

FEES DETAILS

Research Scholars/Students : Rs 300/-
Faculty/ Industry Person : Rs 500/-

Note: Free accommodation will be provided for the participants.

IMPORTANT DATES

Last date for Registration : 22.04.2026
Intimation for selection : 23.04.2026

REGISTRATION LINK

<https://forms.gle/rXbaoK6c68kSyJVGA>



ORGANIZING COMMITTEE

CHIEF PATRONS	Thiru. G. Kamalamurugan, Correspondent, ESEC
	Thiru. S. N. Thangaraju, Secretary, ESET
PATRON	Dr. V. Venkatachalam, Principal, ESEC
CHAIR PERSON	Dr. B. Saritha, HoD / BME Dr. S. Tamil Selvan, HoD / CSD
CONVENERS	Dr. P. Brindha, ASP/BME Mr. S. Ramakrishnan, AP/CSE



ANRF SPONSORED

Five Days National Level

Workshop on

HYBRID QUANTUM - AI FOR DRUG DISCOVERY AND MOLECULAR PROPERTY PREDICTION WITH ANTIVIRAL DRUG DEVELOPMENT USING GOOGLE QUANTUM AI

27th April to 01st May 2026

Organized by

DEPARTMENT OF BIOMEDICAL ENGINEERING



ADDRESS FOR COMMUNICATION

Dr. P. Brindha
The Convener,
Department of Biomedical Engineering,
Erode Sengunthar Engineering College,
Thudupathi, Perundurai, Erode – 638 057. Tamil Nadu.
Mobile : +91 9629472713
Email : brindhapten@gmail.com
Students Coordinators :
Mr. R. Sarathy - 8610085023
Ms. J. K. Samithaa - 9345518803

ERODE SENGUNTHAR ENGINEERING COLLEGE (AUTONOMOUS) Perundurai, Erode - 638 057



ABOUT ESEC

Erode Sengunthar Engineering College started in the year 1996, by the philanthropic trust members of erode Sengunthar educational trust. The college offers 17 UG programmes in engineering & technology (Agri, AIDS, AIML, BME, Bio-Tech, CSE, CSD, Civil, Cyber Security, ECE, EEE, EIE, Mech, RAE, IT, Chemical, Mech-Tamil Medium) and 10 PG Programmes in M.E(Manufacturing Engineering, computer Science Engineering, Power Electronics & Drives, Industrial Safety Engineering, Chemical Engineering, Structural Engineering and Applied Electronics), M. Tech -CSE (5 Years), MCA and MBA. UGC has confirmed the Autonomous status to the Institution for 10 years from 2019 to 2029 based on the successful and effective functioning. National Assessment and Accreditation Council (NAAC-UGC) has awarded 'A' grade accreditation status for a period of 5 years from 2015 to 2020 and extended till 2024. All the UG programmes are accredited by Institution of engineers (IE(I)), Kolkata since 2015. Eight UG & 1PG Programmes have been accredited by NBA, New Delhi. The College strives to impart curricular, co-curricular and extracurricular skills to the students for holistic development. The students have secured around 164 university ranks, including gold medals during last five years. The college is ranked in "Excellence Band" by Atal Ranking of Institutions on Innovations Achievements -2021, Ministry of Education (MoE), Govt. of India.

ABOUT THE DEPARTMENT

Biomedical Engineering combines engineering principles with biological sciences to address critical medical challenges, advancing healthcare in diagnosis, monitoring, and therapy. It is a rapidly evolving field with strong research and industrial potential. The Department of Biomedical Engineering, established in the academic year 2018-19, is equipped with modern infrastructure, experienced faculty, and well-established laboratories to support quality education and innovation. The department actively engages in industry collaborations through MoUs, facilitating student projects, Research and Consultancy Development (RCD), and placement opportunities. It is also proud to be accredited by the National Board of Accreditation (NBA) for the academic years 2025-26, reflecting its commitment to academic excellence and quality standards.

ABOUT THE WORKSHOP

This National Level Workshop focuses on the integration of Hybrid Quantum-AI techniques for advanced drug discovery and molecular property prediction. It introduces participants to the fundamentals of quantum computing and its advantages over classical methods in solving complex chemical problems. The workshop emphasizes the use of Qiskit for designing and simulating quantum circuits relevant to molecular systems. Participants will explore how artificial intelligence models can be combined with quantum algorithms to improve prediction accuracy. The program covers molecular representation techniques such as SMILES, descriptors, and graph-based approaches. It highlights the role of quantum-enhanced machine learning in accelerating drug discovery pipelines. Special focus is given to antiviral drug development, including computational screening and candidate identification. Hands-on sessions will guide participants in implementing hybrid quantum-classical models. Real-world datasets will be used for molecular property prediction and analysis. The workshop also discusses current challenges and future research directions in Quantum AI for healthcare. Participants will gain interdisciplinary exposure to quantum computing, AI, and bioinformatics. The session aims to equip learners with practical skills for research and innovation in next-generation drug design. This workshop provides a platform to understand emerging technologies shaping the future of pharmaceutical sciences.

ELIGIBILITY

The program is open to Students, Research Scholars and Faculties of various Engineering Colleges, Universities and other allied disciplines. Industry person working in the concerned/allied areas can also attend.

RESOURCE PERSONS

Eminent Professors from IIT's, NIT's and other renowned institutions, experts from industries will deliver lectures and conduct hands-on practical sessions.

