

Engineered for Tomorrow

Students training Program on “Emerging Aero Gas Turbine

The Department of Aeronautical Engineering HOD had organized a two day Students Training Program on “Emerging Aero Gas Turbine Technologies” on March 19th, 20th and 21st 2014.

DATE	TIMINGS	PROGRAM
1ST Day 19-03-2014	11:00 AM	Inaugural Function
	11:15-12:00 PM	Dr. K Ramachandra, NDRF Key Note Lecture
	12:00-12:20 PM	Tea
	12:30-1:15 PM	Dr.J J Isaac, NAL
	1:30- 2:30 PM	Lunch Break
	2:45- 3:30 PM	Dr. Sundararajan V, Quest Global
	3:40 PM	Vote of Thanks
2nd Day 20-03-2014	11:00 AM	Inauguration Function
	11:15-12:00 PM	Dr. R Rajendran, NAL
	12:00-12:20 PM	Tea
	12:30-1:15 PM	Dr. Venkata Krishnaiah Thandaga, GTRE
	1:30- 2:30 PM	Lunch
	2:45- 4:00 PM	Training Session
	4:00 PM	Vote of thanks

3rd Day 21-03-2014	11:00 AM	Inauguration Function
	11:15-12:00 PM	Dr. Venkat S Iyengar, NAL
	12:00-12:20 PM	Tea
	12:30-1:15 PM	Dr. NKS Rajan, IISC
	1:30- 2:30 PM	Lunch Break
	2:45- 3:30 PM	Dr. Dheepa Srinivasan, GE
	3:30 PM	Panel Discussions

19 March, 2014

The Program was inaugurated at 11:00 AM by Prof. S.C. Gupta, Head of Aeronautical Engineering (P.G) and Presided by Ms. Deepa M.S, Head of Aeronautical Engineering (U.G) at Smt. Rajalakshmi Jayaraman Seminar Hall.

The first key note lecture was delivered by Dr. K Ramachandra, former Director Gas Turbine Research Establishment, from where he retired as outstanding scientist. He started his lecture by 11:15 AM. The first key note lecture given more ideas about:

- Hyperloop Transportation
- Combustion Instabilities
- Spacecraft Propulsion
- SLOSH Dynamics in Spacecraft

The lecture is concluded by 12:00 PM. The lecture given the students and faculties more details about the future trends in propulsion in Spacecraft Propulsion.

After the first lecture short tea break was provided.

The second lecture was delivered by Dr. J J Issac, distinguished scientist NAL. The lecture started by 12:30 PM. The lecture given details about the following topics:

- Engine Health Monitoring
- Composites material optimization for Turbine Blades
- FADEC- Full Authorized Digital Engine Control

The lecture got over by 1:15 PM. The given the details about continuous health monitoring in engines of Aircraft and Spacecraft. After the session all the workshop attendees went for their Lunch. The post lunch session started at 2:45 PM.

The post lunch session was started by the Lecture of Dr. Sundararajan V, former director of Gas

Turbine Research Establishment from where he retired as outstanding Scientist. He served that organization for 37 years that included 20 years in senior management positions. His lecture started by 2:00 PM. His lecture was about:

- Future trends in Aerospace Propulsion
- Spacecraft Attitude Dynamics and Control using propulsion system
- Solar Sail

The lecture was concluded by 3:30 PM. The lecture given ideas about the future trends in spacecraft propulsion and also about the optimization of Solar Sail.

Then Vote of thanks were given by Principle and vice principle of MVJCE.

20th March, 2014

The Program was inaugurated at 11:00 AM by Prof. S.C. Gupta, Head of Aeronautical Engineering (P.G) and Presided by Ms. Deepa M.S, Head of Aeronautical Engineering (U.G) at Smt. Rajalakshmi Jayaraman Seminar Hall.

The first key note lecture was delivered by Dr. R Rajendran, NAL. The lecture was about following topics:

- Gas turbine efficiency enhancement techniques for Aircraft Propulsion
- Propulsion for Missiles and Launch Vehicles

The lecture got over by 12:00 PM. The lecture given ideas about the enhancement of efficiency for Gas turbine engines.

The lecture given the students and faculties about the recent trends in aero engines and also the research areas which can be used for further studies in aero engines.

After a short tea break, the next lecture provided by Dr. Venkata Krishnaiah Thandaga, former additional director Gas Turbine Research Establishment and Emeritus Scientist, Defense Research and Development Organization. He given a lecture on the following topics:

- Aerothermodynamics of Turbo Machines
- Turbines for Aerospace Vehicle
- Selection of turbines

The lecture given lots of details about Turbine selection of Aircraft Engines. The lecture got over by 1:15 PM.

Then the Lunch was provided to attendees and guest lecturers during 1:30-2:30 PM.

The Next session started at 2:45 PM includes the students training on Gas turbines and Turbo Machines. The students were well guided by guest lectures and faculties of our department. Lots of doubts were asked during training session. It was a great experience for the students to work under their guidance.

21st March, 2014

The Program was inaugurated at 11:00 AM by Prof. S.C. Gupta, Head of Aeronautical Engineering (P.G) and Presided by Ms. Deepa M.S, Head of Aeronautical Engineering (U.G) at Smt. Rajalakshmi Jayaraman Seminar Hall.

The first lecture started at 11:15 AM. The lecture was given by Dr. Venkat S Iyengar, Distinguished scientist, National Aerospace Laboratories. He gave a lecture on the following topics:

- Advanced Combustion in Aero Engines
- Combustion Enhancement

The lecture given more details about the combustion process in in gas turbine engine and also in missiles, Launch vehicles. The lecture got over by 12:00 PM.

After a short tea break, the next lecture was started by 12:30 AM which was delivered by Dr. NKS Rajan, Principle Research Scientist, Department of Aerospace Engineering, Indian Institute of Science, Bengaluru. His lecture was about following topics:

- Heat Transfer
- Bio – mass Gasification
- Numerical Modelling and Software development in Aerospace Propulsion

The lecture got over by 1:15 PM. The lecture given idea about heat transfer applications in aircraft engines. After the lecture attendees of workshop went for Lunch. The post lunch session started by 2:45 PM.

The lecture was delivered by Dr. Dheepa Srinivasan, Indian Institute of Science. The lecture was about the following topic:

- Investigation of characteristics of Jets
- Free Jets and Forced Jets


The lecture given details about the characterization of Jets. The lecture got over by 3:30 PM. These lecture was the last lecture of the student training.

The panel discussion about the Worshop was started by 3:30 PM, headed by Prof. S.C. Gupta, Head of Department, Aeronautical Engineering. The discussion with the distinguished scientists given ideas to students and faculties to recent trends and areas of research. The panel discussion got over by 4:10 PM.

The student training ended with the vote of thanks by Ms. Roohi, Assistant Professor, Department of Aeronautical Engineering who thanked the event organizers and Speakers and faculties of the departments. Feedback was collected from department faculties.

The event was organized by following faculties:

Ms. Deepa M.S
Mr. Nishanth P
Mr. Venugopal M M
Mr. Punith R
Mr. Jayaraman P
Ms. Nikita Venugopal
Mr. Ranjan H M
Mr. Rajendra P
Mr. Gururaj


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