Adsorption Science and Technology for Cooling and Desalination Applications

Overview

Heat transformation with absorption systems has received increased attention in last years. Absorption technology is a well-known and developed technology with many commercial products for refrigeration and heat pumping applications. These systems are driven by heat instead electricity so they offer a great potential to reduce greenhouse gas emissions when use renewable energy sources like solar, geothermal, biomass or waste heat.

The major purpose of this course is to provide students the fundamentals of absorption technology, working fluids and thermodynamic cycles for both refrigeration and heat pumps. Students are introduced to the modeling of absorption refrigeration and heat pump systems. The main applications of absorption technology and current absorption technologies and new trends are presented and discussed.

Modules	Single Module : December 14 - December 19, 2017 Number of participants for the course will be limited to fifty.
You Should Attend If…	➢ Undergraduates, M.Tech./M.Sc. and Ph.D. science stream students. Any student with a basic background in thermodynamics/refrigeration will be able to follow these lectures and gain valuable information. ➢ B.Tech./B.Sc. and M.Tech./M.Sc. level teachers who wish to update their knowledge in an important special field of absorption refrigeration. ➢ Executives, engineers and researchers from industry, service and government organizations including R&D laboratories who are engaged in absorption cooling/refrigeration.
Fees	The participation fees for taking the course is as follows: Students (UG/PG): INR 5000/- Research Scholars: INR 8000/- Faculty Members: INR 12000/- Foreigners: USD 300 Industry and Others: INR 15000/- The above fees include all instructional materials, tutorials and assignments, 24 hrs free internet facility.
Accommodation	Paid accommodation will be provided to participants on first-come-first-serve basis.

The Faculty

Prof. Alberto Coronas obtained his B.Sc. and M.Sc. degrees from Barcelona University (Barcelona, Spain) in 1974 and 1979, respectively. He received his Ph.D. in 1983 from the Barcelona University (Barcelona, Spain). He started his research into absorption refrigeration and heat pumps during a postdoctoral stay under the supervision of Prof. Robert Bugarel in the Ecole Nationale Supérieure d'Ingénieurs en Génie Chimique (Toulouse, France) in 1985. He worked as lecturer at the Chemistry Faculty (Tarragona) of the Barcelona University until 1994. He worked as lecturer at the Mechanical Engineering Department of Rovira i Virgili University until 2001 and since then as full professor on Thermal Engineering. In the period 2008-15, he was the academic coordinator of the postgraduate program on Air Conditioning Technologies and Energy Efficiency in Buildings, and from 2009 coordinates at the Rovira i Virgili University the master and doctorate program in Thermodynamics Engineering of Fluids. He is the head and founder of the Research Group on Applied Thermal Engineering (CREVER) since 1994.

Dr. Subbareddy Daggumati is currently working as an Assistant Professor in the Department of Mechanical Engineering at IIT Indore. Dr. Daggumati received his Master's degree from RUHR University at Bochum, Germany. He received is Doctoral degree from Ghent University, Belgium. Before joining IIT Indore, Dr. Daggumati worked for 6 years at GE Global Research and SIEMENS Wind Power. So far, his doctoral and Post-doctoral research work lead to 21 publications (SCI journals and international conferences). He is also a co-inventor of two patents.

Course Co-ordinator

For any information regarding eligibility fee payment, travel information, accommodation, etc., please contact the course coordinator via e-mail or phone

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