

# YANTRIK RUTHI

E-newsletter of Mechanical Engineering Department

VOL-6 ISSUE-1 FEB-2018 NHCE

SHOWDAILY

IMTEX FORMING 2018  
TOOLTECH 2018

27 Saturday, 2018 | Day 3

Industry-Academia Collaboration

## Research Works by the Academia Garner Rave Reviews

The i2 Pavilion initiative by IMTMA at IMTEX Forming 2018 is bearing the desired fruit. The academic institutes are amassing overwhelming response from the industry players keen to exploit their research in developing new technologies that they can then use to develop new products. Here's a look at another set of innovative works from institutes across the country.

"Retrofitting a Press Brake Machine with CNC Back Gauge" - New Horizon College of Engineering, Bangalore.

In the current project, an electric drive system for precision control of CNC positioning system is designed, assembled and experimentally tested on hydraulic press brake machines. CNC-controlled back gauges use hard stops to position cut parts in order to place bend lines in the correct position.



The Department of Mechanical Engineering, New Horizon College of Engineering showcased its Research and Development by exhibiting four different projects such as Retrofitting a press brake machine with CNC back gauge, Fixture design for Cam play over checking station, Manufacturing of Aluminium tubes fitted with Epoxies and Fatigue life optimization for wheel disc at the Industry-Academia collaboration, i2 pavilion initiative, IMTEX forming 2018. The project on Electric drive system for precision control of CNC positioning system received appreciation from the Jury members, Industrialists and visitors. The same project description was published in the showdaily magazine, Day 3 edition by IMTEX Forming 2018 under the headlines of Research works by the Academia Garner Rave reviews.

The Department of Mechanical Engineering in association with MECHORIZON club also organized a visit to IMTEX FORMING 2018 for faculties and all the students of 4<sup>th</sup> and 6<sup>th</sup> semester on 29<sup>th</sup> and 30<sup>th</sup> January 2018. The students were excited to see various machineries used in Metal Working industries. The students volunteered in preparing the report on the current trends in Manufacturing Technologies.

**Ratan Tata - "If you want to walk fast, walk alone. But if you want to walk far, walk together."**

**Guest  
Lecture**

**A study of Rayleigh-Bénard convection in  
nanoliquids using a two phase model- A  
theoretical answer to the nanoliquid controversy**



**06.02.2018**



**Dr. Kanchana C.**  
Harbin Institute of  
Technology Shenzhen  
Graduate School | HITSZ  
Dept. of Mathematics,  
Harbin

Rayleigh-Bénard convection in liquids with nanoparticles is studied considering a two-phase model for nanoliquids with thermophysical properties determined from phenomenological laws and mixture theory. In the absence of nanoparticle-modified thermophysical properties, the problem is essentially binary liquid convection with Soret effect. The base liquids chosen for investigation are water, ethylene glycol, engine oil, and glycerine, and the nanoparticles chosen are copper, copper oxide, silver, alumina, and titania. Using data on these 20 nanoliquids, our theoretical model clearly explains advanced onset of convection in nanoliquids in comparison with that in the base liquid without nanoparticles.

**Upcoming Club Events**

# RoboTech Fair 18'

**RoboTech Fair '18, a Giga event put forward by The RoboHorizon Club, Department of Mechanical Engineering, presents you a coalesce of Tech Fair, Mini-Project Expo, Education Fair and provides an Industrial-Institute interaction. Wherein 50+ Companies, 60+ Projects, 10+ Institutions, provide you an opportunity to enhance and showcase your technical skills.**

**Date: 6<sup>th</sup> April 2018**

**Space X**

# RoboHorizon Club



**Topic: Quiz on Space Science And  
Technology.**

**Date: 24th of February 2018**

**Editorial board:** Dr. M. S. Ganesha Prasad, Prof. Shiva Prakash S, Prof. Puneeth, Prof. Rakesh. C, Prof. Ronald Regaon R, Prof. Manjesh B C, Prof. Santhosh A N, Mr. Parth (4<sup>th</sup> Sem), & Mr. Akilesh (6<sup>th</sup> Sem),

**Advisory Committee:** Dr. C P S Prakash (Principal, Dayananda Sagar College of Engineering)

Mr. Deepak Kamath (Technical Head of Continental India Ltd. Bangalore)

New Horizon College of Engineering

Ring Road, Near Marathalli, Bellandur Post - 560 103, Bangalore, Karnataka, India

# YANTRIK RUTHI

E-newsletter of Mechanical Engineering Department

VOL-6 ISSUE-2 MAY-2018 NHCE

## ACREX 2018



Dept. of Mechanical Engineering, New Horizon College of Engineering, Bangalore organised visit to ACREX 2018. Students explored the working of Heating, Ventilation, Refrigeration and Building Automation Systems.



On 24th of February, RoboHorizon Club presented, 'SpaceX', a Guest Lecture by Dr. P.K Panda, Chief Scientist, Material Science Division, CSIR-NAL, on Aerospace Related Technology!.

Followed by a Quiz on Aerospace Science and Technology.

Venue for the event was: AV Room, Library and Information Center, Major Sandeep Unnikrishnan Ashoka Chakra Memorial Block.

The lecture was commenced at 9:30 AM and continued till 11:00 AM, followed which an icebreaker, conducted for about 15 minutes. After this, a preliminary quizzing round was organised to select the top 20 students who competed against each other in the final quiz.



**Nothing will work unless you do.**

*Robohorizon Club presented the Robo - Tech Fair '18! A platform where Mini-projects, Hobby Projects were showcased, and the latest Industrial Technology were witnessed and Interaction with various GATE, CAT, GMAT, GRE and other coaching institutions took place.*



**Editorial board:** Dr. M. S. Ganesh Prasad, Prof. Shiva Prakash S, Prof. Puneeth, Prof. Rakesh. C, Prof. Ronald Regaon R, Prof. Manjesh B C, Prof. Santhosh A N, Mr. Parth (4<sup>th</sup> Sem), & Mr. Akilesh (6<sup>th</sup> Sem),

**Advisory Committee:** Dr. C P S Prakash (Principal, Dayananda Sagar College of Engineering)  
Mr. Deepak Kamath (Technical Head of Continental India Ltd. Bangalore)

New Horizon College of Engineering

Ring Road, Near Marathalli, Bellandur Post - 560 103, Bangalore, Karnataka, India