Report on Workshop

Advances in Heat Transfer and Refrigeration

09th-13th January 2018

To create awareness about the current advances of research in Heat transfer and Refrigeration and considering the importance of the knowledge of solving real life and industrial problems in the process of achieving the individual, collective and societal goals with sustainable technology, processes and products, a workshop "Advances in Heat transfer and Refrigeration" was organized by department of mechanical engineering, IITRAM under the guidance of Dr. Ajit Kumar Parwani (Coordinator) and Dr. Dileep kumar Gupta(Coordinator).

Workshop is started on 9th January 2018 with an inaugural speech of Dr. A.U. Digraskar, Director IITRAM in the presence of Dr. Shanti Prasanna, Dean academics IITRAM and Dr. PMV Subbrao Professor IIT Delhi . Overview of the workshop was given by Dr. Ajit Kumar Parwani, Assistant Professor IITRAM. After that the chief guest and speaker for the first day Dr. PMV Subbrao, Professor IIT Delhi has started the first technical session. He has delivered a lecture on development of compact fin and tube heat exchangers for refrigeration and air conditioning applications. He has shown correlation of heat transfer science with ancient hindutva scriptures. In the second technical session he has presented a topic on development of compact fin and tube heat exchangers for refrigeration and air conditioning.

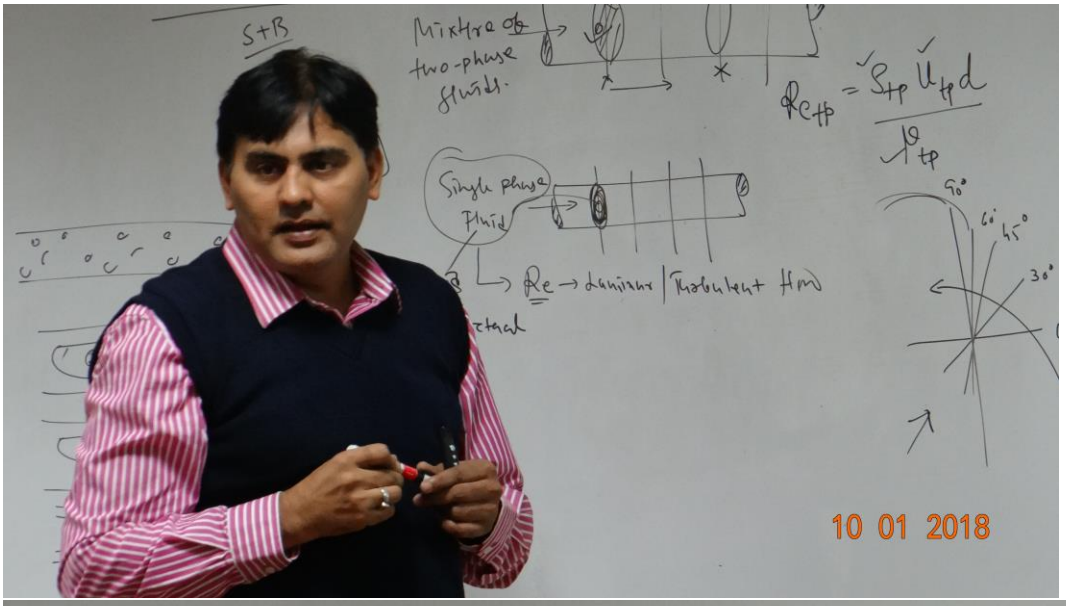
On the second day the third and the fourth technical session was taken by Dr. Hemantkumar B. Mehta, Assistant Professor, SVNIT, Surat. He has presented investigation on air water two phase flow through a minichannel. A hands on siemens NX modelling and simulation software was organized in the last session of the day. The session was taken by the expert from Siemens technology.

Third day of the workshop was started again by the session on NX modelling and simulation software. In this session, the topic which was left on day 2 was covered. After that fifth technical session was taken by Dr. Ajit kumar Parwani. He has discussed his SERB project funded by DST, Estimation of thermal boundary conditions for a cylindrical tube heat exchanger using efficient inverse heat transfer techniques. He has also described all the concept relevant to the project. While last session was a poster presentation where all the masters and Phd students working under the guidance of Dr. Ajit Kumar parwani has presented their research work with the help of posters.

Fourth day of the workshop is scheduled to start with a technical session by Dr. Malti Goel, CEO and founder, Climate change and research institute of India. She will deliver the lecture on carbon capture initiatives in India. After that there will be a field visit of GECL power plant, Gandhinagar. After This visit will give the practical knowledge of working of thermal power plant.

Fifth day or the last day of the workshop will start with a lecture on Transcritical CO_2 Refrigeration by Dr Dileep kumar Gupta, Assistant Professor, IITRAM. He will discuss about the green refrigerant which has no adverse effect on the environment. Second session will be taken by Dr. Prabal Talukdar, Professor, IIT delhi. He is going to discuss about the numerical modelling of heat

transfer in porous media. Valedictory ceremony and vote of thanks is scheduled just after the lecture of Dr. Prabal Talukdar.


S+B
Mixture of two-phase fluids.
Single phase Fluid
Re → Laminar / Turbulent Flow
10 01 2018


11 01 2018


11 01 2018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