

About the Institute:

Annamalai University with a sprawling campus of nearly 1000 acres is one of the largest residential Universities in Southern Asia comprising of 8 Faculties and 49 departments of study located at Chidambaram: The Abode of the Cosmic Dancer Lord Nataraja. Annamalai University, a “university” in the true sense of the term, has been sustaining a unified ecosystem of education – by offering sundry programmes under one roof. Being a multi-faculty institution, Annamalai University has evolved as a time-tested system of administration to ensure the ceaseless transaction of teaching-learning, boundless expansion of research and innovation, and selfless extension of service to the society. Availability of eight diverse disciplines and 49 departments and of study along with sports pavilion, gymnasiums, libraries, yoga/meditation halls, ensures a fertile ground and favourable climate for learners to become all rounded and competent individuals rather than mere “programmed specialists”. Annamalai University is accredited with ‘A+’ Grade by NAAC in 2022

About the Department:

The Department of Manufacturing Engineering was established in the year 1984. Department has a team of 40 qualified research supervisors having specialization in various areas such as Materials Joining, Surface Engineering, Materials Processing, Manufacturing Management and Newer Materials. At present the department is offering following programs: B.E. Mechanical Engineering (Manufacturing), M.E. (Manufacturing Engineering), M.E. (Welding Engineering) and Ph.D in Manufacturing (Full Time & Part Time). The department is the only department to attain the status of DST-FIST-Level-2 and UGC-SAP-DRS-Phase-2 in the Faculty of Engineering & Technology.



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Department of Manufacturing Engineering,

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ANNAMALAI UNIVERSITY

(Accredited with “A+” Grade by NAAC)



**AICTE Training
and Learning
(ATAL) Academy**



Sponsored

Faculty Development Program (FDP) on

Simulation of Welds and Optimization Techniques

(SWOT’ 23)

20th - 25th November, 2023

Coordinator

Dr. S. RAJAKUMAR, M.E., Ph.D

Associate Professor

Co-Coordinator

Dr.S.KAVITHA, M.E., Ph.D

Assistant Professor

Organized by



**Centre for Materials Joining and Research
(CEMAJOR)**

**Department of Manufacturing Engineering
(DST-FIST-Level-2 & UGC-SAP-DRS-Phase-2 Dept.)**

**Faculty of Engineering & Technology
ANNAMALAI UNIVERSITY
Annamalai Nagar – (P.O)
Chidambaram - 608002**

About ATAL

The Government of India in association with All India Council for Technical Education (AICTE) launched the AICTE Training and Learning (ATAL) academy with a vision to empower faculty to achieve goals of higher Education such as access, equity and quality. ATAL Academy have started unique Faculty Development Programs in various thrust areas of modern technology. More than 1100 such programs have already been conducted in various AICTE approved institutions benefitting the faculty, Research Scholars and PG Students around the nation.

About the Faculty Development Program:

WELDING, the fusing of the surfaces of two work pieces to form a precise, reliable, cost-effective, and “high-tech” method for joining materials. Welding today is applied to a wide variety of materials and products, using such advanced technologies as lasers and plasma arcs. The improvement in field of joining pioneer materials has a great outreach; the research activities carried forward to join materials by institutes prefer techniques to reduce the number of experiments, minimal consumption of material.

In this regard, optimization acts as a better tool by reducing the experimental runs and has a better work area within a selected interval. Similarly modeling of the welding processes can aid us with a predetermined result for experiments that are to be conducted and helps us to enhance the structural features of the joint. The application of these tools can improve the productivity in fields of aerospace applications, energy and automotive sectors. Embraced with these tools welding of novel materials in aforementioned industries can enhance the process and power utilized to maximum.

Major Contents:

- Modelling of heat transfer problems in welds.
- Thermo-mechanical modeling of welds.
- Statistical tools: Response Surface Methodology, Regression Models
- Softwares and Algorithms used in optimization.
- Wire arc additive manufacturing modelling
- Hands on Training, using ANSYS, SYSWELD

Speakers:

The resource persons for the program shall include faculty members of the host institute, renowned researchers from top institutes like IIT Madras, IIT Bombay, NIT and Post-doctoral fellows. The forum paves way for budding researchers to pass through innovative techniques.

Eligibility of Participants:

The faculty members of the AICTE approved institutions, Ph.D scholars, PG students, participants from Government, Industry (Bureaucrats/ Technicians/ Participants from Industry etc.) and staffs of host institutions are eligible to attend the program.

Participants interested to attend this program need to make compulsory online registration. Last date of online registration is 04/11/2023. Shortlisted candidates will be informed through their email within a week after registration is closed.

External participants who travel more than 20 KM in one direction to attend the FDPs & attend at least 90% of the sessions will get reimbursement of their travel expenses in the amount of Rs. 2000, there would be no boarding or accommodation options available. However, lunch and refreshments will be provided.

Registration Procedure:

There is no registration fee to attend this program. Registration has to be done only through AICTE- ATAL academy. Program will be conducted through physical mode only.

Please visit <https://www.aicte-india.org/atal>

Certificate

Certificate will be provided by ATAL Academy after successful completion of FDP. Minimum 80% attendance and 60% marks in assessment conducted at the end of the program are required to earn the certificate



Contact:

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More details about CEMAJOR, please visit
https://annamalaiuniversity.ac.in/cemajor_index.php