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Sastra University

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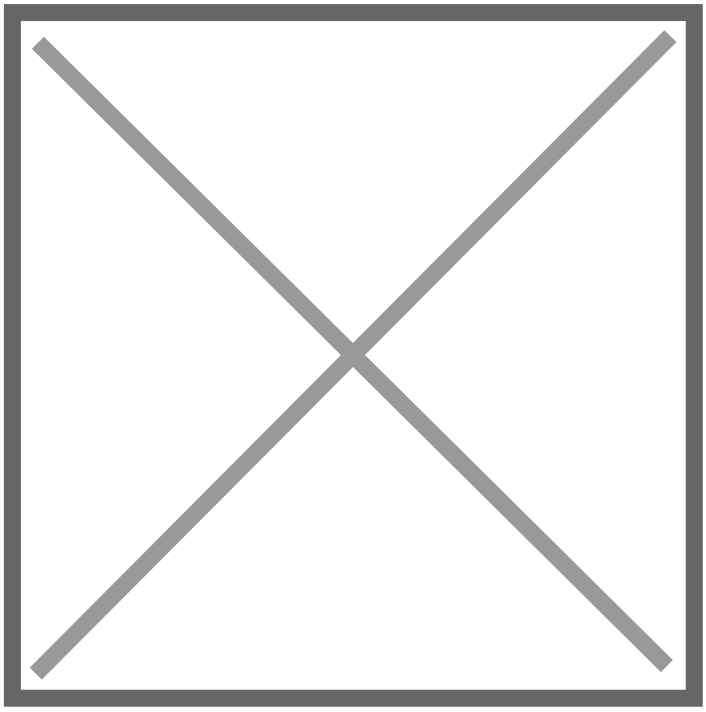
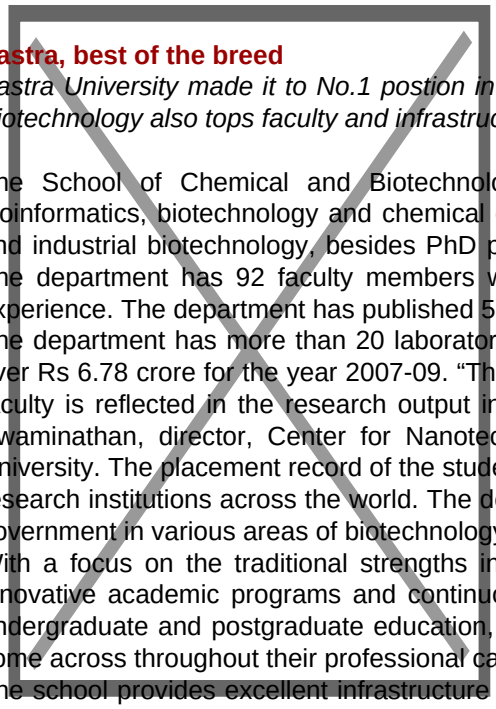


Rank 1 - Sastra University, Thanjavur



Sastra, best of the breed

Sastra University made it to No.1 postion in the BioSpectrum Top 20 Biotech Institutes Survey. It's School of Chemical and Biotechnology also tops faculty and infrastructure ranking.

The School of Chemical and Biotechnology at Sastra University offers undergraduate programs in bioengineering, bioinformatics, biotechnology and chemical engineering and postgraduate programs in bioinformatics, chemical engineering and industrial biotechnology, besides PhD programs. The institute has also started medical and nanotechnology programs. The department has 92 faculty members with 43 of them possessing PhD degree and with over five years of teaching experience. The department has published 51 scientific publications in national and international journals between 2007-09.

The department has more than 20 laboratories. The total investments in lab equipments and consumables are estimated at over Rs 6.78 crore for the year 2007-09. "The excellent infrastructure coupled with an industry-oriented curriculum and expert faculty is reflected in the research output in the form of patents, publications and success rates of the students," says Dr Swaminathan, director, Center for Nanotechnology and Advanced Biomaterials, and dean, sponsored research, Sastra University. The placement record of the students is more than 90 percent and many students are pursuing research in premier research institutions across the world. The department has externally funded research projects worth Rs 20.56 crore from the government in various areas of biotechnology and industry sponsored projects worth Rs 38 lakh.

With a focus on the traditional strengths in engineering and with emphasis on experiential learning, the university offers innovative academic programs and continuously upgrade their curricula. The goal of the university is to provide the best undergraduate and postgraduate education, with programs designed to prepare the candidates to meet the challenges they come across throughout their professional career.

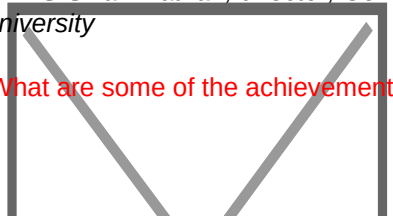
The school provides excellent infrastructure and a conducive environment for learning and is equipped with state–of–the–art laboratories, experienced faculty and a curriculum tailored to suit industrial needs.

The programs offered by the school prepare students for leadership in the development and commercialization of advanced technologies and strive to keep them abreast of the progress in the frontier areas of science and technology. Presently, the school consists of 92 faculty members.

The department has continuously been responding to scientific challenges by launching research initiatives in strategic thrust areas such as pharmaceutical technology, medical nanotechnology, drug design and Indian systems of medicine.

"We motivate students to take up research"

—Dr S Swaminathan, director, Center for Nanotechnology & Advanced Biomaterials, and dean, Sponsored Research, Sastra University



"What are some of the achievements of the institute in recent years?

Sastra has been re-accredited by National Assessment and Accreditation Council with A grade. The School of Chemical and Biotechnology was ranked as the No.1 private biotech school in the country in 2007. The postgraduate program in medical nanotechnology is fully-funded by the Nano Mission Council, Department of Science and Technology (DST), Government of India.

DST has also recognized Sastra as a scientific and industrial research organization. We have created two autonomous centers–Center for Advanced Research in Indian Systems of Medicine (CARISM) and the Center for Nanotechnology and Advanced Biomaterials (CeNTAB).

Further, we have been selected by CSIR as a center for open source drug discovery. Sastra is one of the host institutions in the Research Internship in Science and Engineering (RISE) program of the Indo-US Science and Technology Forum.

Sastra is also a member of the BME Planet, which is a global network for bioengineering. BME Planet has been established by the University of Virginia through the funding from National Science Foundation (NSF) and other foundations.

What are some of the unique features of the biotech department?

The School of Chemical and Biotechnology at Sastra possesses well-equipped laboratories supplemented by highly impressive infrastructure, excellent ambience for research and scientific activities, qualified and dedicated faculty team with a strong focus on research in diverse areas like other departments at Sastra. The school also has access to a GLP compliant animal facility and most of the sophisticated instruments and equipment within the campus.

The presence of two major autonomous centers (CARISM and CeNTAB) of the school provides a variety of opportunity to both students and faculties. The school also offers certificate programs in allied areas based on students' interest to further broaden their horizon and sharpen their skills. We also provide students, even at the undergraduate level, opportunities to work on research project.

What are the new modules you have added to align your education with industry needs?

Sastra emphasizes on the removal of obsolescence and in introducing state–of–the–art technologies. The freedom and flexibility to modify the curriculum has been a great advantage to the students and faculties of the school. To keep pace with industrial research, we have introduced courses on medicinal chemistry, recombinant DNA technology, signaling pathway analysis, nanostructuring, drug delivery systems, tissue engineering, smart nanoparticles and biomedical nanotechnology to prepare the students for a career in industrial research.

What are some of the research projects that students or faculties have initiated?

There is active research in the areas of tissue engineering, drug delivery, electrophysiology, chromatin remodeling, scientific validation of Indian systems for medicinal purposes, nanosensors, nanofluids and development of mesoporous materials. We work on developing scaffolds for regeneration of the skin, small diameter cardiovascular grafts, nerve, bone, etc. We have also synthesized materials that could be used for targeted delivery of anti-cancer and antiretroviral drugs.

Jahanara Parveen