FT SAMACHAR

(News Letter)

1st January 2026–31st June 2026

Guru Nanak Institute of Technology

Department of Food Technology

Departmental Activities @FT, GNIT

Vision of the Dept. of Food Technology

DV: To become a nationally and internationally recognized institution of Food Technology by producing competent food technologists with respect to industry, research and entrepreneurship leading towards sustainable growth of the nation and imparting service to the society.

Mission of the Dept. of Food Technology

To achieve its own vision the Department of Food Technology is committed to

DM-1: To facilitate high quality teaching to produce graduate of international standard

DM-2: To prepare students to face challenges in their professional life through skill development

DM-3: To promote interdisciplinary work culture to acquire knowledge through research activities and interaction with industries

DM-4: To motivate students towards sustainable development of the nation and society through professionalism, proper education, research and social service.

Departmental Activities @FT, GNIT

Program Educational Objectives (PEOs) of Dept. of Food Technology

PEO 1: Graduates will apply the knowledge of engineering to design product and process by analyzing and interpreting experimental data.

PEO 2: Graduates will use modern techniques, skills and engineering tools necessary in food processing sectors for sustainable development.

PEO 3: Graduates will impart knowledge of professional and ethical responsibilities toward the society.

PEO 4: Graduates will work in multi-disciplinary fields as a teamplayer or a teamleader.

PEO 5: Graduates will pursue higher education, research and other creative and innovative efforts in food technology domain through life-long learning.

Program Specific Outcomes (PSOs) of Dept. of Food Technology

PSO 1: Graduates will be able to comprehend the concepts of Food Technology and to apply them in various areas like food processing, preservation, packaging, analysis, quality control etc.

PSO 2: Graduates will be able to use modern computing technology, analytical skills and engineering tools necessary in food technology and innovation in global and social context.

PSO 3: Graduates will have a successful career and to support devotion for real-world applications using optimal resources as an Entrepreneur in the field of Food Technology.

Departmental Activities @FT, GNIT

Webinars/ Seminars/ Workshop organized by Dept. of Food Technology

- **Faculty Development Program:** AICTE–ATAL Academy-sponsored six-day online faculty development program (FDP), 12th to 17th January 2026 Program details: GNIT organized an AICTE–ATAL Academy-sponsored six-day online faculty development programme (FDP) entitled "Industry 5.0 and Sustainability: Emerging Trends and Challenges for a Green Future" held from 12th to 17th January 2026. The FDP was organized by the Department of Applied Science and Humanities, Guru Nanak Institute of Technology, to address the urgent global shift from technology-driven Industry 4.0 to a more human-centric, sustainable, ethical, and inclusive Industry 5.0 paradigm. The programme aimed to build awareness, enhance faculty competence, and encourage interdisciplinary research by integrating advanced technologies with human values and environmental responsibility Audience size: **150**

- **Industry Alumni Interaction:** International Alumni Meet and Seminar on "Food Safety and HACCP Analysis as Tools for Achieving the Sustainable Development Goals (SDGs)" on 13 February 2026 Speaker is Mr. Debjit Ghosh, Food Safety Specialist at MILEI GmbH, Germany Guru Nanak Institute of Technology (GNIT) organized an International Alumni Meet and Seminar on "Food Safety and HACCP Analysis as Tools for Achieving the Sustainable Development Goals (SDGs)" on 13 February 2026 through the Google Meet platform. The event was organized by the Department of Food Technology in association with the Institution's Innovation Council (IIC) and the GNIT Alumni Association. The seminar featured Mr. Debjit Ghosh, Food Safety Specialist at MILEI GmbH, Germany, an accomplished alumnus working in the international food industry, as the keynote speaker. Audience size: 50

- **Wall Magazine Inauguration Ceremony:** Wall Magazine Inauguration Ceremony on 21st April 202 Inaugurated by Prof. (Dr.) Swarup Kumar Mitra, Principal-GNIT and Dr. Dolonchapa Sikder, HOD-FT. The program commenced with an insightful introduction emphasizing the significance of academic wall magazines in promoting experiential learning, knowledge sharing, critical thinking, and student engagement beyond classroom education. This was followed by an interactive presentation session where students enthusiastically explained the themes, concepts, and visual representations incorporated in the magazine. Audience size: 25

- **Industry Mentor Meet:** Industry Mentor Meet on 7th May 2026 on Speaker was Mr. Lasat Tanu Basu, Regional Head – QC & Process Excellence (East) and Trainer (PAN India), Allied Blenders and Distillers Limited. During the highly interactive session, Mr. Basu shared insightful perspectives on the brewery and alcoholic beverage industries in India, focusing on industrial quality control systems, process excellence, production methodologies, food safety standards, hygiene protocols, and regulatory compliance practices followed in the IMFL (Indian Made Foreign Liquor) sector. He also elaborated on the expanding career opportunities for Food Technologists in the brewery and beverage industries. Audience size: 65 students

- **One-Day Boot Camp:** One-Day Boot Camp titled "Food Safety for a Better Future" on 2nd April, 2026 Organized by Department of Food Technology (GNIT) in association with the AICTE Idea Lab – GNIT. The boot camp was conceptualized as an outreach initiative aimed at undergraduate students from various colleges and universities across West Bengal, with an objective to sensitize and educate them on the critical importance of food safety in ensuring public health, quality assurance, and sustainable food systems. The event witnessed enthusiastic participation from around 30 students, reflecting a growing interest in the domain of food technology and innovation. Audience size: 30

Departmental Activities @FT, GNIT



Faculty Development Program



Industry Alumni Interaction



Industry Mentor Meet



Wall Magazine Inauguration



One-Day Boot Camp

Departmental Activities @FT, GNIT

Extension/Social Outreach program

Name of the Activity	Date of the Event	A Brief note regarding the Event	Type of Participants	Total No. of Participants involved	Remarks, if any
Extension/Social Outreach program	02/04/2026	One-Day Boot Camp titled “Food Safety for a Better Future”	UG and PG students from various colleges	30	--






Images of Extension/Social Outreach programof 2025 passed-out batch

Organized by Dept. of Food Technology, GNIT

Departmental Activities @FT, GNIT

Departmental Publication

Paper publication, research & Course work:

International Journal:

1. Dolanchapa Sikdar, Shiladitya Ghosh, A comprehensive review of decontamination techniques for mycotoxin control in food: Advancement from conventional to unconventional strategies and the way forward,Food Chemistry,Volume 508, Part A,2026,148362,ISSN 0308-8146, https://doi.org/10.1016/j.foodchem.2026.148362. Indexed in SCI,Scopus
2. Saikat Mazumder, Navin Kumar, Chitri. Das, Arunava Sinha, Sudhriti Maity, Prapti Dey . Harnessing the processing-induced nutritional, bio-functional changes and the health implications of Paspalum scrobiculatum and Panicum sumatrense. Journal of Food Measurement and Characterization, 1-17, 2026, Springer Nature, Doi: https://doi.org/10.1007/s11694-026-04072-9. Indexed in: WoS/Scopus
3. Saikat Mazumder, Debasmita Bhattacharya, Dibyajit Lahiri, Moupriya Nag, Sudhriti Maity, Vaseem Raja, Shubham Sharma, Shashi Prakash Dwivedi, Mithul Rajeev, Islom Kadirov. Lead and Cadmium Induced Toxicity Under Prolonged Low-Dose Exposure: Food Chain Driven Source, Molecular Mechanisms, Signaling Cascade, and Health Implications. Journal of Applied Toxicology (Wiley), Published Online: 19th March 2026, Doi: https://doi.org/10.1002/jat.70136. Indexed in: WoS/Scopus
4. Saikat Mazumder, Debasmita Bhattacharya, Dibyajit Lahiri, Moupriya Nag, Biotechnological, genomic and computational tools in trait enrichment and stress mitigation of climate-resilient millets: a sustainable pathway in current times. Journal of Crop Science and Biotechnology, Springer Nature (2026). Doi: https://doi.org/10.1007/s12892-025-00337-9. Indexed in: WoS/Scopus
5. Saikat Mazumder, Rupsa Bhattacharya, Debasmita Bhattacharya, Dibyajit Lahiri, Debanjan Mitra, Moupriya Nag, Unlocking the functional and nutritional potential of climate-resilient small millets: a comparative analysis of antioxidant and antimicrobial potential and in silico studies. Journal of Food Measurement, Springer Nature (2026). Doi: https://doi.org/10.1007/s11694-026-04365-z. Indexed in: WoS/Scopus
6. Jayshree Majumdar, M. Sivachitra, V. Navin Ganesh, Raj Kumar G., M. Ramamurthy & Sandeep Gupta, Mechanical enhancement and multi-criteria optimization of calotropis gigantea–date palm leaf fiber–tamarind seed shell powder hybrid composites.Interactions, Springer Nature (2026). https://doi.org/10.1007/s10751-026-02507-9 Indexed in: WoS/Scopus
7. Shairee Ganguly, Dolanchapa Sikdar, Riya Dasgupta, Soumya Mondal, Arkoprovo Paul and Arka Ghosh, Research Prospects of Edible Packaging: Materials, Processing, Industrial Relevance, and Future Development, Recent Advances in Food, Nutrition & Agriculture, Bentham Science (2026), Scopus indexed, DOI: 10.2174/012772574X459356260324213606
8. Shairee Ganguly, Kakali Bandyopadhyay, Dolanchapa Sikdar, Riona Saha, Reshmi Rajeevan, Valorization of orange peel powder for β-carotene fortification of bovine-milk-based and plant-milk-based whipped cream. Journal of Food Science and Technol (2026), Springer Nature, IF:3.3, SCIE/Scopus/WOS, DOI: https://doi.org/10.1007/s13197-026-06718-4

9. Jaleel, A., Gokulakannan, K., Majumdar, J., Rawat, L., Jyoti., & Kumar, H., (2026). Role of artificial intelligence in smart agriculture: Opportunities and challenges. Scientific culture, Vol. 12, No. 4, (2026), pp. 10926-10938. Scopus
10. Saikat Mazumder, Debasmita Bhattacharya, Dibyajit Lahiri, Moupriya Nag, Sudhriti Maity, Debpriya Saha, Navin Kumar, Vandana Singh, Shubham Sharma, Shashi Prakash Dwivedi, Mithul Rajeev, Seema Raj, Sarvesh Rustagi, Abdusamiyeva Nargiza, Oybek Mamarakhimov, Lola Sanayeva, Food-derived dietary alkaloids: structure–biofunctionality relationships in modulating gut microbial biofilms for downregulation of colorectal carcinogenesis. Food Research International (Elsevier), Volume 241, 2026, Doi: https://doi.org/10.1016/j.foodres.2026.119629 Indexed in: WoS/Scopus.

International Conferences:

1. Chitrini, Das, Arunava Sinha, Navin Kumar., Sudhriti Maity, Prapti Dey, Debpriya Saha, & Saikat Mazumder (2026). Investigating Thermal Process-Induced Functional Changes in Little Millet: A RSM-based Comparative Insight. In BIO Web of Conferences (Vol. 228, p. 05003). EDP Sciences. DOI: https://doi.org/10.1051/bioconf/202622805003, Indexed in: WoS/Scopus
2. Jayshree Majumdar, Shubham Mandliya, Hari Niwas Mishra, Optimisation of tray and microwave drying conditions of sustainable extruded lentil analogue, 2025/10/27, MDPI, Indexed in: WoS/Scopus.

Book/ Chapter:

1. Dr Swarup Kumar Mitra , Dr. Anurima Majumdar , Jayshree Majumder,, Dr. Shantanu Datta ,Dr Barnali Proceedings of Bhavisya Entrepreneur 2025: National Symposium on Entrepreneurship Innovation ISBN: 978-93-343-9865-6, Publication Year: 2025 Edition: 1st
2. Saikat Mazumder, Debasmita Bhattacharya, Dibyajit Lahiri & Moupriya Nag Challenges in Extracting Flavonoids from Plant Sources: Yield, Purity, and Cost. In: Priya, K., Joshi, S.J., Pandit, S. (eds) Flavonoids: Extraction, Characterization, and Therapeutic Applications. Springer, Singapore. https://doi.org/10.1007/978-981-95-8165-8_12, Indexed in: WoS/Scopus

Departmental Activities @FT, GNIT

Achievements: (Faculty)

- **Faculty name**: Mr. Sikat Majumder
- **Details of achievement:** Awarded JIS PURASKAR 2026 for Highest Number Publication in Indexed Journal

- **Faculty name**: Dr. Shairee Ganguly
- **Details of achievement**: Awarded JIS PURASKAR 2026 for Highest Number Publication with Students

- **Faculty name**: Dr. Dolanchapa Sikder
- **Details of achievement**: Awarded JIS PURASKAR 2026 for Highest Number Publication with Students.

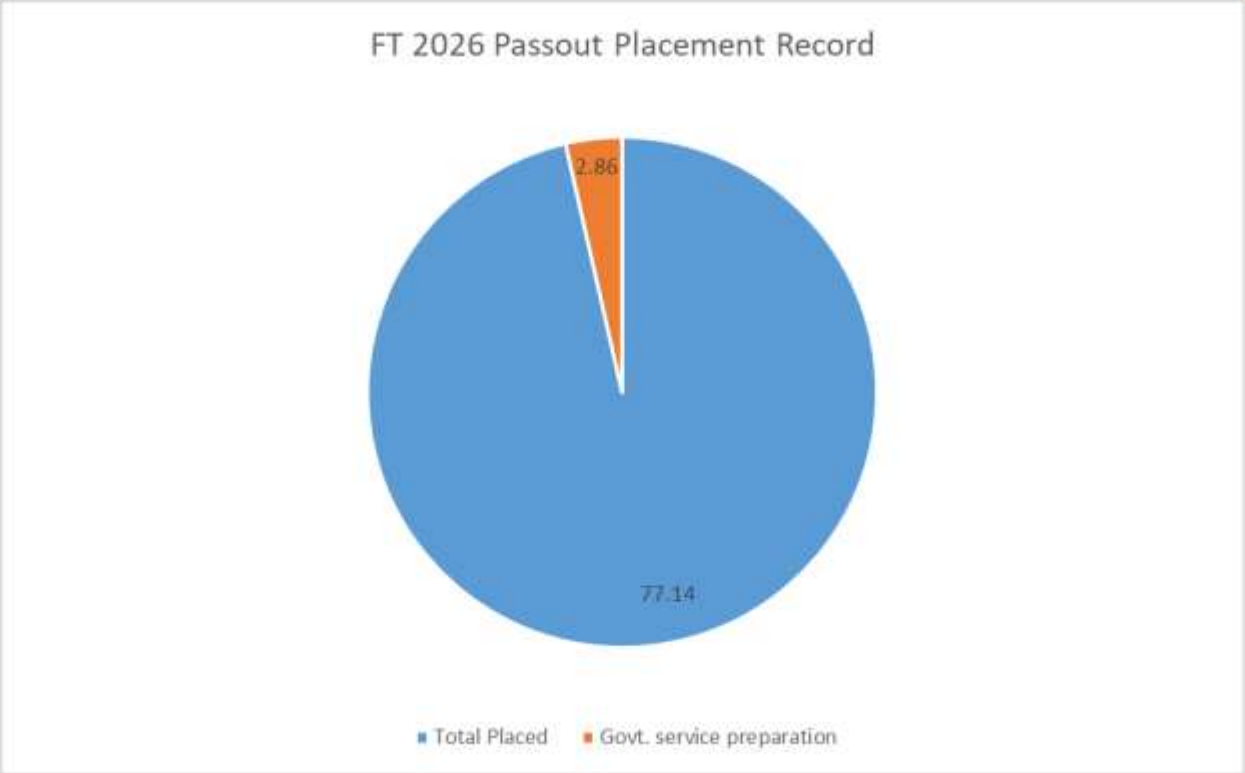
Achievements: (Students)

Name of Student: Ankur Patra, Monoswene Das, Ankita Rakshit, and Tanupriya Saha.
Details of achievement: Selected to attend the workshop on Artificial intelligence and Deep Learning FromFundamentals to Hands-on Application for Food Research Organized by NIT Rourkela, 16-20 th March, 2026

Name of Student: Ms. Rituparna Das
Details of achievement: Selected for the Research Program for the Ph.D Programme in the Department of Chemical Engineering at IIT Kharagpur

Student name: Samadrita Mallik,
Details of achievement: Topper in Environmental Chemistry and Microbiology, NPTEL Course from Jan-Apr, 2026

Departmental Activities @FT, GNIT



Placement Records: 2026 passed out Batch

And the journey is going on