentic learning experiences that will meaningfully connect us with the world.

Read all about KCT's International and Transnational engagements.



## Kiwi Racer at KCT!

Ara Institute of Canterbury, New Zealand

Graeme Harris, Department of Mechanical Engineering, Ara Institute of Canterbury, New Zealand visited KCT as a part of a Faculty Exchange Program from July 10<sup>th</sup> to 23<sup>rd</sup>, 2016. Department of automobile conducted several interactive sessions, workshop, seminars and hands on training in KCT Garage kindled the keen interest of the KCTians interested in Automotive Engineering.

#### Talk on Fluid Mechanics & Wind Tunnel Testing



Graeme Harris gave a talk on Fluid Mechanics & Wind Tunnel Testing on July 12<sup>th</sup>, 2016 for Final Year Mechanical, Aeronautical and Automobile Students of KCT. Around 200 students attended the session and had a wonderful opportunity to learn about new technology.



### International Seminar on Advanced Fluid Research and Mechanics

Aeronautical and Automobile Engineering departments of KCT conducted "International Seminar on Advanced Fluid Research & Testing" on 13th July 2016. Mr. Graeme Harris explained about the innovative Fluid



Mechanics Teaching in New Zealand demonstrated the practical teaching methods. Mr. Ramkumar highlighted how CFD applications are used in AEW&C aircraft design and simulation of Air to

Air Refueling. 41 faculty from 8 colleges participated in the event.

#### International Workshop on Motorsport Engineering

Automobile Engineering department of Kumaraguru College of Technology, Coimbatore conducted INTERNATIONAL WORKSHOP ON "MOTORSPORTS ENGINEERING" on Tuesday, 19th July 2016 in association with ARA Institute of Canterbury, Christchurch, New Zealand. More than 200 engineering students from various colleges across Tamil



Nadu attended the workshop. Greame Harris, Lecturer Mechanical Engineering from ARA Institute of Canterbury, New Zealand brought out various motorsport activities in New Zealand and the his contribution from academia for development of world class racing engines for record breaking performances.





"Graeme Harris is such a wonderful human being and a good teacher. Always has a smile in his face. We worked with us undoubtedly matching the Energy level of a student at his age. He taught us Basics and shortcuts in manufacturing field; I was totally inspired by him" – Giridharan, Captain of Team Blitzkrieg





#### Interactive Session on Cultural Perspectives of New Zealand

Graeme had a Interactive session with the Business School students of KCT under the topic "Cultural Perspectives of New Zealand" on July 18<sup>th</sup>,2016. He shared the culture, values and behavioural patterns of Kiwis from a social and organizational perspective. He also shared his experience in dealing with students from different cultural background and the multicultural management skills. The students, who had visited the Ara Institute of Canterbury in July, 2016 also shared their experience, which added value to the session.





## Leeds International Summer School (LISS) University of Leeds

Darun Kumar Maheswaren, Final year Civil Engineering is at Leeds International Summer School (LISS) from July 2<sup>nd</sup> at University of Leeds, UK. The program consists of two modules, 1: Business and Cultural Awareness: Bridging the Gap and 2: Smart Phone Applications. He had successfully completed the first one on July 16<sup>th,</sup> 2016.



It is good to be in University of Leeds (UoL), UK. I am experiencing the best here. The classes are very much interactive. I have classes only for three hours a day and they impart some other interesting activities in classroom. Students have come from almost all over the world including Australia, China, Japan, USA, Canada and Indonesia. My first module got over by last week and I had to do presentations as a part of coursework. I did two presentations, one is a group activity and the other is on my own. The presentations are mostly about representing India in different situations and my visit to two companies earlier helped me in this regard. I had a peep into York, Harewood House and few other places as part of LISS. Last weekend I had been to Scotland.



### Aeronautical Engineers Share their Research Work at Bristol, UK Applied Aerodynamics 2016 conference

Faculty and students of Aeronautical Department of KCT presented papers in the 2016 Applied Aerodynamics: Evolution & Innovation Countries -The Next 150 Year of Concepts, Design and Operations conference, at Bristol - Science Centre, UK from July 19<sup>th</sup> – 21<sup>st</sup>, 2016 organized by Royal Aeronautical Society

The papers that were presented are

 "Experimental and computational studies on propeller flow field characteristics"
P.S.Premkumar,KCT; S.Muthukumar, Aero, KCT;
Dr.C.Senthilkumar, Aerospace, MIT,Chennai. 2. "*Computation of Aerodynamic Gust Response using the Open-Source SU2 Code*" Oshin Ponnuchamy, Final year Aero, KCT; Dr. Dominic Denver John Chandar, Scientist, A-Star, Singapore; P.S.Premkumar, KCT

**3.** *'Numerical Study on Effect of Chevron in 3D Convergent" – Divergent Nozzle* Gomathinayagamsiva.M & P.Hariprasanth, Third year Aero, KCT; M.Karthik, Engineer, Altran India, Bangalore (KCT Alumni - 2015) and P.S.Premkumar

4. "Studies on







Dump Diffusers with Aerodynamically Shaped Adjustable Flame Tubes for Aircraft Engines" Sharad Sharan (Final Year Aero, KCT)

5. "*Studies on External Flow Choking at Moving Wing at Opposed Wind Flow in Ground Effect*" in a catching manner" Vivek Srinivasan (Final Year Aero, KCT)



### Visit to University of Loughborough

Prem Kumar, Asst Prof of KCT Aeronautical department and Manu Sasidharan, Global Partnerships Manager, UK, visited Loughborough University for discussions on collaboration between the Aeronautical departments, KCT and University of Loughborough.

Various collaborative options were explored in the Department of Aeronautical Engineering. The discussions included Integrated Engineering Program – MEng BEng in the dual campus model, offering one credit courses in UAV from University of Loughborough to KCTians and summer schools.







## KCTians at Health Care Hackathon Tel Aviv University, Israel

Sanjana and Gayathri Final Year students of the Undergraduate Program of Biotechnology are in **Tel Aviv University's 2016 Summer Research Program** in Biological and Neuro Sciences at Tel Aviv University International from June 16 to August 11, 2016.

They participated in a three-day Healthcare Hackathon Med4Dev India Israel Affordable Healthcare Hackathon held from July 22<sup>nd</sup> - 24th, 2016 at Tel Aviv's Google Campus, Israel. Some 1,000 techies, entrepreneurs and health practitioners from India and Israel worked through the weekend to come up with innovative ways to tackle healthcare problems faced by India's low-income and low-middle income communities. Sanjana and Gayathri designed a non-invasive Hemogram to test anaemia, a device to draw blood without pricking the patient's finger.

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"We made one of the best decisions ever. We all know Israel has a Start-Up nation, and in India we don't have the technology to take our ideas forward. Indians are still apprehensive about going to Israel, so this initiative is breaking this taboo. I never thought I would be in Israel doing something that would help India" Sanjana quipped to JERUSALEM POST"



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## Mechatronics Engineers at RWTH Aachen, Germany

S.Vinoth, R.Kathik and R. Sundar of Final Mechatronics, KCT are currently undergoing two weeks summer school in "*Mechatronics Systems Engineering and Product Innovation*" from July 18<sup>th</sup> – August 1<sup>st</sup>, 2016 in RWTH Aachen University, Germany.

The program has an introduction in the demanding topics of generating product innovations. The participants will be introduced to the aspects of mechanical engineering to create and engineer cutting-edge innovative products.

The "Mechatronic Systems Engineering and Product Innovation" Summer School is educationally conceptualized and conducted by the Institute for Engineering Design (IKT), Institute for Theoretical Information technology (TI) and the Institute of mechanism theory and dynamics of Machines (IGM) of the RWTH Aachen University.

In our summer school we met students pursuing bachelors, masters and Phd from different countries which helped us to know about their educational system and culture.

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We have gained a good exposure about Mechatronics system and international educational standards. The lectures were interesting and they give us many practical sessions involving the complete study of Mechatronics product. A case study was conducted on Autonomous cars and we were given tasks with lots of challenges which made us to involve more in it. Apart from the educational lectures, we were exposed to international cultures. We explored a lot in Germany and a trip was arranged by the university to Maastricht, Netherlands.

--RWTH Summer Schools Students



### Voice of the KCTians

We had an experience of A Lifetime at RWTH Summer School Participants

Mithun Raja Subramanian, Saainath Ravichandran, Sangeeth Eswaran, Vinay Sidharth Vignesh from Final year Undergraduate Program in Mechanical Engineering are in **RWTH Aachen University**, Germany from June 20 - July 4 2016 for the **Automotive and Mobility Studies** Summer School.

The German Automotive Exchange Program 2016 was a joint venture between RWTH International Academy and International Network of Knowledge (INK) In the first module, which was the summer school of RWTH in Automotive and Mobility studies, we have gained knowledge of various topics in automobiles, road transport and hybrid technologies. In the second module, through INK's Program we have visited several automotive museums and industries like Mercedes Benz, Porsche and BMW.

Their thoughts on the visit: "Our 12 days course had a detailed study structure comprising battery storage system, electric power trains traffic and management systems. The city of Aachen is already а planned architecture for effective traffic management. But, they still are working to make it more comfortable for the cyclists and pedestrians.

In addition to that, we also had an opportunity to take a look at the fully electrical BMW I-3 vehicle. It takes 8 hours to get charged completely with the household voltage supply of 230 volts. At charging stations, it takes only 3 hours. We got to know that its range can extend up to 150kmph.

Every student was also given a chance to drive the Go-carts. There were three Go-carts which were based respectively on internal combustion, electrical and hybrid principles.

We had a great time in understanding the German work environment and state of the art technologies. We thank KCT and INK for organising the entire program which gave us international, cultural and technical exposure".





## KCTians share their Global Experiences.

Abishek Krish, Gokul, Vengateishver & Vignesh Karthikeyan of Textile Department of KCT was Technical University of Liberec, Czech Republic from May 16 to June 15, 2016 for a research Internship.

They shared their experiences with ths students of Department of Textiles on July 25, 2016. They shared their academic and cultural experiences during their stay. They also had opportunity to travel to Switzerland, Belgium, Germany and Italy.





# Global Visitor's to KCT

### **Guest Lecture on Coastal Management Program**

Dr. Neelamani, Senior Scientist, Kuwait Institute for Scientific Research, Kuwait, gave a Guest lecture on Coastal Management Program and its job opportunities to our Civil Engineering Students on July 28<sup>th</sup>, 2016.





### **Professor from HERIOT WATT University at KCT**

Dr. Stephen Gill, Academic Head, School of Mathematical and Computer Sciences visited KCT on July 28<sup>th</sup>, 2016 for a Guest Lecture and he had a discussion with International Partnerships Team for the possible collaborations between the institutions.





## Happening of KCT!



#### BEST PROJECT WILL BE AWARDED WITH INTERNATIONAL OPPORTUNITIES

#### REGISTRATION DEADLINE: July 30. 2016

Get 5% off EARLY BIRD DISCOUNT for registrations before July 15. 2016 Fee: 3000 INR (without accommodation) 3750 INR (with accommodation for 3 days in KCT) FOR REGISTRATION aspire@ink-connect.com +4917679763926 | +91 7708 393 830 www.ink-connect.com



## Opportunities for International Funding! Apply now!

## **Chinese University of Hong Kong**

The Inbound Research Mobility Scheme encourages the **development of individual research** with leaders in frontier research in different fields through enabling and supporting inbound research visits from universities and institutions overseas. The programme supports inbound visiting scholars from overseas universities to undertake short-term research visits of up to two weeks at CUHK. The visiting faculty members may participate in academic activities of exploratory and developmental nature, including but not limited to, developing research collaborations with CUHK faculty members, delivering seminars, and engaging in academic exchanges and meetings with faculty members and students of CUHK.

http://www.oal.cuhk.edu.hk/index.php/overseas-research-opportunities/internationalization-mobility-schemes/inbound-research-mobility-scheme



Deutscher Akademischer Austausch Dienst German Academic Exchange Service

The German Academic Exchange Service (DAAD) is the largest funding organisation in the world supporting the international exchange of students and scholars. Since it was founded in 1925, more than 1.5 million scholars in Germany and abroad have received DAAD funding. Funding is available for young researchers and senior academicians of India. Check the details in <a href="http://www.daaddelhi.org/en/14498/#postdocindia">http://www.daaddelhi.org/en/14498/#postdocindia</a>



Indo-US Joint Clean Energy Funding Opportunity from Joint Clean Energy Research and Development Center (JCERDC)! Application due date August 31, 2016

http://iusstf.org/story/53-61-Joint-Clean-Energy-Research-and-Development-Center(JCERDC).html



## **KCT International Partnerships Office**

Kumaraguru College of Technology internationalpartnerships@kct.ac.in https://www.facebook.com/InternationalRelations.KCT/