SANT LONGOWAL INSTITUTE OF
ENGINEERING & TECHNOLOGY

NEWSLETTER
Vol. 1 (Issue I & II) | March, 2026

SLIET FOOD TECH CHRONICLE

RESEARCH • INNOVATION • SUSTAINABILITY • TECHNOLOGY

Platform of Scientists, Technologists
& Engineers Innovation
for a Better Future

FOOD TODAY • HEALTH TOMORROW • SUSTAINABLE ALWAYS

Department of Food Engineering and Technology

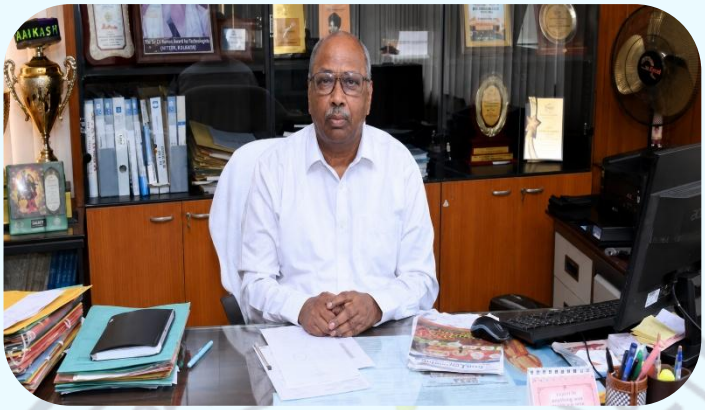
Sant Longowal Institute of Engineering and Technology (CFTI, Under MoE, Govt. of India)

The Department of Food Engineering & Technology at Sant Longowal Institute of Engineering and Technology Longowal is one of the premier departments dedicated to imparting quality education, research, and technical expertise in the field of food processing, food safety, and food engineering. The department aims to bridge the gap between engineering principles and food science to develop innovative, sustainable, and value-added food processing technologies. Equipped with modern laboratories, pilot-scale processing facilities, and experienced faculty members, the department provides students with strong theoretical knowledge along with practical exposure to industrial applications.

The department offers Integrated Certificate & Diploma (ICD), undergraduate, postgraduate, and doctoral programs designed to prepare skilled professionals for the rapidly growing food industry. It actively promotes research in areas such as food process engineering, food quality and safety, functional foods, waste utilization, alternative proteins, fermentation technology, and product development. The department also organizes workshops, industrial visits, expert lectures, training programs, and technical events to enhance students' professional competence and industry readiness.

With a focus on innovation, entrepreneurship, and sustainable food systems, the Department of Food Engineering & Technology continuously contributes towards academic excellence, industry collaboration, and societal development. Through its dedicated faculty, talented students, and active collaborations with industries and research organizations, the department strives to create competent food technologists and researchers capable of addressing global food challenges.

Message from the Director



It gives me immense pleasure to present the inaugural edition of the newsletter from the Department of Food Engineering and Technology. This initiative reflects the department's commitment to academic excellence, innovation, and meaningful engagement with the broader scientific and industrial community.

A newsletter is more than just a collection of activities—it is a dynamic platform that captures the intellectual vibrancy of a department. It displays the scholarly achievements of faculty, the creativity and dedication of students, and the evolving research landscape in the field of food engineering and technology. By documenting seminars, workshops, research advancements, industrial collaborations, and student accomplishments, this publication serves as a valuable archive of our collective progress.

For students, this newsletter acts as both a source of inspiration and a medium of expression. It encourages them to engage in scientific writing, stay informed about emerging trends, and develop a sense of belonging to a thriving academic community. It also enhances their professional visibility by highlighting their achievements and contributions.

For the department, the newsletter strengthens internal cohesion while also projecting its academic and research strengths to external stakeholders, including industry partners, alumni, and prospective students. It reinforces the department's identity and fosters collaboration by sharing knowledge and success stories.

At the institutional level, such initiatives contribute to building a strong academic culture and enhancing the departmental reputation. This reflects our commitment to transparency, communication, and continuous improvement, while also highlighting the institute's role in addressing contemporary challenges in food science and technology.

I appreciate the efforts of the editorial team, faculty members, and students who have contributed to this publication. I am confident that this newsletter will continue to grow as a vibrant platform for knowledge sharing, innovation, and academic excellence.

I extend my best wishes for its continued success.

Dr. Mani Kant Paswan
Director, SLIET, Longowal

Message from Dean, FSW

It is a matter of great pride and pleasure to introduce the latest edition of newsletter by Department of Food Engineering and Technology. This publication serves as a vibrant chronicle of academic achievements, research milestones, and student triumphs.

The field of Food Engineering and Technology is evolving at a rapid pace. Department is tackling global challenges include sustainable food systems, food security, and advanced nutritional security. This department remains at the forefront of these innovations. Department consistently bridge the gap between academic research and industrial application. Within these pages, you will discover the remarkable dedication of our faculty and students. Their commitment to research excellence, community outreach, and industry collaboration shines through. This newsletter is a testament to collective hard work, creative spirit, and scientific curiosity.

I extend my heartfelt congratulations to the editorial team, contributors, and students. Your hard work brought this issue to realization. I am confident that this publication will inspire, inform, and ignite fresh ideas among our readers.

Dr. A S Arora
Dean FSW,
SLIET, Longowal

Message from Head of the Department

It is a matter of immense pride to present the inaugural edition of the Department of Food Engineering and Technology newsletter. This publication reflects the academic strength, research excellence, and collaborative spirit that define our department. This newsletter will serve as an important platform to document and share our achievements, including research contributions, student accomplishments, industry interactions, and academic excellence. For students, it offers a suitable platform to enhance their knowledge, develop communication skills, and gain recognition for their constant efforts and achievements. For the department, the newsletter strengthens our academic identity facelift, promotes collaboration, and highlights our strengths to external stakeholders. At the institute level, this effort will contribute to build a culture of excellence, innovation, and effective communication.

I congratulate and appreciate the efforts of the editorial team, faculty, staff and students involved in bringing out this publication and wish for its continued success and future endeavours.

Dr. Charanjit Singh Riar
Head of Department,
Food Engineering and Technology,
SLIET, Longowal

Important Events, Activities and Achievements		
Expert Talks/Seminars/Workshops/Conferences/STTPs/FDPs/Quizzes		
Department Corner	Faculty Corner	Student/Alumni Corner

World Food Day 2025 Celebrations

The Department of Food Engineering and Technology, in collaboration with the AFST(I) Longowal Chapter, successfully celebrated World Food Day 2025 from 6–16 October under the global theme *"Hand in Hand for Better Foods and a Better Future."* The ten-day event witnessed vibrant participation from over 150 students of Diploma and UG programme of the department.

The celebration featured a series of academic and creative activities, including Food Quiz, Poster Making, Food Art Competition, Oral Presentation and Extempore competitions, that highlighted students' scientific insight, communication skills, and awareness of food, nutrition, and sustainability. The Food Quiz, one of the most engaging events, saw active participation and demonstrated strong knowledge of food science and global food issues.

Creative expression was showcased through poster making and food art competitions, where students effectively translated the theme into impactful visual and artistic forms. The programme concluded with a photo-shoot documentary competition, capturing the essence of the celebrations through compelling visual narratives.

Addressing the valedictory session, Prof. Mani Kant Paswan commended the efforts of students and faculty in promoting awareness of global ood challenges in alignment with the sustainable development Goals. Dr. C. S. Riar, along with Dr. D. C. Saxena, Dr. Sukhcharn Singh, and Dr. Navdeep Jindal, appreciated the enthusiastic participation and emphasized the importance of such platforms in fostering innovation and sustainability.

The celebration successfully integrated learning, creativity, and awareness, reinforcing the significance of sustainable food systems while providing a dynamic platform for students to showcase their ideas and talents.

AFST(I) National Food Convention 2025

Under the visionary leadership of Prof. Mani Kant Paswan, Director SLIET, the Department of Food Engineering and Technology, in collaboration with the Association of Food Scientists and Technologists of India Longowal Chapter, successfully organised a two-day National Food Convention (AFSTINFC-2025) on October 15–16 in hybrid mode. The event commemorated World Food Day under the theme *"Hand in Hand for Better Foods and a Better Future,"* highlighting the importance of collaboration, innovation, and sustainability in food systems.

The convention witnessed participation from around 100 delegates representing 27 national and international institutions, who presented their research through oral and poster sessions. The event was supported by leading industry partners, reflecting strong academia–industry synergy.

The inaugural session was graced by Dr. Nachiket Kotwaliwale, Director of ICAR-Central Institute of Post-Harvest Engineering and Technology, Ludhiana, as Chief Guest, along with Dr. Rakesh Sharda as Guest of Honour. The valedictory function featured Prof. Ashok Kumar, former Dean and Director of Extension Education, Punjab Agricultural University, Ludhiana and Dr. Sanjeev Sharma, Deputy General Manager (R&D), Patanjali Ayurveda Limited as Chief Guest and Guest of Honour, respectively.

The convention underscored the role of interdisciplinary research and technological advancements in addressing critical challenges related to food security, nutrition, and sustainability, aligned with the United Nations Sustainable Development Goals. The event was coordinated by the organising team comprising Prof. C. S. Riar (Chairman), Prof. D. C. Saxena (Convener), and organising secretaries Prof. Sukhcharn Singh and Prof. Navdeep Jindal.

FoSTAC Training Programme

The Department of Food Engineering & Technology at Sant Longowal Institute of Engineering and Technology successfully organised a Food Safety Training and Certification (FoSTAC) programme in collaboration with the Nestlé Food Safety Institute, a recognised training partner of the Food Safety and Standards Authority of India on Dec 3-4, 2025.

The programme witnessed enthusiastic participation from over 50 undergraduate and postgraduate students, highlighting strong engagement with food safety practices and regulatory frameworks. As a flagship initiative of FSSAI, FoSTAC is designed to build competency in food safety and hygiene among future professionals and food handlers.

The training covered critical areas including food safety regulations, hazard analysis, hygiene practices, food labelling, and quality control, equipping participants with industry-relevant knowledge and practical skills aligned with national standards. The programme was effectively coordinated by Prof. P. S. Panesar and Prof. C. S. Riar.

National Conference FIFATF-2025

The Department of Food Engineering and Technology at Sant Longowal Institute of Engineering and Technology successfully organised a two-day National Conference on *"Food Innovation, Food Allergies and Traditional Foods (FIFATF-2025)"* on 11–12 December 2025 in hybrid mode. Held under the leadership of Prof. Mani Kant Paswan, Patron-in- chief and Director SLIET, the conference brought together around 200 delegates, including academicians, researchers, industry professionals, and students from across the country.

The inaugural session was chaired by Prof. Mani Kant Paswan, Director SLIET and the Guest of Honour was Prof. Kaushal Kishor Prasad, Professor Department of Superspeciality of Gastroenterology PGIMER Chandigarh. Sh. Chirag Paswan, Union Cabinet Minister for Food Processing Industries and S. Ravneet Singh Bittu, Minister of State for Railways and as the Minister of State for Food Processing Industries send their messages and wishes for the conference. The organising team comprised of Prof. H. K. Sharma (Patron), Prof. Kamlesh Prasad (Chairman), and Prof. C. S. Riar (Co-Chairman) also graced the inaugural session. Dr Sukhcharn Singh and Dr Pradyuman Kumar was organizing secretaries of the conference.

The conference included thematic and industry-focused sessions on emerging areas such as PMFME initiatives, predictive modelling for shelf-life, valorisation of food processing waste, and advanced techniques for pesticide residue analysis. who appreciated the institute's efforts in fostering meaningful academic dialogue. The conference concluded on a high note, reaffirming SLIET's commitment to promoting knowledge exchange, collaborative research, and innovation in addressing challenges related to food, nutrition, and security in alignment with the Sustainable Development Goals.

AFSTI General Body Meeting of Longowal Chapter

A meeting was organized by the AFSTI Longowal Chapter in the Department of Food Engineering & Technology to discuss about the previous events and initiatives for enhancing the status and activities of the local chapter at the national level. The meeting witnessed the participation of faculty members, association life members, student members along with the President of the association Dr. Parmjit S. Panesar. The meeting was held to formulate effective strategies for increasing the visibility, academic engagement, industrial collaboration, and professional outreach of the local chapter. Various important aspects including organizing national-level seminars, expert lectures, workshops, student activities, industry interactions, collaborative research initiatives, and participation in professional events were discussed in detail. Emphasis was also laid on increasing student membership, promoting technical awareness, and strengthening networking with other chapters and professional bodies across the country. During the meeting, several valuable suggestions were proposed by the members to improve the functioning and impact of the chapter. The participants collectively expressed their commitment toward making the local chapter more active, dynamic, and nationally recognized through continuous academic and professional activities.

On this occasion, a special felicitation ceremony was also organized to honour and congratulate Dr. Parmjit S. Panesar (President, AFSTI) for their future leadership, and continuous support toward the growth and development of the Association as well as the local chapter. The President was felicitated with a token of appreciation by Dr. Charanjit Singh Riar (HOD, FET), Dr. D. C. Saxena (President, Longowal Chapter), Dr. Navdeep Jindal (Treasurer, Longowal Chapter) and Dr. Sukhcharn Singh (Secretary, Longowal Chapter) in recognition of dedicated efforts in promoting academic excellence and professional development among students and faculty members.

The event concluded with a vote of thanks, where gratitude was expressed to all dignitaries, participants, and organizing members for their valuable presence and contributions toward the successful conduct of the meeting.

Alumni Lectures on Industry Exposure and Career Development

An Alumni Lecture was organized on 27 January 2026 for the students of the Food Engineering & Technology Department with the objective of providing industry exposure and career guidance through alumni interaction.

The session was delivered by two distinguished alumni: Mr. Jashkamal Singh, Factory Head, Kandhari Beverage Pvt. Ltd. Ambala (Haryana) and Ms. Saloni Garg, Quality Control Coordinator, PepsiCo, Channo, Patiala (Punjab). The alumni were welcomed and introduced by Dr. Charanjit Singh Riar, HOD, Food Engineering & Technology Department, SLIET. About 50 undergraduate students of the department attended these lectures.

Mr. Jashkamal Singh shared his professional journey and fond memories of his student life at the institute. He emphasized the importance of discipline, regular attendance, and active classroom participation. He guided students on interview preparation, highlighting proper dress code, confidence-building, and professional behaviour. He also explained how to respond confidently when unsure about an interview question and stressed the importance of both theoretical concepts and practical knowledge, especially hands-on understanding of industrial machinery.

The session included an interactive discussion where students asked questions regarding the skills, qualities, and mindset required to succeed in the food industry. Mr. Jashkamal Singh addressed these queries with practical insights and industry expectations.

Later, Ms. Saloni Garg spoke about her experience entering the industry, the challenges she faced during her internship and early career, and how students can prepare themselves to avoid similar difficulties. She motivated students to remain focused on academics and skill development and briefly explained the role and significance of Quality Control in the food industry.

Overall, the alumni lectures were highly informative and motivating. The interaction provided students with valuable industry exposure, practical guidance, and inspiration, making the session both impactful and enriching.

Alumni Lecture by Mr. Ram Singh

The Department of Food Engineering & Technology at Sant Longowal Institute of Engineering and Technology organized a motivating alumni lecture on 18th February 2026. The session was delivered by distinguished alumnus Mr. Ram Singh (GFT-2014), Receiving Manager at Allegion, Canada and was attended by more than 50 UG students making the event engaging and interactive.

The program began with a warm welcome and introduction of the guest by Dr. Charanjit Singh Riar, HOD, who expressed pride in the achievements of the alumnus at the international level. In his address, Mr. Singh shared his journey as a proud SLIETian, reflecting on his academic years and the challenges he faced after graduation. He emphasized that perseverance, continuous learning, and the right mindset are key to professional growth.

Through his presentation titled "The Secret – Mind-set, Mentorship & Professional Success," he highlighted the strong connection between thoughts, discipline, and success. He explained the concept of the Law of Attraction, stating that positive thinking leads to positive outcomes. Mr. Singh also guided students in interview preparation, emphasizing that practical knowledge and skills are more important than CGPA. He underlined the importance of time management, punctuality, and professional discipline, sharing his own work practices such as following FIFO (First In, First Out). He also encouraged students to think innovatively and consider entrepreneurship as a future career option, while acknowledging the vital role of professors in shaping students' mindset and careers.

During the interactive session, students actively engaged with questions regarding career choices, maintaining focus, and overcoming distractions. Mr. Singh advised them to set clear goals, write them down, and review them regularly to build consistency and discipline.

The session concluded with a vote of thanks by Dr. Charanjit Singh Riar. Faculty members, including Prof. Navdeep Jindal, Dr. Sukhcharn Singh, and Dr. Dharmesh Chandra Saxena, also appreciated the speaker for sharing his valuable experiences and motivating the students.

Industrial Visit of Diploma Final Year

Industrial Tour

With the encouragement and support of Prof. Mani Kant Paswan, Director of Sant Longowal Institute of Engineering and Technology (SLIET), final-year diploma students of the Department of Food Engineering undertook an industrial visit to Akene India Private Limited, a beverage manufacturing unit located near Focal Point, Sangrur. During the visit, students were given a comprehensive overview of the beverage production process. They observed the use of plastic pellets for manufacturing preforms, which are subsequently molded into bottles. The students also gained insights into juice preparation and processing, along with modern packaging techniques such as tetra packing and 250 ml bottling of non-carbonated beverages. The technical operations and quality assurance practices were explained in detail by Mr. Suvinder, QA Supervisor, and Mr. Shahrukh Khan, Production Supervisor. They guided the students through each stage of production, emphasizing the importance of hygiene, quality control, and operational efficiency in industrial settings. The students described the visit as highly informative and beneficial, as it provided them with valuable exposure to real-world food processing and packaging technologies.

The visit was conducted under the guidance of Prof. C. S. Riar, Head of the Department, along with Prof. C. S. Saini and Dr. Tejinder Kaur. Prof. Riar appreciated the cooperation extended by the company and highlighted the significance of such industrial visits in enhancing students' practical knowledge and industry readiness.

Faculty Corner

Short-term Course, Faculty Development Programme organized/attended

Prof. Parmjit S. Panesar attended a one-week online Faculty Development Program on "AI for Teaching and Learning," organized by the Department of Computer Science and Engineering at SLIET Longowal during 16–20 March 2026.

Invited talk

Prof. Charanjit Singh Riar was invited to deliver a lecture on "Primary and Secondary Food Additives: Characteristics, Applications, Regulations & Safety" during a Faculty Development Program organized by DAV College. He was also invited to speak on "Promoting Awareness and Capacity-Building on On-Farm Processing of Agricultural Produce to Enhance Farmers' Income" at the National Seminar on "Strengthening Farmer Producer Organizations and On-Farm Processing for Sustainable Rural Development: A Step Towards Viksit Bharat 2047," organized by the Department of Applied Agriculture, Central University of Punjab.

Prof. Parmjit S. Panesar delivered a keynote address on "Sustainable Valorization of Food Industry Byproducts for Circular Economy Innovation and Economic Resilience" at the International Conference on Sustainable Innovations in Life Sciences, Food, Environment & Biotechnology (IC-SILFEB 2026) held at Guru Jambheshwar University of Science & Technology during 12–13 March 2026. He also delivered an invited talk on agripreneurship, optimized value chains for horticultural crops, and circular strategies for waste upcycling during the ICAR-sponsored 21-day Winter School held at Dr. YS Parmar University of Horticulture and Forestry from 27 January to 16 February 2026.

In addition, he served as a Session Chair at the international conference on "Advanced Next Generation Vision for Emerging and Sustainable Healthy Foods: Sustainable Food Processing, Waste Valorization and Circular Economy in Food Processing 2026," organized at National Institute of Food Technology Entrepreneurship and Management (NIFTEM) during 26–28 February 2026. He was also invited as a Keynote Speaker at the 8th International Symposium on Innovative Global Technology Trends organized by MIT Art, Design and Technology (MIT ADT) University on 24 March 2026. Furthermore, he chaired a session on "Innovation in Nutrition, Dietetics, Upcycling and Local Foods on Gastronomic Engineering" during the 31st ICFoST 2025 held at National Institute of Food Technology Entrepreneurship and Management (NIFTEM) from 18–20 December 2025.

Prof. Vikas Nanda served as the Regional Chair and delivered a keynote address on "Quality Parameters of Indian Honey and Adulteration Challenges: Current Challenges and Way Forward" at the 6th International Conference on Food Properties (ICFP-6) held during 28–30 January 2026 in Bangkok. He was also invited to represent India as a speaker and round table participant on "Economic Anomalies in the Honey Market" at the Apimondia 2025 held during 23–27 September 2025.

Additionally, he served as an Invited Speaker, Resource Person, and Guest of Honour at a National Seminar on "Scientific Honey Beekeeping Integrated with Oilseed Mission," organized at the Centre for Innovation and Entrepreneurship Development (CIED), Islamic University of Science & Technology (IUST) during 16–18 October 2025. He also served as a Resource Person in a district-level training programme for beekeepers on "Honey Processing,

Analysis and Value Addition," organized by the Department of Horticulture under the National Beekeeping and Honey Mission (NBHM) on 10 July 2025.

Dear Speaker

On behalf of the organizing committee, I would like to sincerely thank you for your commitment as speaker in the *Round Table - Looking at Economic Anomalies in the honey market* within the 49th Apimondia Congress held in Copenhagen. Your contribution enhance the quality of the event, which I personally believe gave important inputs on the theme, and allowed more than 8000 attendees to share scientific and technical knowledge, networking and strength bonds between all those sharing common interest in bees and beekeeping.

Best regards and see you soon, if not before, in Dubai 2027.

Miguel Vilas-Boas

Chairperson of Apimondia Scientific Commission on Beekeeping Technology and Quality

Prof. Pradyuman Kumar delivered an invited talk on "Application of Microwave in Food Processing as a Nonthermal Technique" at the International Conference on Sustainable Agriculture and Food Safety- 2026 held during 12-13 March 2026 at Parul University, Vadodara.

Achievements and Awards

Prof. Parmjit S. Panesar has been appointed as the President of the Association of Food Scientists and Technologists (AFSTI) for the year 2026, reflecting his distinguished leadership and contribution to the field of food science and technology. He is also serving as the Chairman of the Board of Studies in Food Science and Engineering for UG/PG programs at IK Gujral Punjab Technical University for the term 2026–2028. In addition, he is a Member of the Board of Studies in Food Technology as well as the Board of Research Studies, School of Engineering & Technology at Islamic University of Science and Technology.

Prof. Navdeep Jindal has been appointed as the member of the Board of Studies in Food Science and Engineering for UG/PG programs at IK Gujral Punjab Technical University for the term 2026–2028

Prof. Charanjit Singh Riar and **Prof. Parmjit S. Panesar** have been recognized among the "Top 2% Scientists of the World" in the career-long research category in the list released by Stanford University.

Prof. Charanjit Singh Riar was also conferred with the "Inspiring Professor Award 2025" on the occasion of National Teachers' Day (5 September 2025) for his outstanding contribution to education and continued dedication towards the bright future of students by Madras Journal Series Pvt. Ltd., a registered enterprise under the Ministry of MSME, Government of India.

Editorial board memberships

Prof. D. C. Saxena serves as the Editor of the Journal of Grain Science & Technology (JGST) and is also a Member of the Editorial Board of Functional Food Science.

Prof. Parmjit S. Panesar is associated with the editorial boards of several international journals, including the Journal of Food Science & Technology (ISSN: 0022-1155), International Journal of Biological Macromolecules (ISSN: 0141-8130), and the Indian Journal of Microbiology (ISSN: 0973-7715).

Prof. Vikas Nanda serves as an Editorial Member of the International Journal of Food Science and is also associated as an Editorial Member with Springer Nature.

Research project

Prof. Parmjit S. Panesar is serving as the Principal Investigator of the research project titled "Unravelling the Nutraceutical Potential of Millet Polyphenols in Modulating Gut-Microbiome Liver Axis in Alleviating Hepatic Endotoxemia and Steatosis," undertaken jointly with National Agri-Food Biotechnology Institute (NABI). The project is funded by the Indian Council of Medical Research (ICMR), Government of India, with a sanctioned grant of ₹1,15,17,394 for the period 2025–2028.

Patent granted/filed

Prof. D. C. Saxena along with **Prof. Sukhcharn Singh** and **Prof. Navdeep Jindal** has contributed to innovative research and technology development through multiple patent publications and filings. Their published patent includes "Automated Amla Pricking Machine and Pricking Method Thereof" (Application No. 202511099216), which was published on 05 December 2025 in Journal Number 49/2025. They have also filed a patent titled "A Tandoor for Automated Continuous Flatbread (Tandoori Roti) Production and Method Thereof". The patent application was filed on 27 March 2026 with Patent Filing Number 202611037618.

Prof. Pradyuman Kumar has co-filed a patent application titled "Development of Antioxidant-rich Black Bean Protein Based Dry Mix Powder" along with **Priti Sharad Mali**, contributing towards the development of functional and nutritionally enriched food products.

Prof. Vikas Nanda has contributed to several patent filings, including a "Device to Detect Adulteration in Red Chilli Powder" developed with **Dilpreet Singh Brar** and **Bir Mohan Singh**, as well as an "IoT Enabled Electronic Nose (E-Nose) System for Authentication and Quality Assessment of Red Chilli Powder." He has also co-developed a patent on "Process Technology for Formulation and Preparation of Honey Fillings for Bakery Application" along with **Masud Alam** and **Basharat Nabi Dar.**

Additional duties assigned by the institute

Prof. D. C. Saxena is serving as the Nodal Officer for the implementation of the Guidelines for Gender Champions, contributing towards the promotion of gender sensitivity and inclusivity within the institution.

Prof. Parmjit S. Panesar is serving as the Chairman of the RA Bill Committee, Estate Office (Civil Wing), at SLIET Longowal. He is also the Co-convener of the NEP Cell and a Member of the International Cell Committee of SLIET Longowal.

Prof. Sukhcharn Singh is serving as Vice-Chairman SET 2026.

Prof. Pradyuman Kumar is serving as Chief Warden Boys Hostel

Prof C. S. Saini, Associate Dean (Discipline)

Conference

Prof. Vikas Nanda delivered an oral presentation of the research paper titled "Starch and Non-Starch Hydrocolloids Synergy in Honey Fillings: Techno-Functional, Rheological, Textural, and Sensory Properties" at the 49th Apimondia Congress, held from 23–27 September 2025 in Copenhagen.

Miscellaneous

Prof. Vikas Nanda undertook a consultancy project titled "Development and Analytical Evaluation of Honey Sweetened Energy Bar" associated with value addition of the Saffola honey brand, funded by Marico Ltd., Mumbai, with a project amount of ₹1,57,500. He is also the Founder and Content Creator of a YouTube channel focused on honey research, scientific beekeeping, processing, quality analysis, and value addition for the benefit of beekeepers, researchers, and entrepreneurs.

Publication: Papers in journals, conference, chapters, books

Books

1. Nutraceutical Potential of Millet-Based Food Products: Chemistry and Applications, **Parmjit S. Panesar**, **Charanjit S. Riar**, Sushil Dhital, John Wiley & Sons (2026).
2. Biorefining Fruit Waste: Technological Advances in a Circular Bioeconomy, **Parmjit S. Panesar**, Ramesh C. Ray, Noé Aguilar-Rivera, John Wiley & Sons (2026).
3. Biowaste to Biofuel: A Microbial Approach, Shashi Kant Bhatia, **Parmjit S. Panesar**, Ranjit Gurav, CRC Press (2025). https://doi.org/10.1201/9781003633709

Book Chapters

1. Amandeep Singh, Tejinder Kaur, Souvik Giri, Kawaljit S Sandhu, **Charanjit S. Riar**. Antinutritional Factors in Millets and Their Elimination Methods, In: Nutraceutical Potential of Millet-Based Food Products: Chemistry and Applications, (Eds. **Parmjit S. Panesar**, **Charanjit S. Riar**, Sushil Dhital) (PP-65-84), John Wiley & Sons, Ltd.

2. Ashmita Uppal, **Parmjit S. Panesar**, Durga S Bunkar (2026). Biochemical and Nutritional Composition of Fruit Waste: A Critical Assessment. In: Biorefining Fruit Waste: Technological Advances in a Circular Bioeconomy. John Wiley & Sons, Inc, 27-55.

3. **Charanjit S. Riar**, **Parmjit S. Panesar**. Classification and Production of Millets In: Nutraceutical Potential of Millet-Based Food Products: Chemistry and Applications, (Eds. Parmjit S Panesar, Charanjit S Riar, Sushil Dhital) (PP-1-45), John Wiley & Sons, Ltd. https://doi.org/10.1002/9781394294732.ch1

4. Divyanshi Thakur, Tejinder Kaur, Amandeep Singh, **Charanjit S. Riar**, **Parmjit S. Panesar**. Millet Bioactives: Bioavailability and Enhancement of Their Bioaccessibility, In: Nutraceutical Potential of Millet-Based Food Products: Chemistry and Applications, (Eds. Parmjit S Panesar, Charanjit S Riar, Sushil Dhital) (PP-203-226), John Wiley & Sons, Ltd.

5. Farhan M Bhat, **Charanjit S. Riar**. Millets Dietary Fibers: Extraction, Quality Characteristics, and Health Benefits, In: Nutraceutical Potential of Millet-Based Food Products: Chemistry and Applications, (Eds. Parmjit S Panesar, Charanjit S Riar, Sushil Dhital) (PP-135-149), John Wiley & Sons, Ltd.

6. Goyal, R., & **Nanda, V.** (2025). Extraction of natural colourants from medicinal fruits of Iran. In Medicinal Fruits of the Middle East (pp. 14-55). CRC Press.

7. Goyal, R., & **Nanda, V.** (2025). Yak Milk: Fermented Products and Their Health Benefits. In Yak Milk (pp. 85-103). CRC Press.

8. Navneet Kaur, Simran Jot Kaur, **Parmjit S. Panesar**, Shashi Kant Bhatia (2026). Commercialization of Microbial Biofuels around the World. In: Biowaste to Biofuel, CRC press, 245-274.

9. Neha Goyal, **Parmjit S. Panesar**, **Charanjit S. Riar**, Durga S. Bunkar (2026). Millet Byproducts: Bioactive Composition and Value Addition. In: Nutraceutical Potential of Millet-Based Food Products: Chemistry and Applications, John Wiley & Sons, 321-351.

10. **Parmjit S. Panesar**, Ramesh C. Ray, Ashmita Uppal (2026). Waste Biorefinery: Current Status and Opportunities. In: Biorefining Fruit Waste: Technological Advances in a Circular Bioeconomy. Scrivener Publishing LLC.

11. Ram Krishna, **Kamlesh Prasad**. Dehydration of Amla Pomace and Coriander Leaves for Value-added Product Artificial Neural Network Assisted Moisture Prediction, **Book**- Applied Food Processing and Preservation Technologies, 2026.

12. Samandeep Kaur, **Parmjit S. Panesar**, Vikrant Singh (2026). Antioxidants in Citrus By-Products, In: Citrus Fruit Processing By-Products: Technologies and Basic Protocols, Spinger US, 47-55.

13. Samandeep Kaur, Umexi Rani, **Parmjit S. Panesar**, Vikrant Singh (2026). Biotechnological Potentialities and Valorization of Citrus Waste: Their Potential Applications. In: Biorefining Fruit Waste: Technological Advances in a Circular Bioeconomy. John Wiley & Sons, Inc, 127-161

14. Samandeep Kaur, Vikrant Singh, **Parmjit S. Panesar** (2026). Sustainable Biomaterials for Bakery Products. In: Sustainable Biomaterials for Food Packaging, CRC Press, 306-332.

15. Sharma, A., & **Nanda, V.** (2026). Oilseed Proteins. In Food Proteins (pp. 89-139). CRC Press.

16. Shashi Kant Bhatia, **Parmjit S. Panesar**, Ranjit Gurav (2026). Introduction to Biowaste to Biofuel: A Microbial Approach. In: Biowaste to Biofuel, CRC press, 1-7.

17. Sonker, T. and **Kumar, P.** 2026. Micronutrient malnutrition: Current status and interventions. In: Rice Fortification: Technology, Machinery and Quality Assurance. CRC Press USA (ISBN: 9781041117612).

Papers in WoS/SCI-indexed journals –

1. Aditi Sharma, Navdeep Jindal, **Sukhcharn Singh**, Modulation of functional properties, molecular structural and thermal stability of Indian teff (*Eragrostis tef*) protein isolates through germination. International Journal of Biological Macromolecules, Volume 335, Part 1, January 2026, 149274. **(IF – 8.5)** https://doi.org/10.1016/j.ijbiomac.2025.149274

2. Aditi Sharma, Navdeep Jindal, **Sukhcharn Singh**, Unlocking the potential of pseudocereal and millet proteins: isolation, quality, and industrial applications. Critical Reviews in Food Science and Nutrition **(IF – 8.3)** https://doi.org/10.1080/10408398.2025.2573822

3. Ankit Deep, **Kamlesh Prasad**, **Navdeep Jindal**, Development of microcontroller based versatile device for the process monitoring and control applications in food processing industries. Journal of Food Science and Technology, February 2026. **(IF- 3.4)** https://doi.org/10.1007/s13197-026-06623-w

4. Ankit Deep, **Kamlesh Prasad**, **Navdeep Jindal**, Whey Forward: Reducing Total Solids for Cleaner Effluents and Value-Added Products using Reverse Centrifugal Expulsion. Indian Journal of Dairy Science 79 (1), 2026 **(IF- 0.2)** https://doi.org/10.33785/IJDS.2026.v79i0

5. Arun K Shakya, **Navdeep Jindal**, **Charanjit S. Riar**. A comprehensive review of conventional, green, and assisted techniques for chia (*Salvia hispanica* L.) oil extraction. Food Production, Processing and Nutrition, 7,67, 1-21. **(IF – 5.7)** https://doi.org/10.1186/s43014-025-00346-9

6. Ashmita Uppal, **Parmjit S. Panesar*** and Sudesh K Yadav (2026). Unlocking the valorization potential of rapeseed meal using green technologies towards sustainable circular economy: A review. *Food and Bioproducts Processing* (157), 24-41. **(IF- 3.4)** https://doi.org/10.1016/j.fbp.2026.02.014

7. Bhardwaj, M., Bist, Y. & **Saxena, D.C.** Effect of Amylose Content and Starch Nanocrystals on the Structure–Function Properties of Pearl Millet Starch Nanocomposite Films. Food Biophysics 20, 169 (2025). **(IF – 3.2)** https://doi.org/10.1007/s11483-025-10058-9

8. Bhat, S. A., M. Singla, T. Srivastava, et al. 2026. "Enhancing the Functional, Antioxidant, and Microbiological Properties of Pearl Millet Flour: A Comprehensive Study on the Effects of Gamma Irradiation Dose." Cereal Chemistry 0: e70056. **(IF – 2.5)** https://doi.org/10.1002/cche.70056

9. Bhat, S.A., Kumar, Y., Sharma, R. et al. Methods, Structural and Physicochemical Properties, and Food System Roles of Starch–Polyphenol Complexes: A Review. Food Biophysics 21, 37 (2026). **(IF – 3.2)** https://doi.org/10.1007/s11483-026-10128-6

10. Brar, D. S., Singh, B., & **Nanda, V.** (2025). Application of Deep Learning and Explainable Artificial Intelligence (XAI) for Detecting Red Chilli Powder Adulteration. Journal of Food Composition and Analysis. **(IF – 4.6)** 10.1016/j.jfca.2025.107947

11. Dey, M. Singh, A. and **Kumar, P.** 2025. Understanding the mechanism of change in digestion behaviour, antinutritional properties, and rheological characteristics of barnyard and browntop millet: the role of soaking and germination. Journal of Food Measurement and Characterization.20:321-339. **(IF – 3.3)** https://doi.org/10.1007/s11694-025-03603-0.

12. Mali, P.S. and **Kumar, P.** 2026. Mechanistic insights into black bean protein isolate/HPMC interactions with anthocyanins: enhanced in vitro digestive stability and structural properties via freeze drying. Food Biophysics. **(IF – 3.3)** https://doi.org/10.1007/s11483-026-10152-6.

13. Mali, P.S. and **Kumar, P.** 2026. Impact of high-intensity ultrasound on the structural integrity, functional attributes, and emulsifying properties of black bean protein isolates for food application.

Journal of Food Measurement and Characterization **(IF – 3.3)**. https://doi.org/10.1007/s11694-026-04329-3.

14. Mali, P.S. and **Kumar, P.** 2026. High-intensity ultrasound-induced structural modification of black bean (Phaseolus vulgaris l.) protein isolate: improved amino acid composition, and nutritional profiling. Food Biophysics. **(IF – 3.3)** https://doi.org/10.1007/s11483-026-10130-y.

15. Parmar, S., Singh, Y. and **Kumar, P.** 2025. Ultrasound pretreatment-enhanced OSA esterification of proso millet starch for application in low-fat mayonnaise. Food Chemistry **(IF – 9.8).** https://doi.org/10.1016/j.foodchem.2025.146174.

16. Jyoti Soni, **Parmjit S. Panesar*** and Avinash Thakur (2025). Microwave-Assisted Extraction of Starch from Litchi Kernel and Its Physicochemical, Morphological, Structural, Pasting, and Thermal Characterization. *Waste and Biomass Valorization*, 1-14. **(IF – 2.8)** https://doi.org/10.1007/s12649-025-03375-0

17. Jyoti Soni, **Parmjit S. Panesar*** and Avinash Thakur (2025). Ultrasound-assisted extraction of bioactive compounds from *Litchi chinesis* kernel: optimization, bioactivity and antimicrobial study. *Bioresource Technology Reports*, 32, 102397. **(IF- 4.3)** https://doi.org/10.1016/j.biteb.2025.102397

18. Jyoti Soni, **Parmjit S. Panesar*** and Avinash Thakur (2026). Optimization and performance analysis of ultrasonication on the extraction of starch from Litchi (*Litchi chinensis*) kernel and its characterization. *Biomass Conversion and Biorefinery*, 16(2), 78. **(IF- 4.1)** https://doi.org/10.1007/s13399-025-06968-w

19. Kumar, A., Alam, M., Kumari, K., **Nanda, V.,** (2026). Transformation of Quality Attributes of Dough, Bakery Products, and Bakery Fillings Using Diverse Hydrocolloids: A Concise Review. Journal of Food Process Engineering, 49,2, e70388. **(IF- 2.9)** https://doi.org/10.1111/jfpe.70388

20. Kumar, Y., Singh, S. & **Saxena, D.C.** Rheological and Textural Insights Into Crosslinked Buckwheat and Rice Starch Gels and Their Aerogel Applications. Food Biophysics 20, 174 (2025). **(IF – 3.2)** https://doi.org/10.1007/s11483-025-10063-y

21. Makdud Islam, Akhouri Sanjay Kumar Sinha, **Kamlesh Prasad,** PLA/starch bi-layer films reinforced with rice straw cellulose nanofibers and functionalized with organosolv–lignin nanoparticles and grapefruit bioactives for shelf life. Sustainable Food Technology, 4, 752-771, November 2025. **(IF- 5.3)** https://doi.org/10.1039/D5FB00561B

22. Makdud Islam, Akhouri Sanjay Kumar Sinha, **Kamlesh Prasad**, Rice straw biomass-based modified cellulose nanofibers (CNFs): Reinforcement in polylactic acid (PLA) bio nanocomposite films. Biomass Conversion and Biorefinery, December 2025. **(IF- 4.1)** https://doi.org/10.1007/s13399-025-06962-2

23. Mamta Bhardwaj, Yograj Bist**, D.C. Saxena**, Structure-function relationships of pearl millet nano-starches prepared by different methods. International Journal of Biological Macromolecules, Volume 342, Part 1, 2026, 150101, ISSN 0141-8130. **(IF – 8.5)** https://doi.org/10.1016/j.ijbiomac.2026.150101

24. Neha Goyal, **Parmjit S. Panesar*** and Harish K Chopra (2026). Sequential Microwave-assisted enzymatic extraction (MAEE) of insoluble and soluble dietary fiber from Indian gooseberry (*Phyllanthus emblica*) pomace: process optimization and characterization (Structural, Thermal, Morphological, functional and physiological Properties). *Journal of Food Measurement and Characterization*, 1-18. **(IF – 3.3)** https://doi.org/10.1007/s11694-026-04126-y

25. Palak Mahajan, Manab Bandhu Bera, **Parmjit S. Panesar** (2026). In-vitro bio-accessibility and storage stability of freeze-dried Kutki millet (*Panicum sumatrense*) starch-based hydrogel containing gallic acid. *Journal of Food Science and Technology*. 1-10. **(IF – 3.3)** https://doi.org/10.1007/s13197-026-06615-w

26. Praveen Saini, Akhouri Sanjay Kumar Sinha, **Kamlesh Prasad,** Upcycling wheat bran: Development of a novel fiber-rich functional ingredient. Food and Humanity 5, 100879, October 2025. **(IF > 2)** https://doi.org/10.1016/j.foohum.2025.100879

27. Praveen Saini, Akhouri Sanjay Kumar Sinha, **Kamlesh Prasad**, Wheat Bran Modification Treatments for Enhancing the Quality and Nutritional Profile of Traditional Cookies. Discover Food (5) 424, December 2025. **(IF- 3.7)** https://doi.org/10.1007/s44187-025-00681

28. Prem Prakash, **Kamlesh Prasad**, Shashi Kala, Influence of thin-layer drying temperature on dehydration characteristics and quality of garlic cloves (*Allium sativum* L.). Journal of Food Measurement and Characterization. **(IF- 3.3)** https://doi.org/10.1007/s11694-026-04160-w

29. Ram Krishna, **Kamlesh Prasad**, Stability Studies on Developed Instant Chutney Tablets: A Step Toward Convenient Traditional Foods. Current Research in Nutrition and Food Science 14 (2), 2026. **(IF-1.1)** https://doi.org/bit.ly/3R3RHpZ

30. Ranjali Chaturvedi, Amisha Kaushik, **Sukhcharn Singh**, Physical modification of Browntop millet flour: effects of HMT, ultrasonication and gamma irradiation. Journal of Food Measurement and Characterization. **(IF – 3.3)** https://doi.org/10.1007/s11694-025-03799-1

31. Renu Sharma, Suhail Ahmad Bhat, Tanuja Srivastava, **D.C. Saxena,** In-depth analysis of nutritional, antioxidant, anti-nutritional, thermal, spectral and micro-structural properties of value-added extruded snacks, Journal of Cereal Science, Volume 129, 2026, 104433, ISSN 0733-5210. **(IF – 3.7)** https://doi.org/10.1016/j.jcs.2026.104433

32. Ridhi Awasthi, Yogesh Kumar, Mohit Nagar, Yograj Bist, **D.C. Saxena**. Cold plasma pretreatment enhances the crosslinking and esterification of guinea grass starch for starch-based cheese analogue development. Food Chemistry, Volume 511, 2026, 148863, ISSN 0308-8146. **(IF – 9.8)** https://doi.org/10.1016/j.foodchem.2026.148863

33. Shubhra Shekhar, Francisco J. Trujillo, Shubhpreet Kaur, **Kamlesh Prasad**, Elucidation of Electrical Characteristics for Apples (*Malus domestica*) Using Electrochemical Impedance Spectroscopy. Journal of Non-Destructive Testing 3(4), 25, October 2025. **(IF- 2.4)** https://doi.org/10.3390/ndt3040025

34. Sunil Kumar, Amit Rai, **Kamlesh Prasad**, Sustainable Biosynthesis of Silver Nanoparticles via *Terminalia bellerica* Leaf Extract to Enhance Antioxidant and Antimicrobial Efficacy. Scientia Iranica, 2026. **(IF- 1.9)**

35. Tejinder Kaur, **Parmjit S Panesar** and **Charanjit S. Riar**. Effect of controlled hydrothermal treatment on the structural, functional, and in vitro digestibility characteristics of foxtail millet grain starch. *European Food Research and Technology*, 252, 42 (2026). **(IF – 3.2)** https://doi.org/10.1007/s00217-025-05012-5.

36. Yograj Bist, Mohit Nagar, Yogesh Kumar, Srishti Upadhyay, **D.C. Saxena**, Vijay Singh Sharanagat, Cold plasma pretreatment enhances OSA esterification efficiency in Kodo millet starch: Morphological, structural, rheological, and functional insights, Innovative Food Science & Emerging Technologies, Volume 107, 2026, 104358, ISSN 1466-8564. **(IF – 6.8)** https://doi.org/10.1016/j.ifset.2025.104358

Papers in Scopus indexed journals –

1. Ankit Deep, **Kamlesh Prasad**, Navdeep Jindal, Tradition Meets Technology: Optimizing Paneer with Reverse Centrifugal Expulsion. Asian Journal of Dairy and Food Research, 2026. https://doi.org/10.18805/ajdfr.DR-2439
2. Anuradha Saini and **Parmjit S. Panesar***(2025). Optimization of ultrasound-assisted extraction of lutein from kinnow peels using response surface methodology. *Food and Humanity*, 5, 100903. https://doi.org/10.1007/s42535-025-01516-3
3. Makdud Islam, Akhouri Sanjay Kumar Sinha, **Kamlesh Prasad**, Comparative Evaluation of LDPE and Functionalized PLA/Starch Bi-Layer Films with Modified Lignin Nanoparticles and Grapefruit Flavedo Extracts for Extending Green Grape Shelf-Life. Journal of Packaging Technology and Research, February 2026. https://doi.org/10.1007/s41783-026-00199-8
4. Ramandeep Kaur Sidhu, C.S. Riar, **Sukhcharn Singh**, Eco-friendly biofilms from chemically modified Indian teff (*Eragrostis tef*) starch for quality maintenance and shelf-life improvement of green grapes. Sustainable Food Technology. https://doi.org/10.1039/D5FB00606F
5. Sandip Sanjay Gite, Divyadharshini Sivaraj, Moumita Karmakar, P.K. Rasmi, Sibo Boro, Chandrakant Genu Dalbhagat*, Shubham Mahendra Nimbkar, Vivek Kambhampati, Thivya Perumal, **Sukhcharn Singh**, Extrusion-induced modulation in functional and structural aspects of pseudocereals-based extrudates. Food and Humanity, 5(2025)100905 https://doi.org/10.1016/j.foohum.2025.100905
6. Srivastava, Y., Shafeeque, M., Kaur, M. et al. Studies of rheological properties of edible gel material extracted from common millets in India. Vegetos (2025). https://doi.org/10.1007/s42535-025-01516-3

Papers in other journals –

Arun Kumar, Navdeep Jindal, Charanjit Riar. Optimization of Green Extraction of Oil from Black Chia Seed Using Supercritical CO_2 and Study of Its In-vitro Antioxidant Characteristics, Journal of Pharmaceutical Research International, 37, 9, 33-56.

Conference Paper

1. Das, R. and **Prasad**, **K.** Shrinkage Kinetics of Dehydrating Materials Using the Arbitrary Lagrangian–Eulerian (ALE) Approach in Finite Element Modeling. Multifunctional Materials for Electronics and Biomedical Devices, pp 669-690 October 2025, National Conference on Advanced and Emerging Materials for Technological Applications.
2. Dehenkar, H. Mali, P.S. and **Kumar, P.** 2025. Valorization of roselle calyx bioactive compounds through ultrasound-assisted extraction using response surface methodology. National Conference on "Food Innovations, Food Allergies and Traditional Foods" (FIFATF-2025) 11-12 December 2025, SLIET Longowal.
3. Dey, M. and **Kumar, P.** 2025. Effect of soaking and germination on the nutrient and anti-nutrient properties of millets. National Food Convention, 15-16 October 2025, AFST (I) Mysore and SLIET Longowal.
4. Dey, M. and **Kumar, P.** 2025. Role of Germination in Modulating Digestion, Antinutritional Factors, and Rheology of Barnyard and Browntop Millet. Advanced Next Generation Vision for Emerging and Sustainable Healthy Foods- ANVESH, 26-28 February 2026, NIFTEM-Kundli.
5. Gaur, H., **Parmjit S. Panesar**, Kondepudi, K.K. (2026) Exploring the bioactive potential of kodo millet bran: Extraction, characterization and applications In: International conference on "Advanced Next Generation Vision for Emerging and Sustainable Healthy Foods: Sustainable Food Processing, Waste Valorization and Circular Economy in Food Processing, 2026" held at National Institute of Food Technology Entrepreneurship and Management, Kundli, Sonipat, Haryana (India) 26-28 February, 2026.

6. **Goyal, N.,** Panesar,P.S., Chopra, H.K. (2025) From waste to wealth: sustainable valorization of gooseberry (*Phyllanthus emblica*) by-products for nutraceuticals and industrial applications. In: National food convention on "Hand in Hand for Better Foods and a Better Future" held at Sant Longowal Institute of Engineering and Technology, Longowal, Sangrur, India, 15-16 October 2025.

7. Kapri, P. and **Prasad**, **K.** Deep Learning as a Non-destructive Machine Vision Approach in the Quality Classification of Ripening Banana. Multifunctional Materials for Electronics and Biomedical Devices, pp 691-703 October 2025, National Conference on Advanced and Emerging Materials for Technological Applications.

8. Kaur, K. and **Prasad, K.** 2025. Hyperspectral Imaging as an Intelligent Nondestructive Food Quality Assessment Tool. National Conference on "Food Innovations, Food Allergies and Traditional Foods" (FIFATF-2025) 11-12 December 2025, SLIET Longowal.

9. Krishna, R., and **Prasad, K.** Pressure-Dependent Juice Extraction Behaviour of *Emblica officinalis* and Physico-Chemical Characteristics of Pomace Powder for High-End Use. Multifunctional Materials for Electronics and Biomedical Devices, pp 651-667 October 2025, National Conference on Advanced and Emerging Materials for Technological Applications.

10. Mali, P. S. and **Kumar, P.** 2025. Advancing the Food Economy: HIU-Driven Enhancements in Black Bean Protein Functionality for Value-Added Processing and Meat Analogue Development. India International Science Festival Young Scientist Conclave on "Vigyan se Samruddhi for Aatmanirbhar Bharat, 6 - 9 December 2025, Ministry of Earth Sciences, Delhi at Panchkula.

11. Mali, P.S. and **Kumar, P.** 2025. Black bean protein as a sustainable alternative protein: advancing its structural, functional, and rheological properties for food applications. National Food Convention, 15-16 October 2025, AFST (I) Mysore and SLIET Longowal.

12. Parmar, S., Saxena, D.C. and **Kumar, P.** 2025. Starch-derived pickering emulsions for advanced food technology: fabrication methods, microstructural organization and industrial applications. National Conference on "Food Innovations, Food Allergies and Traditional Foods" (FIFATF-2025) 11-12 December 2025, SLIET Longowal.

13. Parmar, S., Saxena, D.C. and **Kumar, P.** 2025. Ultrasound pretreatment enhanced OSA esterification of proso millet starch and its application in mayonnaise. National Food Convention, 15-16 October 2025, AFST (I) Mysore and SLIET Longowal.

14. **Prasad**, K., Paswan, M., Sharma,H.K. Food Innovations, Food Allergies and Traditional Foods (FIFATF-2025), National Conference Book of Abstracts**, December 2025.** https://fifatf.org/wp-content/uploads/2026/01/Book-of-Abstracts-FIFATF-2025.pdf

15. Rouf, T., Sharma, P. **Kumar, P.** and Kumar P. 2025. Systematic development and detailed characterization of composite maize flat bread fortified with asparagus bean flour: A study on nutritional enhancement and quality attributes. National Conference on "Food Innovations, Food Allergies and Traditional Foods" (FIFATF-2025) 11-12 December 2025, SLIET Longowal.

16. Saindhaw, S. and **Kumar, P.** 2025. Advances in Dairy Quality Assurance through Machine Learning: Current Trends and Applications. National Conference on "Food Innovations, Food Allergies and Traditional Foods" (FIFATF-2025) 11-12 December 2025, SLIET Longowal.

17. Saindhaw, S. and **Kumar, P.** 2025. Artificial Intelligence for Microbial Quality Control in the Dairy Sector- A review. National Food Convention, 15-16 October 2025, AFST (I) Mysore and SLIET Longowal.

18. Saindhaw, S. and **Kumar, P.** 2025. Image-Based Intelligence for Cereal Grain Quality Assessment: Advances, Challenges, and Future. Advanced Next Generation Vision for Emerging and Sustainable Healthy Foods- ANVESH, 26-28 February 2026, NIFTEM-Kundli.

19. Sharma, P. and **Kumar, P.** 2025 Effect of drying methods on different properties of pea pod peel powder. Advances, Challenges, and Future. Advanced Next Generation Vision for Emerging and Sustainable Healthy Foods- ANVESH, 26-28 February 2026, NIFTEM-Kundli.

20. Sharma, P. and **Kumar, P.** 2025. Pea pod peel extract as natural antioxidants for food preservation: A sustainable approach. National Food Convention, 15-16 October 2025, AFST (I) Mysore and SLIET Longowal.

21. Soni, J., **Panesar**, P.S., Thakur, A. (2025) In-depth analysis on potential applications of litchi fruit processing waste: A systematic approach. In: National food convention on "Hand in Hand for Better Foods and a Better Future" held at Sant Longowal Institute of Engineering and technology, Longowal, Sangrur, India, 15-16 October 2025.

22. Soni, J., **Panesar**, P.S., Thakur, A. (2025) Valorization of litchi kernel through microwave-assisted starch extraction and characterization. In: National conference on "Food Innovations, Food Allergies and Traditional Foods", held at Sant Longowal Institute of Engineering and technology, Longowal, Sangrur, India, 11-12 December 2025.

23. Soni, J., **Panesar**, P.S., Thakur, A. (2026) Recent advances in starch-PLA based composite films for active food packaging: Formulation strategies, properties and emerging applications. In: International conference on "Advanced Next Generation Vision for Emerging and Sustainable Healthy Foods: Sustainable Food Processing, Waste Valorization and Circular Economy in Food Processing, 2026" held at National Institute of Food Technology Entrepreneurship and Management, Kundli, Sonipat, Haryana (India) 26-28 February 2026.

24. Sonker, T. and **Kumar, P.** 2025. Illicium verum (Star Anise): An Integrative Review of Botanical Insights, Essential Oil Extraction and Pharmacological Effects. National Food Convention, 15-16 October 2025, AFST (I) Mysore and SLIET Longowal.

25. Sonker, T. and **Kumar, P.** 2025. Revealing the Valorization Potential of Star Anise (Illicium verum) Residues: A Physicochemical and Functional Assessment. Advanced Next Generation Vision for Emerging and Sustainable Healthy Foods- ANVESH, 26-28 February 2026, NIFTEM-Kundli.

26. Sonker, T. and **Kumar, P.** 2025.Comparative Toxicity and Identification of Illicium Species: A Food Safety Perspective on Star Anise Adulteration. National Conference on "Food Innovations, Food Allergies and Traditional Foods" (FIFATF-2025) 11-12 December 2025, SLIET Longowal.

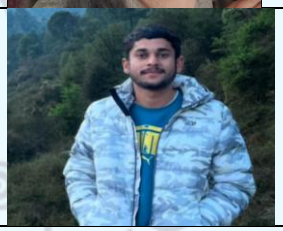
27. Uppal, A. **Panesar P.S.**, Yadav, S.K. (2025) Valorization of Rapeseed Meal for High-Value Compound Extraction to Advance the Circular Economy. In: National food convention on "Hand in Hand for Better Foods and a Better Future" held at Sant Longowal Institute of Engineering and Technology, Longowal, Sangrur, India, 15-16 October 2025.

28. Uppal, A. **Panesar P.S.**, Yadav, S.K. (2026) Effect of extraction techniques on the yield, structure, and functional properties of rapeseed protein isolate. In: International conference on "Advanced Next Generation Vision for Emerging and Sustainable Healthy Foods: Sustainable Food Processing, Waste Valorization and Circular Economy in Food Processing, 2026" held at National Institute of Food Technology Entrepreneurship and Management, Kundli, Sonipat, Haryana (India) 26-28 February 2026.

29. Wirutkar, S.H., **Panesar, P.S.** and Thakur, A. (2025) Comparative analysis of protein and starch based biodegradable film: physicochemical properties and hydrophilic behaviour. In: National conference on "Food innovation, food allergies and traditional foods", held at sant Longowal Institute of Engineering and Technology, Longowal, Punjab (India), 11-12 December 2025

30. Wirutkar, S.H., **Panesar, P.S.** and Thakur, A. (2026) Extraction of cellulose from apricot biowaste using conventional and microwave assisted processes. In: International conference on "Advanced Next Generation Vision for Emerging and Sustainable Healthy Foods: Sustainable Food Processing, Waste Valorization and Circular Economy in Food Processing, 2026" held at National Institute of Food Technology Entrepreneurship and Management, Kundli, Sonipat, Haryana (India) 26-28 February 2026.

Student Corner

Amandeep Singh, Ph.D. Scholar, FET was granted National Fellowship for Other Backward Classes given by Ministry of Social Justice and Empowerment, Government of India through UGC-NET June-2024 Examination (NBCFDC Ref. No.: **240510606732,** dated **18-09-2025**).	
Tanya Sonker, Ph.D. Scholar, FET was granted National Fellowship for Scheduled caste students given by Ministry of Social Justice and Empowerment, Government of India through UGC-NET December-2024 Examination (NBCFDC Ref. No.: **No. NSFDC/E-97379,** dated **10-10-2025**).	
Priti Sharad Mali Ph.D. Scholar FET got 1st Prize in Oral Presentation on "Black bean protein as a sustainable alternative protein: advancing its structural, functional, and rheological properties for food applications" in National Food Convention organized by AFST(I)-Longowal Chapter and Department of Food Engineering and Technology, SLIET, Longowal, Punjab on 15–16 October 2025.	
Sparsh Parmar, Ph.D. Scholar, FET got 1st Prize in Poster Presentation on "Ultrasound pre-treatment enhanced OSA esterification of proso millet starch" in National Food Convention organized by AFST(I)-Longowal Chapter and Department of Food Engineering and Technology, SLIET, Longowal, Punjab on 15–16 October 2025.	
Aditi, Ph.D. Scholar, FET got **Best Oral Presentation Award** on "Functional and Nutritional Evaluation of Teff Flour for Partial Replacement of Wheat Flour in Cake Formulation" in National Food Convention organized by AFST(I)-Longowal Chapter and Department of Food Engineering and Technology, SLIET, Longowal on 15–16 October 2025. She also got **Best Oral Presentation Award** on "Octenyl Succinic Anhydride (OSA) Modification of Teff and Barnyard Millet Starches: Functional and Structural Characterization for Food Innovation" in Food Innovations, Food Allergies and Traditional Foods" in FIFATF-2025 organized by Department of Food Engineering and Technology, SLIET, Longowal, Punjab on 11–12 December 2025.	
Dilpreet Singh Brar, Ph.D. Scholar, FET got **2nd Prize in Poster Presentation** in National Food Convention 2025 organized by AFST(I)-Longowal Chapter and Department of Food Engineering and Technology, SLIET, Longowal, Punjab on 15–16 October 2025. He also got **Best Poster Presentation Award** on "Food Innovations, Food Allergies and Traditional Foods" in FIFATF-2025 organized by Department of Food Engineering and Technology, SLIET, Longowal, Punjab on 11–12 December 2025.	

Praveen Saini, Ph.D. Scholar, FET got **Best Poster Award** on "Functional Bakery Innovation: Effect of Modified Wheat Bran on the Shelf Life and Quality of Cookies" in Young Scientists Conclave at 11th India International Science Festival (IISF) 2025 held during 6–9 December 2025 at Panchkula, Haryana, India. He also got **Best Oral Presentation Award** on "Innovation in Wheat Bran Modification: A Techno-Economic Analysis for the Development of Fiber-rich Ready-to-Use (RTU) Formulation" in FIFATF-2025 organized by Department of Food Engineering and Technology, SLIET, Longowal, Punjab on 11–12 December 2025.	
Riya, Ph.D. Scholar, FET got **Best Poster Award** on "Valorization of spring onion (*Allium fistulosum*) leaves for agro-waste utilization in India" in Young Scientists Conclave at India International Science Festival (IISF) 2025 held during 6–9 December 2025.	
Divyanshi, Ph.D. Scholar, FET got **Best Poster Award** on "Isolation, characterization, and utilization of Tardi (*Dioscorea bellophylla*) starch in the development of antimicrobial films incorporated with silver nanoparticle" in FIFATF-2025 organized by Department of Food Engineering and Technology, SLIET, Longowal, Punjab on 11–12 December 2025.	
Amisha Gurung, Ph.D. Scholar, FET got **Best Poster Award** on "Solvent screening for maximum phytochemical recovery and antioxidant potential of nettle leaves" in FIFATF-2025 organized by Department of Food Engineering and Technology, SLIET, Longowal, Punjab on 11–12 December 2025.	
Anamika Sharma, Ph.D. Scholar, FET won **Best Oral presentation Award** for "Pectinase-Assisted Hydrolysis Enhances Nutrient Release and Functional Properties of Bee Pollen" at 6th International Conference on Food Properties, Bangkok, Thailand held from 28th -30th January 2026.	
Heena, Ph.D Scholar, FET won **first prize for best poster** for "Microgreens and the Evolution of Organic Farming: Bridging Nutrition, Sustainability and Innovation" at 2nd National Workshop on Revival and advancement of traditional/organic agricultural practices through innovation, collaboration, and incubation (2.0) held from 5-6 February 2026.	
Masud Alam, Ph.D Scholar, FET won **Best Oral Presentation Award** for "Impact of baking on of functional, techno-functional, rheological of honey fillings formulated with rind from watermelon waste and corn starch" at 6th International Conference on Food Properties, Bangkok, Thailand held from 28 -30 January 2026.	

Research Scholars Awarded with SQPA for their publications in reputed International Journals –

Name of Scholar	Number of papers in WoS Journals with impact factor (IF ≥ 1) in addition to the mandatory requirement of two research papers	Name of Supervisor (s)
M. Ubaid PFE-2013	02	Dr. Charanjiv Singh Saini
Praveen Saini PFE-2112	02	Dr. Kamlesh Prasad Dr. A. S. K. Sinha
Ramandeep Kaur PFE-2126	02	Dr. Sukhcharn Singh Dr. Charanjit Singh Riar
Makdud Islam PFE-2139	02	Dr. Kamlesh Prasad Dr. A. S. K. Sinha
Jyoti Soni PFE-2204	02	Dr. Parmjit Singh Panesar Dr. Avinash Thakur
Aditi PFE-2207	01	Dr. Sukhcharn Singh Dr. Navdeep Jindal
Amisha Kaushik PFE-2208	01	Dr. Sukhcharn Singh Dr. Dharmesh Chandra Saxena
Dilpreet Singh Brar PFE-2308	02	Dr. Vikas Nanda Dr. Birmohan Singh
Sunil Kumar PFE-2373	01	Dr. Kamlesh Prasad Dr. Amit Kumar Rai

Research Scholars Awarded their degree in 28th convocation held on 07th February 2026-

S. No.	Research Scholar	Supervisor(s) Name	Research Title
1	Smita Dimri PFE-1807	Dr. Sukhcharn Singh	Studies on the effect of modification on the various properties of biodegradable films from Barnyard Millet (*Echinochloa frumentacea*) starch
2	Tejinder Kaur PFE-1807	Dr. Charanjit S. Riar Co-Supervisor – Dr. Parmjit S. Panesar	Studies on the effect of hydrothermal treatment of milling, nutritional and storage characteristics of Foxtail Millet and its utilization
3	Yogesh Kumar PFE-1901	Dr. D. C. Saxena Co-Supervisor - Dr. Sukhcharn Singh	Studies on development of aerogel based antimicrobial active packaging material form cross-linked starch of Buckwheat and broken rice
4	Rahul Das PFE-2018	Dr. Kamlesh Prasad	Process optimization of ready to use Chickpea-dehydrated vegetable composite mix for fried products
5	Prem Prakash PFE-2022	Dr. Kamlesh Prasad	Development of garlic powder and Garlic incorporated Pasta
6	Dipak Das PFE-2023	Dr. Parmjit S. Panesar Co-Supervisor –	Soybean meal protein isolation, Characterization, Utilization in

		Dr. C.S. Saini	edible film development and its application
7	Yograj Bist PFE-2128	Dr. D. C. Saxena Co-Supervisor – Dr. Vijay S. Sharanagat	Studies on synthesis of nanoparticles from guinea grass seed starch for development of Pickering emulsion

Research scholars successfully defended their Final Viva-

1	Praveen Saini PFE-2112	Dr. Kamlesh Prasad Co-Supervisor – Dr. A. S. K. Sinha	Characterization and Food applications of Mechanically modified wheat bran fiber
2	Ramandeep Kaur PFE-2126	Dr. Sukhcharn Singh Co-Supervisor – Dr. Charanjit S. Riar	Studies on Isolation, Modification and Characterization of Indian Teff (*Eragrostis tef*) Starch and its application in biodegradable film

Merit list of PG 2K23 batch students are –

PGFET-2355005	RAKSHITA BHARDWAJ	9.86	FIRST
PGFET-2355004	RIDHI AWASTHI	9.86	SECOND
PGFET-2355002	PRIYAMBDA GALOHDA	8.88	THIRD

Merit list of UG (JEE-Main 2K21 and LEET 2K22 batch) students are –

GFT-2235052	Rupam Raj	9.44	FIRST
GFT-2140052	Sai Jagannath Gunda	9.17	SECOND
GFT-2235053	Gaurav Kumar	9.16	THIRD

Students qualified NET/GATE exams

Divyanshi Thakur, Ph.D. Scholar, FET qualified UGC-NET December-2025 Examination (Appl. No. - 250520697643) with 99.04 percentile.
Adrija Debnath, PG (2K24), FET qualified GATE-2026 Examination (Appl. No. – XL26S18028089) in Life Sciences (XL).

Newsletter Publication Committee:

Prof. Charanjit Singh Riar
HoD, FET

Prof. Pradyuman Kumar
Convener

Mr. Ashawani Kumar
Member

Dr. Tejinder Kaur
Member

Mr. Aditya Shree
Ph.D. Scholar

Ms. Tanya Sonker
Ph.D. Scholar

Mr. Amandeep Singh
Ph.D. Scholar

Ms. Komalpreet Kaur
M. Tech. Student

Ms. Sakshi Singh
BE student

Mr. Sayim
ICD student