

About the Course

This course is designed to offer an in-depth exploration of the convergence between agricultural technologies (AgroTech) and advanced food preservation methods. It aims to provide participants with a comprehensive understanding of how innovative technologies can be applied to enhance food preservation processes, ensuring longer shelf life, improved safety, and reduced food waste. The course also covers sustainable preservation practices and their role in maintaining food quality while meeting global food security needs. The course is well-suited for professionals in agriculture, food processing, and technology sectors, as well as policymakers and researchers looking to understand the future of food preservation within the context of AgroTech.

Topics Covered

- Fundamentals of Food Preservation Techniques.
- Cold plasma food preservation.
- Improved Food Preservation Practices.
- Entrepreneurial Opportunities of Food Preservation.
- Renewable Energies used in Food Preservation
- Hands-on training for food Safety & hygiene practices in Food
- Case Studies of Successful Food Preservation Enterprises
- Food preservation using irradiation techniques and its other societal applications
- Regulatory Compliance and Food Safety
- Cold Storage and Food Preservation: Maximizing Freshness and Extending Shelf Life

Eligibility

Faculty members of AICTE approved institutions, Universities, research scholars, PG Scholars, participants from Government, Industry (Bureaucrats/Technicians/Participants from Industry etc.) and Engineers from R&D Labs.

Number of participants is limited to 100. ATAL FDPs are completely free for participants

Selection of the participants will be based on a first come first serve basis and based on their area of research work. The coordinator's decision will be final in the selection of participants.

Details of Registration

Registration has to done only through <https://atalacademy.aicte-india.org/>

Kindly visit <https://atalacademy.aicteindia.org/FAQs> for more information.

FREE REGISTRATION for all participants

Online Platform

The entire programme will be conducted through online mode. The details of online platform and meeting link will be communicated to the selected candidates through their registered email. Assessment on topics covered will also be done through online mode. Minimum 80% attendance and 60% Marks are required to earn certificate.

AICTE -Training and Learning (ATAL) Academy

The Government of India in association with AICTE launched the ATAL academy in 2018. The Vision of ATAL academy is to empower faculty to achieve goals of Higher Education such as access, equity and quality.



AICTE Training and Learning (ATAL) Academy Online



Faculty Development Programme on

“Integrating AgroTech with Modern Food Preservation Strategies”



10th February 2025 to 15th February 2025



**Organized by
Department of Mechanical Engineering**

**National Institute of Technology,
Tiruchirappalli**

Thanjavur Road, Tiruchirappalli - 620015

**COORDINATOR
Dr. V. Mariappan**

**CO-COORDINATOR
Dr. Anand Ramanathan**

Objectives of Academy

- » To set up an Academy which will plan and help in imparting quality technical education in the country
- » To support technical institutions in fostering research, innovation and entrepreneurship through training
- » To stress upon empowering technical teachers & technicians using Information & Communication Technology
- » To utilize SWAYAM platform and other resource for the delivery of trainings.
- » To provide a variety of opportunities for training and exchange of experiences. Such as workshops, Orientations, learning communities, peer mentoring and other faculty development programmes.
- » To support policy makers for incorporating training as per requirements

About the College

National Institute of Technology, Tiruchirappalli (NITT), is one among the premier Institutions of India and is well known for its high standards in teaching and research. It offers 10 Undergraduate and 23 Postgraduate programmes in the disciplines of Engineering, Science, Architecture and Management. It has been declared as an Institute of National Importance by the Government of India under NIT Act. NITT retained its 1st position amongst its 31 counterparts in the country in the National Institutional Ranking Framework (NIRF) Ranking (Engineering) released by the Union Ministry of Human Resource Development and also found place in top 10 engineering colleges in the country. National Institute of Technology, Tiruchirappalli (NITT) stands out as a hub of academic excellence and innovation, attracting talented students and faculty from across the nation. With a sprawling campus of over 800 acres, NITT is equipped with state-of-the-art infrastructure, cutting-edge laboratories, modern learning facilities, and industry partnerships to address global challenges.

About the Department

The Department of Mechanical Engineering is one among the first three departments established in 1964. With a team of highly qualified faculty members, the department consistently strives to be a globally renowned Department in Mechanical Engineering where the best of teaching, learning and research synergize to fulfil the requirements of industry and society. As a feather in its cap, the department has been ranked between 300 – 450 consecutively for the past three years in the QS world ranking which makes the department unique among all NITs in the country.

Vision

To be a centre of excellence in the field of Mechanical Engineering where the best of teaching, learning and research synergize.

Mission

- Prepare effective and responsible graduate and post graduate engineers for global requirements by providing quality education.
- Constantly strive to improve pedagogical methods employed in delivering academic programs.
- Respond effectively to the needs of the industry and changing world.
- Conduct basic and applied research and to generate intellectual property.
- Provide consultancy to the neighbourhood and cultivate the spirit of entrepreneurship.

For Further details Contact

Dr. V. Mariappan

Associate Professor
Department of Mechanical Engineering,
National Institute of Technology,
Tiruchirappalli – 620015
E-Mail: vmari@nitt.edu
Mobile: +91 9894471094



Dr. Anand Ramanathan

Professor
Department of Mechanical Engineering,
National Institute of Technology,
Tiruchirappalli – 620015
E-Mail: anandachu@nitt.edu
Mobile: +91 9444838909



Resource Persons

Dr. Sundaram Senthilarasu

Professor, Teesside University, England

Dr. Amaro Olimpio Pereira Junior

Associate Professor, Universidade Federal do Rio de Janeiro, Brazil

Mr. A Madhukar

Chief Executive Officer, Climatics

Mr. Venkateswarlu Karumanchi

Managing Director,
Southern Refrigeration Systems Private Limited

Mr. R Anish Simha

Assistant Vice President, Rinac India Limited

Mr. Jeyaprakash Gurusamy

Senior Technical Manager, Trane Technologies

Dr. Raman Ravishankar

Scientific Officer Retired, BARC Variable Energy
Cyclotron Centre, Kolkata.

Dr. N Ramasubramanian

Director, VR Food Tech

Dr. R Jagan Mohan

Professor, National Institute of Food
Technology, Entrepreneurship and
Management, Thanjavur

Dr. N. Venkatachalapathy

Professor and Head, National Institute of Food
Technology, Entrepreneurship and Management,
Thanjavur

Dr. M Loganathan

Professor, National Institute of Food Technology,
Entrepreneurship and Management, Thanjavur

ATAL Online FDP “Integrating AgroTech with Modern Food Preservation Strategies”

Inaugural Session on February 10, 2025 – 6:00 PM to 6:30 PM

Day 1: 6:30 PM to 8:00 PM

Sustainable Energy Production

Dr. Amaro Olimpio Pereira Junior, Professor,
Universidade Federal do Rio de Janeiro, Brazil



Day 1: 8:00 PM to 9:30 PM

Fundamentals of Food Preservation Techniques.

Dr R Jagan Mohan, Professor
NIFTEM, Thanjavur



Day 2: 6:00 PM to 7:30 PM

Cold plasma food preservation

Dr. R. Anand, Professor,
National Institute of Technology,
Tiruchirappalli



Day 2: 7:30 PM to 9:00 PM

Improved Food Preservation Practices

Dr. M Loganathan, Professor, NIFTEM,
Thanjavur



Day 3: 6:00 PM to 7:30 PM

Entrepreneurial Opportunities of Food Preservation

A Madhukar, Chief
Executive Officer, Climatics



Day 3: 7:30 PM to 9:00 PM

Renewable Energies used in Food Preservation

Dr. Sundaram Senthilarasu, Professor
Teesside University, England



Day 4: 6:00 PM to 7:30 PM

Hands-on training for food Safety & hygiene practices in Food Preservation

Dr. N. Venkatachalapathy, Professor & Head
NIFTEM, Thanjavur



Day 4: 7:30 PM to 9:00 PM

Case Studies of Successful Food Preservation Enterprises

Mr. Jeyaprakash Gurusamy
Senior Technical Manager,
Trane Technologies, Bangalore



ATAL Online FDP “Integrating AgroTech with Modern Food Preservation Strategies”

Day 5: 6:00 PM to 7:30 PM

Food preservation using irradiation techniques and its other societal applications

Dr. Raman Ravishankar,
Scientific officer Retired BARC Variable Energy
Cyclotron Centre, Kolkata



Day 5: 7:30 PM to 9:00 PM

Enhancing food safety and quality through modern processing techniques

Mr. R Anish Simha
Assistant Vice President, Rinac India
Limited.



Day 6: 2:00 PM to 3:30 PM

Regulatory compliance and food safety Cold storage: A Critical Tool for sustainable food preservation

Dr. N Ramasubramanian, Director
VR Food Tech, Chennai



Day 6: 3:30 PM to 5:00 PM

Cold storage and Food Preservation: Maximizing Freshness and Extending shelf life

Dr. Venkateswarlu karumanchi
Director, Southern Refrigeration systems
private limited, Chennai



Day 6: 5 PM to 6:30 PM

Cold Storage: A Critical Tool for Sustainable Food Preservation

Dr. V.Mariappan, Associate professor
National Institute of Technology
Tiruchirappalli



Online Test & Feedback

February 15, 2025
6:30 PM to 7:30 PM

Valedictory Session

February 15, 2025
7:30 PM to 8:00 PM

How to Register

1. Log in to the **ATAL Academy Portal** at <https://atalacademy.aicte-india.org/>.
 - If you are not already registered, first sign up at <https://atalacademy.aicte-india.org/signup>.
 - Choose the role as a **Participant** during signup and complete your profile details.
2. After logging in, navigate to the FDP tab.
3. Use the following filters:
 - Type: ATAL
 - Month: February
 - Thrust Area: Mechanical
 - Mode: Online
4. Press Ctrl + F and search for the application number **1730978715** to locate our FDP.
5. Click the '+' button to apply

Note: Please obtain the NOC from the relevant authority (HOD/Principal/Dean) of your institute, with their signature and seal. The NOC format is provided on the next page. You will be able to apply only after uploading the NOC.

- For any queries, feel free to call  9360346600, 9442868578 (Mr. Joel Silas. S, PhD research scholar, NIT, Tiruchirappalli).

Letter Head

Participant NOC Format

Subject: NOC for Attending ATAL FDP

Ref No. _____

Date: _____

To Whomsoever It May Concern

This letter is to express No Objection on Mr./Mrs./Ms./Dr. < Participant name > in attending the six days ATAL FDP on “**Integrating AgroTech with Modern Food Preservation Strategies**” through online mode conducted at National Institute of Technology Tiruchirappalli from 10th February 2025 – 15th February 2025.

This certificate is issued as per requirement of AICTE for successful conduction of ATAL Faculty Development Program.

Yours Sincerely,

(Sign & Stamp)

HoI/Competent Authority

Institute Name and Address