

NIIST - National Institute for Interdisciplinary Science and Technology

The National Institute for Interdisciplinary Science and Technology (NIIST) is a prominent research institute under CSIR in Thiruvananthapuram, Kerala. Established in 1975 as the Regional Research Laboratory, it was renamed in 2007 to highlight its multidisciplinary focus.

NIIST conducts advanced research in areas such as chemical sciences, materials science, biosciences, environmental technology, sustainable energy, artificial intelligence, and machine learning, emphasising science for society and technology for national development.

Objectives

NIIST aims to promote interdisciplinary research, develop innovative technologies for industry and society, support sustainable development, improve agro and food processing, advance materials and clean energy, and foster collaborations between industry and academia to commercialise scientific innovations.

Significance and Role of NIIST

NIIST is vital to India's scientific ecosystem, bridging fundamental science with practical applications. It focuses on biomedical innovations and technology transfer, playing a key role in technology commercialisation and innovation - driven development.

Collaborations

NIIST collaborates with CSIR labs and ISRO, notably with VSSC, for advanced materials in India's space program.

It also partners with GIZ India on solar and building-integrated photovoltaic technologies.

Achievements and Recognitions

NIIST has achieved notable milestones, including biodegradable cutlery from agro residues, vegan leather technology, greywater treatment systems, and efficient indoor dye - sensitised solar cells with 35.6% efficiency. Their accomplishments have garnered several prestigious awards, such as the CSIR Technology Award (2004) and the NRDC National Technology Award, reflecting the excellence of their research and scientists.

Conclusion

The National Institute for Interdisciplinary Science and Technology (NIIST) advances innovative research in biotechnology, materials science, energy, and sustainable technologies, fostering industrial development and environmental protection.

