DEPARTMENT OF CHEMISTRY

“Take off with chemistry”

School of Chemical & Biotechnology
About SASTRA

Established in the year 1984, as Shanmuga College of Engineering and renamed as Shanumga Arts, Science, Technology and Research Academy (SASTRA). The government of India has conferred the University status in the year 2001 (under section of 3 of UGC act, 1956).

SASTRA offers various undergraduate and postgraduate programmes in Engineering, Management, Law, Science, Humanities and Education. Besides that, SASTRA has the state-of-art research laboratories and confers Doctoral degree in various fields. Excellency of SASTRA was honoured for the third time by NAAC with Maximum Grade of “A” (CGPA of 3.54).

Department of Chemistry offers the following programmes:

- M.Sc. Chemistry
- Ph.D. Chemistry

Objective

To educate, train and develop highly competent chemists capable of providing solutions to improve quality of human life and environment. Also to train skilful manpower to succeed in ever growing chemical industries.

Faculty

The Department has distinguished faculty members with rich experience in academia/research/industry. The department has an unique feature of all the faculties with highest degree, Ph.D., from various premier institutes like IISc, IITs, well recognized central and state universities. The interaction of students with the faculty is encouraged and is reflected in the high degree of success of the students in interviews, competitive examinations & technical presentations.
Course Structure

The syllabus for various courses is framed in accordance with CSIR and GATE syllabus. In addition, the students will be exposed to advanced topics such as Green chemistry, Nanomaterials, Renewable energy, Optoelectronics and etc. Besides regular laboratory courses, which hone the analytical skills of the students, the department has introduced two research project works in the curriculum. With these courses, the students will get trained as an individual researcher in research laboratories, to get the flavour of current trends in research.

Salient Features of the Programmes

- Well qualified and experienced faculty members
- Excellent curriculum, world class infrastructure
- Socially relevant and practice oriented teaching and research
- Smart class rooms & well equipped laboratories
- Research exposure
- Well stocked library
- 24 h robust campus wide Wi-Fi
- Campus placement & career guidance
- Special coaching for CSIR-NET, GATE, etc
- Hostel facility

Research Facilities

- Spectroscopy (UV-Vis, FT-IR, Raman, ICP-MS & NMR)
- X-ray techniques (XRD, XPS & XRF)
- Microscopic techniques (FE-SEM, HR-TEM, AFM, Confocal fluorescence & Scanning electrochemical microscope)
- Separation techniques (HPLC, GC-MS & LC-MS/MS)
- Electrochemical work stations, Surface area analyzer
- High performance computing clusters
Thrust Areas of Research
Dedicated faculty members of the department with sophisticated facilities focus on the following thrust areas of research to be a part of solving today’s challenges:

- Biophysical Chemistry
- Clean Energy: Generation, Storage & Utilization
- Computational Chemistry
- Coordination Complexes
- Electrophysiology
- Functional Nanomaterials
- Green Chemistry
- Laser Spectroscopy
- Materials Science
- Medicinal Chemistry
- Natural Products
- Organic Synthesis
- Organometallics
- Polymer Science
Industrial Interaction

The Department of Chemistry at SASTRA has established a triangular linkage between industry, academia and government to transform key findings in the laboratory to technology and to commercial products. Our department has active interaction with the following industries:

- High Energy Batteries (I) Ltd.
- Tata Chemicals Ltd.
- Orchid Chemicals & Pharmaceuticals Ltd.
- Ashok Leyland Ltd.
- Seshasayee Papers & Boards Ltd.
- Kaleesuwari Refinery Pvt. Ltd.
- Veerapandi Common Effluent Treatment Plant
- Indus Biotech Pvt. Ltd. and etc.

Global Outreach

Some faculty members have placed the Department of Chemistry, SASTRA in the global map by establishing collaborations with the following institutes/universities:

- National University of Singapore, Singapore
- National Institute for Materials Science, Japan
- Tohoku University, Japan
- Osaka Prefecture University, Japan
- University of Jinan, PR China
- University of California, Irvine, USA
- University of Vienna, Austria
- Complutense University, Spain
- Limnological Institute, Russia
- Deakin University, Australia
- The University of Sydney, Australia
- The University of Queensland, Australia and etc.

Placement Record

- 36 % of our alumni are pursuing Ph.D., in various institutes/universities in India
- 29 % of our alumni are placed in various industries (IT, Pharmaceutical, Refinery and etc.)
Honouring Eminent Scientists

SASTRA University honours eminent scientists who have contributed significantly in the field of chemistry, materials science, protein crystallography and biotechnology with SASTRA – C. N. R. Rao Award, SASTRA – G. N. Ramachandran Award and SASTRA – Obaid Siddiqi Medal on the National Science Day, 28th February every year.

Sowing Science in the Young Minds

SASTRA University organizes Research Science Initiative and DST INSPIRE Internship camp periodically to inculcate the importance of science in the young minds (school children) of Thanjavur and Trichy.

Interaction with Renowned Scientists/Industrialists

The Department of Chemistry at SASTRA University organizes conferences, and special lectures through Knowledge-Leadership Forum periodically to promote interaction of faculty members and students with scholarly scientists and industrialists.
Awards and Honours for Faculty

Some faculty members of the department have bagged prestigious awards/fellowship such as:

- Early Career Chemist Award from Pacific Basin Societies, USA
- Young Scientist Research Award from Department of Atomic Energy, India
- Fulbright fellowship from USIEF

Contact:

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