



RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001: 2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Academic Year 2021 – 2022 (Odd Semester)

Details of Programme Organized

Sl. No.	Contents	Details
01.	Title of the programme	Maintenance 4.0 in Wind Energy Industry
02.	Programme Theme	Research Opportunities
03.	Programme Type	Webinar
04.	Details of resource person	Prof. Fausto Pedro Garcia Marquez Castilla-La Mancha University Spain
05.	Mode & Venue / Platform	Google Meet & YouTube
06.	Date & Duration	26.11.2021 & 1 hour
07.	No. of Student Participants	31
08.	No. of Faculty Participants	14
09.	No. of External Participants	26
10.	Expenditure amount (if any)	NIL
11.	Social Media URL	https://www.youtube.com/watch?v=pi0FjdSm4rQ
12.	Video URL (if any)	https://www.youtube.com/watch?v=pi0FjdSm4rQ

13. Objective of the Programme:

- To impart knowledge on cutting edge technologies (Wind Energy System Maintenance 4.0) to the participants and to upgrade the expertise of the faculty members in mechanical engineering field.

14. Detail description of the activity:

Extramural Lecture Series on the topic " Maintenance 4.0 in Wind Energy Industry " was organized by Department of Mechanical Engineering, Ramco Institute of Technology, Rajapalayam on 06.05.2021. The main objective of these ELS is to impart knowledge about Wind Energy System and the maintenance involved in the same. The Resource Person was Prof. Fausto Pedro Garcia Marquez, Castilla-La Mancha University, Spain.

The pattern of Wind energy and the statistical data on wind energy potential was briefed by the professor. Then he compared the Operation and Maintenance cost in Off-shore and on-shore wind turbines with a statistical data from European Wind Energy Association (EWEA). The modern approach in maintenance of wind energy system i.e. 4.0 was explained by the resource person. Novel Integrated Condition Monitoring (NIMO) technology in for wind turbine maintenance was explained with a neat flowchart. The use of Supervisory Control and Data Acquisition (SCADA) in wind turbine system was briefed along with Condition Based Maintenance and Computerized Management System. The four major aspects of maintenance 4.0 was explained (i.e. safety, availability, reliability and maintainability). Further the values that are obtained from SCADA for every 10 minutes was listed. The obtained data were categorized as quantitative and qualitative. Finally, the session was concluded by the resource person with a case study taken for onshore maintenance. At the end of the session, resource person addressed the queries raised by the participants.

The total no. of participants was 71 including internal and external participants. The entire sessions were interactive where faculties raised their doubts and a precise explanation was given by the resource person. The overall feedback of the program was good. Finally, the participants were distributed with the certificates.

15. Banner / flyer of the programme:



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North vengalloor Village, Rajapalayam - 626 117
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Department of Mechanical Engineering

EXTRAMURAL LECTURE SERIES(ELS) - INT004 MAINTENANCE 4.0 IN WIND ENERGY INDUSTRY

Academic & Research
Credentials



Date :November 26, 2021
(Friday)
IST: 03.30 P.M.
Spain Time:11.00 A.M.

Fausto Pedro García Márquez

Full Professor
Castilla-La Mancha University
Spain

Registration Link : <https://tinyurl.com/INT004-Wind-Energy>

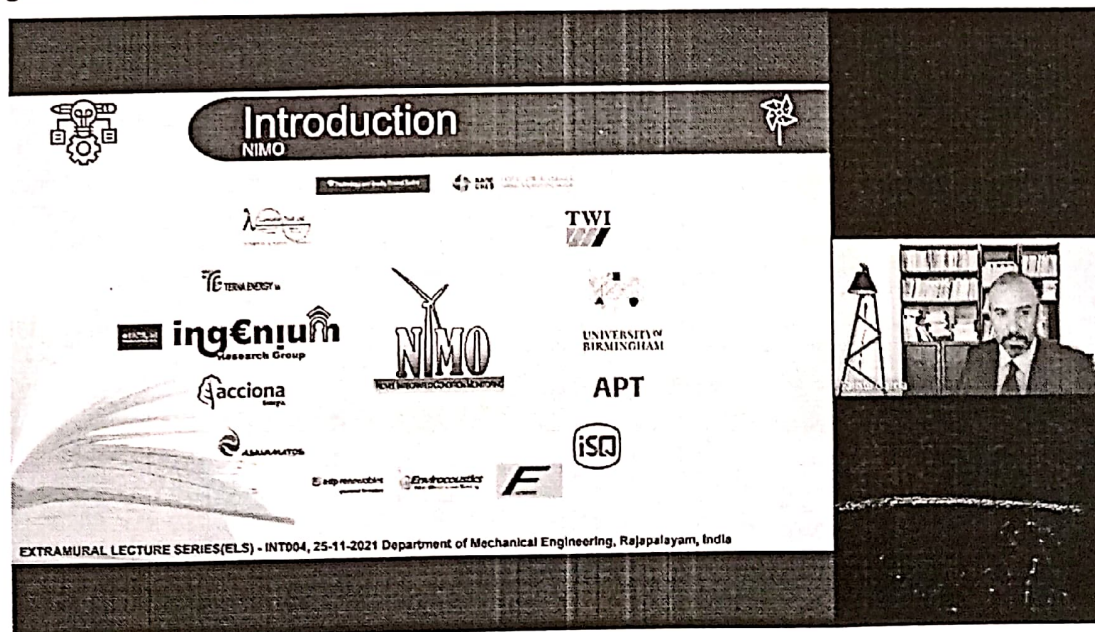
COORDINATOR
Dr.V.SIVAKUMAR
ASSOC. PROF./MECH

CONVENER
Dr.P.SURESHKUMAR
ASSOC. PROF./MECH

PATRON
Dr.S.RAJAKARUNAKARAN
VICE PRINCIPAL & HEAD /MECH

CHIEF PATRON
Dr.L.GANESAN
PRINCIPAL

16. Programme Photographs:





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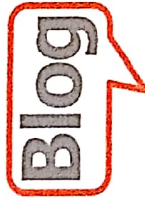
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