FoodPro

CSIR - CFTRI Newsletter October - December 2025

सीएसआईआर-केंद्रीय खाद्य प्रौद्योगिक अनुसंधान संस्थान
CSIR - Central Food Technological Research Institute
ಸಿ ಎಸ್ ಐ ಆರ್ ಐ
ಸಿ ಎಫ್ ಟಿ ಆರ್ ಐ
cftri
1950 से.....
Since 1950.....

अन्नपाने च सर्वदा

Food Processing | Nutrition | Innovation | Value Addition
Traditional Foods | Food Machinery | Shelf Life | Food Quality
Nutraceuticals | Centre of Excellence | Pre & Probiotics | PMFME
Skill Development | Technology Transfer | Incubation









ಸಿ.ಎಸ್.ಐ.ಆರ್-ಕೇಂದ್ರೀಯ ಆಹಾರ ತಂತ್ರಜ್ಞಾನ ಸಂಶೋಧನಾಲಯ, ಮೈಸೂರು
सीएसआईआर - केंद्रीय खाद्य प्रौद्योगिक अनुसंधान संस्थान, मैसूरु
CSIR – Central Food Technological Research Institute, Mysuru

CONTENTS

Research Highlights	2 - 3	Entrepreneurs' Speak	6 - 8
Products Developed	3	Events	9 - 13
Technologies Transferred	3 - 4	Awards and Prizes	13
IPR in the Horizon	4	Retirees	13
Training Programmes Conducted	4 - 6	Ph.D.s Awarded by AcSIR	14 - 15
New Collaborations	6	Select Publications	15

Research Highlights

A promising approach for improved citric acid production by *Aspergillus niger* with the assistance of cinnamaldehyde derivatives

Considering the importance of food preservation, this study reports the synthesis of cinnamaldehyde derivatives, namely chalcones and pyrazoles, using an energy-efficient and eco-friendly microwave-assisted method with an atom economy exceeding 92%, yielding products of high purity and yield. The synthesized compounds were evaluated for their ability to enhance *Aspergillus niger* growth for citric acid production via submerged fermentation. Pyrazole derivatives significantly outperformed both untreated controls and chalcones, achieving up to 25-fold and 4-fold increases in citric acid production, respectively. At lower concentrations, citric acid yields ranged from 100 to 113 g/L. Additionally, substituents on the phenyl ring significantly influenced citric acid production. The presence of the electron-rich naphthyl ring, along with the highly electronegative nitro group, significantly enhanced citric acid levels compared to other groups such as –Cl, –Br, -OMe, and various heterocycles. The purity and authenticity of the recovered citric acid were confirmed through spectral analyses. Molecular docking studies against aconitase enzymes from nine different sources revealed diverse interaction modes with binding affinities ranging from −7.2 to −10.0 kcal/mol. regarding the mechanism of action, we believe that the compounds may act as co-factors which effect key enzymes and play a critical role in increasing the rate of citric acid production. These compounds may be considered promising lead molecules for enhancing citric acid production, effectively addressing both industrial demand and supply challenges. This report presents the first known instance of producing citric acid using small molecule substrates such as pyrazoles derived from a spice-based bioactive substance, which has demonstrated highly promising results.

(**Source:** Boomika Jayanna, Rohith Gattu, Neha Pandey, Praveena Bhatt, Bettadaiah B.K., Pushpa S Murthy, Suhas Ramesh (2025). *A Promising Approach for Improved Citric Acid Production by Aspergillus Niger with the Assistance of Cinnamaldehyde Derivatives,* Food Chemistry, Volume 492, 145257)

Valorisation of Coffee Husk for Functional Arabinogalactans: A Sustainable Value-Added Ingredient

Coffee husk, a major agro-industrial by-product of coffee processing, constitutes nearly 18% of the dry weight of the coffee cherry and is rich in polysaccharides (~58%), yet remains largely underutilized. This research explores the recovery and characterization of arabinogalactans from coffee husk as a sustainable strategy to convert agro-waste into a high-value functional ingredient. The extracted polysaccharides were evaluated for their structural and functional attributes relevant to food and nutraceutical applications.

Highlights from the study:

- Arabinogalactans were efficiently extracted from coffee husk using mild alkali
- The recovered polysaccharides were rich in galactose and arabinose and exhibited a molecular weight of ~121 kDa

- Structural analyses confirmed a semi-crystalline, thermally stable carbohydrate matrix
- The arabinogalactans formed a strong gel-like network with favourable water and oil holding capacities
- Uronic acid content and lower molecular weight fractions enhanced radical scavenging activity

Significance: The study establishes coffee husk, a widely available byproduct, as a valuable source of functional arabinogalactans. By demonstrating their structural integrity, gel-forming ability, and antioxidant potential, the work highlights a practical route to convert agro-waste into sustainable, value-added food ingredients, supporting circular bioeconomy principles and offering opportunities for innovation in functional foods and nutraceuticals.

(**Source**: Tripathi, S., Eligar, S. M., & Murthy, P. S. (2025). *Valorisation of coffee husk for functional arabinogalactans: A sustainable value-added ingredient.* Food Chemistry, 145127.)

Products Developed

Micronutrient Fortification of Dalia (Broken Wheat)

Micronutrient fortification of dalia adds essential vitamins and minerals to broken wheat, improving nutrition without changing taste, color, or cooking method, making it a simple and affordable health solution.

Micronutrient Fortification of Semolina (Sooji)

Micronutrient fortification of semolina involves blending vitamins and minerals uniformly into sooji during processing, making it suitable for daily foods like *upma*, pasta, and bakery products.

Micronutrient Fortified Instant Rava Idli Mix

Micronutrient fortified instant *rava idli* mix is prepared by blending sooji with vitamins, minerals, and other ingredients, enabling quick preparation of nutritious *idlis* for regular consumption.

Micronutrient Fortified Instant Halva Mix

This technology involves blending semolina, sugar, ghee, and essential vitamins and minerals to create a ready-to-cook mix. It allows quick preparation of nutritious *halva*, enhancing the daily diet and supporting better health.

Micronutrient Fortified Instant Upma Mix

This technology involves blending semolina (sooji) with essential vitamins, minerals, and spices to create a ready-to-cook mix. It enables quick preparation of nutritious *upma,* making it a convenient and healthy meal option.



Technologies Transferred

- Shelf stable *roti* from non-wheat cereal and millet (Rice, Maize, Ragi, Jowar, Bajra)
- Convenience flour from ragi suitable for stiff porridge
- Tutti fruity (Papaya/ Carrot)
- Process for the preparation of raw banana powder (unripe)
- Pickles and Chutneys
- Cereal Bar
- Spirulinachoco bar
- Spirulina-cereal bar
- *Nutra chikki* with added spirulina
- Glucose-Amla beverage mix
- Fortified mango bar
- Nutri fruit bars with immune boosters
- Fruit bar: Mango
- Fruit bar: Banana
- Improved banana fruit bar

- Fruit syrups and squashes
- Ready to serve fruit juices and beverages
- Malted ragi based ready to eat weaning food
- Multigrain cereal-legume bar
- Puffed rice bar
- Instant products from moringa leaves
- Tomato products: preparation (including juice, ketchup, sauce)
- Ready to use multi-grain *Idli and Dosa* batter in retail packs
- Sugar free bread
- Process for development of gluten free bread premix [Version -1] Proso millet
- Spice bread
- Bread: production (9 varieties - Brown, Plain, Sweet, Milk, Whole Wheat, Fruit, High Fiber, Ragi, Bajra)
- Multigrain bread
- Instant gravy mixes (dehydrated)
- Ready mix: *Vada*
- Preparation of ready to eat shelf stable egg crunchy bite
- Fruit jams & jellies: preparation
- Fruit jam slices
- Wafers (Chicken, Fish, Prawn, Egg, Meat)
- Date syrup concentrate
- Egg loaf
- Prawn pickle
- Shelf-stable chicken tit-bits
- Preparation of shelf stable biryani paste
- Layered *parotta* (South Indian)
- Coffee leaf brew mix
- *Chikki* with Moringa
- *Chikki* / Nutra *chikki* (3 formulations)
- Fermented and dehydrated ready mix for *dosa batter*
- Preparation of shelf stable egg albumin and egg yolk cubes
- Ragi based papads

IPR in the Horizon

Patents Filed

- Mealworm protein concentrate enriched fruit bar and process of preparation of the same, 09-10-2025, 202511099390.
- Mealworm protein concentrate enriched vegetable soup, 09-10-2025, 202511098878
- A method of bioprocessing of seaweed *gracilaria sp.* biomass for food application, 14-10-2025, 202511099391.
- Flavour infused honey and method thereof, 13-11-2025, 202511111140.
- A chitosan anchored ZNO-TIO2-FE2O3-GO composite nanoadsorbent and a process for the preparation thereof, 26-11-2025, 202511117826.

Training Programmes Conducted

Baking Science and Technology (06.10.2025 – 10.10.2025). A training programme was organized at CSIR–CFTRI, Mysuru, in which 16 participants attended. The programme covered topics related to an overview of the training, quality aspects of wheat, and grading of flour. It mainly focused on physical traits such as weight, moisture content, and kernel damage, as well as flour quality constituents including protein content, gluten strength, starch, ash content, and particle size. Rheology of dough and nutritional aspects of bakery products which provides details on nutritional aspects of bakery products involve enhancing, handling and final product quality, which requires careful formulation to optimize both health benefits and sensory appeal.

Fruits and Vegetable Products (15.10.2025 - 17.10.2025). A customized training programme was held and organized at Hyderabad, in which seven participants took part. The training covered a wide range of topics, including an overview of post-harvest

technologies in fruits and vegetables, and the importance of fruits and vegetables to human health. The programme also included sessions on equipment used for processing fruits and vegetables, along with a visit to the pilot plant. In addition, topics such as packaging and handling of fresh and processed fruits and vegetables were discussed. The training further provided participants with knowledge on the general principles of processing and preservation, microbiological safety, and instrumental methods for assessing the quality of food products.

Processing of Oranges and Value Addition Program (12.11.2025 - 14.11.2025). A farmer-centric training programme was organized at CSIR–CFTRI, Mysuru, sponsored by the Agriculture Department, Zilla Parishad, Amravati, Maharashtra. The programme was conducted for 18 participants from Maharashtra.

Post-Harvest Management of Fruits and Vegetables 2025 (25.11.2025). One-day training programme was conducted for tribal women at CSIR–CFTRI, Mysuru, with 26 participants. The programme was mainly aimed at rural and tribal women and conducted as part of valedictory function of Janjatiya Gaurav Varsh 2025. The training emphasized entrepreneurial opportunities through fruit processing and value addition. Special sessions were conducted on bringing out the best from waste, such as the formulation of the Banana Pseudo-stem. Participants were also trained in the processing of convenient, low-cost products to reduce waste and improve shelf life. In addition, the programme highlighted methods for transforming seasonal produce into year-round, nutritious, and value-enriched products.

Nutri Cereals Process and Product Technology (01.12.2025 - 03.12.2025). A training programme on Nutri-Cereals Processing and Product Technology, sponsored by Ramaiah University of Applied Science, was conducted for 26 participants. The programme covered a wide range of topics that helped participants gain knowledge on grain diversity and grain structure. Sessions were conducted on maize and millet milling machinery, which involves a sequence of steps such as cleaning (screening and destoning), conditioning (dampening), milling (using roller mills or hammer mills for grinding and sifters for separating flour and bran), and packaging. The training also included topics on the processing of small millets and value addition, with detailed discussions on malting, fermentation, flaking, and popping. In addition, participants were introduced to the effects of processing on biochemical changes and mycotoxin content in grains.

Fumigation Prophylaxis and Pest Management Techniques for Stored Food Commodities (05.12.2025 - 19.12.2025) A training programme organized by CSIR–CFTRI, Mysuru, was conducted, with a total enrolment of 45 participants. The programme covered important aspects related to infestation control in stored products and fumigation principles and techniques which mainly involves preparation (sealing, evacuating), application (introducing fumigant like phosphine or formaldehyde), exposure (holding time), and aeration (ventilation), with critical steps including proper sealing, dosage, safety protocols (PPE, monitoring). The training also highlighted the role of traditional systems in protecting stored food grains. These methods were presented as a foundation for sustainable agriculture, offering cost-effective, chemical-free solutions that can be further enhanced with modern techniques, such as hermetic sealing, to improve efficacy. Participants were provided with practical exposure through visits to container fumigation facilities (methyl bromide) at PCSD, CFS, Whitefield, Bengaluru, and at the FCI Depot. In addition, demonstration classes on methyl bromide fumigation and rodent control relevant to the food industry were conducted.

Orientation Program on Advanced National Food Processing Technology (09.12.2025 11.12.2025): A customized training programme, sponsored by the Government of Andhra Pradesh – Society for Elimination of Rural Poverty (SERP–AP), was conducted for 13 participants. The programme guided participants through key topics on post-harvest technologies in fruits and vegetables, including an overview of the importance of fruits and vegetables to human health. Emphasis was placed on the role of nutrients such as vitamins and minerals, which are essential for metabolic functions. The training also included topics and discussions on nutraceuticals in millets and their health benefits. Demonstrations were conducted on the dehydration of vegetables and the preparation of osmo–air–dried fruits. In addition, participants were trained on millet storage and infestation control, which involves proper conditioning and regular treatments for stored food commodities.

Wheat, Wheat-Products, Quality and Packaging (22.12.2025 - 24.12.2025). A customized three-day training programme, sponsored by the Madhya Pradesh Laghu Udyog Nigam (MPLUN), Indore, Madhya Pradesh, was conducted for 24 participants. The programme provided participants with an opportunity to explore and gain in-depth knowledge on the packaging of wheat and wheat products. The training covered important topics such as wheat quality and grading, milling, and extrusion. Sessions were also conducted on value-added wheat products and on the

regulatory aspects of milled products, providing an overview of food safety and hygiene standards, as well as composition and quality standards. Special emphasis was given to enrichment and fortification practices to restore nutrients lost during milling. The programme also discussed the classification of wheat into low-protein, high-protein, and very high-protein categories, along with their suitability for specific wheat-based products. Participants were further introduced to wheat as a globally important staple food, highlighting its diverse varieties and wide range of applications.

New Collaborations

- **Madurai Agribusiness Incubation Forum (MABIF), Madurai, 5th December 2025**

  Scope: Establishing a collaborative framework for co-incubation, technology transfer, start-up support, joint research, food product development, and capacity building.



- **Tamil Nadu Food Processing and Agri Export Promotion Corporation(TNAPEx), Chennai, 7th December 2025**

  Scope: To collaborate and facilitate sponsored research, product development, and innovation in the food processing sector.



- **JSS Ayurveda Medical College & Hospital, Mysuru, 30th December 2025**

  Scope: Strengthen research, innovation, and product development in the fields of Ayurveda, food technology, nutraceuticals, and functional foods.



- **Kodagu University, Kodagu, 30th December 2025**

  Scope: Strategic positioning through collaborations between both institutions in meeting the emerging scientific and technological challenges of society.



Entrepreneurs' Speak

Twlite Bionic (OPC) Pvt Ltd

Twlite Bionic (OPC) Private Limited is a dynamic start-up founded by first-generation entrepreneurs with substantial experience in the food industry. With a passion for innovation and a commitment to quality, we are dedicated to introducing fresh ideas and superfoods that enrich health and wellness. Our journey is driven by a vision to blend tradition with modern science, creating products that deliver both nutrition and taste, while championing sustainable and natural practices. At Twlite Bionic, every step is about pioneering better solutions for a healthier tomorrow.

"Sustain your Spark with Spirulina"

Journey with CFTRI: Like many early-stage startups, we faced significant challenges in our initial journey. However, the CFTRI-developed products—such as Spirulina Protein Bars and Millet Health Mix—have played a pivotal role in

strengthening our operations and impact. Through these innovations, we are able to deliver nutritious food solutions to cancer patients at reputed institutions like the Kidwai Institute of Oncology and Shankara Cancer Foundation.

Our Products: Our product portfolio features superfoods such as spirulina protein bars, millet health mixes, low-GI products, and a wide range of nutritious millet-based snacks.



BIRAC BioNEST Incubation Centre:

The BIRAC-BioNEST incubation facility at CSIR-CFTRI is designed to nurture entrepreneurial talent in food bioprocessing and biotechnology research.

Events:

Visit to Incubation Centre

The startups housed in the BioNEST incubation facility interacted with tribal children who visited the facility on the occasion of *"Jana Jatiya Gaurav Varsh" on* 17th November 2025. The interaction focused on nurturing young minds, sparking curiosity, and encouraging them to dream big—especially about becoming entrepreneurs and change makers within their own communities. The founders shared their journeys, the challenges they overcame, and how innovation can start from the smallest ideas.



ICFoST 2025:

The BioNEST Incubation Centre promoted its startups and their products through the CSIR-CFTRI stall at ICFOST-2025, organised by the Association of Food Scientists and Technologists (India) from 18–20 December 2025 at NIFTEM–Thanjavur, Tamilnadu. The participating startups also took part in panel discussions, networking sessions, and interactions with officials from FSSAI, senior leaders from the food industry, and potential investors.



New Incubates

The following seven new incubates have enrolled with the CSIR-CFTRI incubation centre.

Sahasti Solutions and Services Private Limited

The company proposes to launch Mosambi (Sweet Lime) Tea. This refreshing, wellness-focused beverage that blends the natural zest of sweet lime with tea leaves, delivering a smooth, non-bitter taste. Free from added sugars and preservatives, it is designed for health-conscious consumers seeking clean-label options. Enriched with vitamin C, antioxidants, and dietary fiber, the drink supports immunity and digestive health while addressing the growing demand for nutritious, flavorful, and convenient beverages.

Kadamba Nanom Private Limited.

The company specializes in the development of functional foods and eco-friendly preservative systems, supported by innovative processing technologies. Leveraging green nanoscience, it creates high-performance and sustainable product solutions. Its portfolio includes exogenous ketone-based formulations for health and wellness, as well as bioactive ingredients designed to deliver functional and therapeutic benefits.

Krmah Consumer Products LLP (Kettleworkz)

The company is developing Tea Bombs—dissolvable, ready-to-brew tea spheres crafted from premium Assam tea, natural spices, and light sweeteners, enclosed in food-safe shells. These dissolve instantly in hot water to provide a hygienic, pre-measured brew without the need for tea bags or additional equipment. In parallel, the company is introducing Tea Concentrates, liquid bases made from estate-grown Assam tea for rapid preparation of hot or cold beverages. Together, these products offer consistent flavor, exceptional convenience, and a premium tea-drinking experience tailored for today's on-the-go consumers.

Swananda Food And Beverages (OPC) Pvt Ltd

The company's Masala Soda Tablets ("Masala Bombs") are effervescent formulations that dissolve rapidly in carbonated water or soft drinks to produce freshly prepared masala soda. Available in custom bottles with a cap-activated release mechanism as well as in portable, standalone tablet formats, they provide a hygienic and convenient way to infuse beverages with authentic Indian spice blends. In addition, the company offers kefir-based probiotic drinks made with coconut

water and fruit bases, delivering gut-health benefits and positioning them as lightly carbonated functional beverages between kombucha and yogurt.

Poornasattva Foods LLP

The company specializes in the development of healthy, innovative food products made with high-quality ingredients and distinctive formulations, including cereal and millet mixes, cookies, and nutrition bars.

Qbit Nutra Private Limited

The company has developed an all-in-one daily health drink powder that delivers over 60 essential vitamins, minerals, probiotics, prebiotics, digestive enzymes, superfoods, and adaptogens in convenient single-serve sachets. Each 10g sachet provides comprehensive nutrition to support gut health, enhance energy levels, strengthen immunity, and promote overall well-being.

Kombucherie Private Limited

Kombucherie develops functional fermented beverages under its flagship brands Dad's Hack Kombucha and Good Gut Shots (kombucha blended with apple cider vinegar), along with white-label fermentation and bottling services. Its Good Gut Shots represent a first-of-their-kind blend of kombucha and apple cider vinegar designed to support digestion and gut health. In addition, the company is driving packaging innovation by offering kombucha in cans and beer bottles, positioning it as a social, non-alcoholic adult beverage, with upcoming innovations including kombucha concentrates and vinegars as functional food ingredients.

Accomplishments by BioNEST incubatees

- Gusteau Foods has been recognised with a grant of 35 Lakhs in “The Ten Minute Million” Startup Event at IIT Bombay



- Mr. Ramesh from GK Unique has won the Karnataka Elevate 2025 grant of 21 lakhs for his Gut Sip product. (Gut Sip was developed in CFTRI, and he is one of the licensees and had incubated in BioNEST, where the incubation centre facilitated his grant application to ELEVATE)



- Mr Vikrant Save from Immunza Pvt Ltd. (Agility Food Products) has been in SiliconIndia's 10 Best Food Processing Startups



- Immunza has also launched functional bars under the Nuttrio brand on 16 November 2025. The product formulation of these bars was carried out in CSIR-CFTRI incubation centre. The bars include Ayurveda-Inspired Functional Bars such as SheCare Bar (for women's wellness), Immunity Bar (to support immune function), Memory Bar (for cognitive support), Stamina Bar (for energy and endurance), Energy Bar (for sustained natural energy) and Skin Care Bar (to support skin health)



- Mr. Suresh Bhat from Shree Abhaya Foods was shortlisted to present his pitch in prestigious Whale Tank which is a is a biotech-focused venture platform in India

Events

134th Birth Anniversary Celebration of Dr. B.R. Ambedkar (October 14, 2025)

134th Birth Anniversary Celebration of Bharath Ratna Dr B.R. Ambedkar was held at CSIR-CFTRI Campus on 14th October, 2025, organised by CSIR-CFTRI SC/ST Employees Welfare Association. The event was inaugurated by Dr N. Santosh Hegde, Honourable Supreme Court Justice & Lokayukta, Govt. of Karnataka, who delivered the Inaugural Address, and Dr Giridhar Parvatam, Director, CSIR-CFTRI, presided over the function. Smt. K. Jyothi, IAS, Commissioner for Textile Development & Director of Handlooms & Textiles, Govt. of Karnataka; Dt. P. Shivaraju, KAS, Addl. District Commissioner, Mysore, was the Chief Guest for the function. Mr Shivaswamy, President, CSIR-CFTRI SC/ST Employees Welfare Association, welcomed the gathering.

Ayurveda Day 2025 (October 15, 2025)

"Celebration of Ayurveda Day 2025" was held at Cheluvamba Hall, CSIR-CFTRI Campus, Mysuru, on 15th October 2025. Dr. M.N. Shubhashree, Central Ayurveda Research Institute (CARI), Ministry of Ayush, Govt. of India, Bangalore, delivered the talk entitled "Ayurveda and Ayush Aahar". Dr. Giridhar Parvatam, Director, CSIR-CFTRI, gave Presidential Remarks. The Team of Doctors, consisting of Dr. M.N. Shubhashree, Dr. M K S Vinushree, and Dr. M K. Sarada from CARI, conducted a free medical and yoga camp for the staff and students of CFTRI.



International Workshop on "Advances in Wheat and Flour Quality Analysis: Techniques and Applications (October 16, 2025)

International Workshop on "Advances in Wheat and Flour Quality Analysis: Techniques and Applications" organized by ANCHROM in association with CSIR-CFTRI was held on 16th October 2025 on the occasion of World Food day 2025. Dr. Giridhar Parvatam, Director, CSIR-CFTRI, inaugurated the workshop and presided over the function and gave presidential remarks. The other dignitaries were Mr. Evans Daniel Hill, Sales Director, KPM Analytics, briefed about Chopin; Mr. Akshay Charegaonkar, Managing Director, ANCHROM Enterprises, India Pvt. Ltd., briefed about ANCHROM; and Dr. Suresh D. Sakhare, Sr. Principal Scientist & Head, FMBCT, briefed about the workshop. Ms. Lena Bosc Bierne, Product Manager, CHOPIN, France: Ms. Lucie Lebert, Product Specialist, Chopin, France, delivered the talks, and lastly, a Panel Discussion was held.



Vigilance Awareness Week Valedictory Programme (October 30, 2025)

Vigilance awareness week valedictory programme was held at CFTRI on 30th October, 2025. Sri K M Sridhar, Sr. CoA, CSIR-CLRI, gave an invited talk (Online) on vigilance awareness. Dr. Rajesh S. Matche, Chief Scientist and Director Nominee, presided over the function, during which Sri K. Ravikumar, CoA, welcomed the gathering. Prizes were distributed by dignitaries to the winners among the CFTRI staff and the CFTRI School students who won the essay writing and written quiz competitions held as part of the vigilance awareness week programme.



Kannada Rajyotsava Celebration (November 1, 2025)

Kannada Rajyotsava celebration was held at the CFTRI campus on 1st November, 2025. Dr. Madan Patel, Rajyotsava Awardee, Kannada Writer, Film Actor & Director, was the Chief Guest for the function, and Dr Ammaiah Sekhar, Poetess, Retd. Lecturer, Govt



Maharani Degree College, who was the guest of honour and Dr Giridhar Parvatam, Director, CSIR-CFTRI, presided over the function and hoisted the Kannada Flag.

Director, CSIR-CFTRI visit to CFTRI Resource Centre, Hyderabad (November 18, 2025)

Dr. Giridhar Parvatam, Director, CSIR-CFTRI visited CFTRI Resource Centre, Hyderabad on 18th November, 2025. He interacted and discussed with staff pertaining to strengthening of resource centre and other matters. This resource Centre holds geographical importance as it can cater to the needs of prospective entrepreneurs in food processing sector for states of Telangana, AP, Odisha, millet Technologies, establishment of Food Analysis Laboratory & upgradation of Pilot Plant facilities.



Janjatiya Gaurav Varsh 2025 (November 25, 2025)

The valedictory function of Janjatiya Gaurav Varsh 2025 was organised on 25th November 2025. Shri Yogesh T, KAS, Govt. of Karnataka, was the Chief Guest and Dr Madegowda C, Project Manager, ATREE, B.R. Hills, Yalandur (T), Chamarajanagar, was the Guest of Honour. Dr Giridhar Parvatam presided over the function. The JJGV 2025 Souvenir was released during the event. Dr Prakash M Halami, Nodal Officer, JJGV 2025, spoke about the year-long activities.



Constitution Day Celebration (November 26, 2025)

Constitution Day was celebrated at CSIR-CFTRI on 26th November 2025. Major General S.G. Vombatkere (Retd.), Officer of the Indian Army attended as the Chief Guest. The programme was presided over by Dr Giridhar Parvatam, Director, CSIR–CFTRI. Sri. Ravi Kumar K, Controller of Administration and Sri. Shivaswamy, President of SC/ST Association of CSIR-CFTRI were present. The programme included the trilingual reading of the Preamble of the Constitution.



IISF 2025 Curtain Raiser at CSIR-CFTRI (November 27, 2025)

The IISF 2025 Curtain Raiser event was organized on 27th November 2025. Prof. Utpal S Tatu, Chair, Department of Biochemistry, IISc, Bengaluru was the Chief Guest and delivered a lecture on “One Health Approach to Tackle Global Health Challenges”. Dr. A.M. Sudhakara, Vice President of VIBHA, Karnataka was the Guest of Honour. The function was Presided over by Dr. Giridhar Parvatam, Director, CSIR-CFTRI. Around 75 students from the University of Mysore, along with staff members of CSIR–CFTRI, Mysuru, participated in the event. The programme also provided students an opportunity to visit various facilities of the Institute.



CSIR-CFTRI Director Visits Modern Zonal QC Lab, Raipur (December 2, 2025)

Dr. Giridhar Parvatam, Director of CSIR-CFTRI, along with Dr. Ashuthosh A Inamdar, Head of TTBD, and Dr. Vijayalakshmi S, Scientist in TTBD, visited the Modern Zonal QC Lab at FCI, Raipur, Chhattisgarh, on 2nd December 2025. They interacted with the staff and technical personnel. During this visit, discussions focused on the inflow of samples and the analysis of fortified rice samples received by the lab. The staff



highlighted the laboratory's infrastructure. Some staff members who recently trained at FS&AQCL of CFTRI mentioned that CFTRI's training programmes greatly enhanced their skills in fortified rice analysis. Dr. Giridhar Parvatam also informed that CFTRI experts will visit this centre to provide on-site training once ICP-OES is installed.

GI Mahotsav 3.0 organized at CSIR-CFTRI (December 5-8, 2025)

GI Mahotsav 3.0 was organised at the CSIR-CFTRI campus by Madurai Agri Business Incubation Forum (MABIF) in collaboration with MSME, GoI; NABARD, Tamil Nadu Agricultural University (TNAU) and CSIR-CFTRI from 5-8 December 2025. Er. K. Ganesh Moorthy, ED & CEO, NABARD MABIF, welcomed, and a special address was rendered by Shri. Devaraj, JD, MSME; Dr P.P. Mahendran, Dean, AC&RI, TNAU campus, Madurai; Shri. Surendra Babu, CGM, NABARD RO, Karnataka and Dr S. Senthil Vinayagam, Director, IIPM. Dr Giridhar Parvatam, CSIR-CFTRI, presided over the inaugural function. Student Hackathon was conducted on various themes for students from Science and Engineering backgrounds, and the prizes were distributed to the winners on the inaugural day. The four-day event featured several technical talks by eminent personalities, along with cultural programmes held from 5 to 7 December 2025.The valedictory session was held on 8th December 2025, and certificates were issued to all the exhibitors.





Motivational Talk on Stress Management Organised by CFTRI–FRIG (December 10, 2025)

CFTRI–FRIG organised a motivational talk on 10th December 2025 on the theme "Stress Management and Right Thinking (SMART)." The session was delivered by Dr. Sachin Parab, motivational speaker, with expertise in medicine, counselling, yoga, and self and crisis management. The programme was presided over by Dr Giridhar Parvatam, Director, CSIR–CFTRI. Staff members, research scholars, and students participated actively and benefited from the session. The talk received an overwhelming response, as it included case-based discussions followed by a practical meditation session.

ISMT Valedictory Function & CSIR-CFTRI Platinum Jubilee Lecture Series 2024-2025 (December 29, 2025)

44th ISMT Valedictory Function & CSIR-CFTRI Platinum Jubilee Lecture Series 2024-2025 were held on 29th December 2025. Dr. Shylaja Donempudi, Distinguished Scientist and Head, Business Development Group, CSIR Headquarters, New Delhi, was the Chief Guest. Dr. Giridhar Parvatam, Director, CSIR-CFTRI, presided over the function. Appreciation Medals and Certificates were presented to the students. This was followed by the Platinum Jubilee Lecture Series 2024-25, and Dr. Shylaja Donempudi delivered the lecture on the topic "Science to Supremacy: Reimagining Food Innovation and Global Markets".



Library Colloquium on Crafting Quality Knowledge (December 29, 2025)

One day, Colloquium on Crafting Quality Knowledge – The Role of Library and Source-based Research was organised by the FOSTIS Library on 29th December 2025. Dr. ARD Prasad, Professor and Head (Retd.), Documentation Research & Training Centre (DRTC), Indian Statistical Institute (ISI), Bengaluru, was the Chief Guest. The programme was presided over by Dr. Giridhar Parvatam, Director, CSIR–CFTRI. Three technical sessions were held by: (i) Dr. Shivaram BS, Head, ICAST, CSIR-NAL, Bengaluru on the topic "From authoritative search to ethical scholarship"; (ii) Dr. M Chandrashekhara, Sr Professor, DoS in Library



and Information Science, University of Mysore on the topic “From information gatekeepers to research partners: The strategic role of libraries in scholarly excellence; and (iii) Dr. T Padmavathi, Principal Technical Officer, FOSTIS/Library, CSIR-CFTRI on the topic “Research impact and metrics: what every researcher must know”.

CSIR-CFTRI Scientific Excellence and Research Interaction Event (December 30, 2025)

The CSIR–CFTRI Scientific Excellence and Research Interaction Event was held on 30th December 2025. Prof. Ashok Alur, Vice Chancellor, Kodagu University, graced the occasion as the Chief Guest. The programme was presided over by Dr. Giridhar Parvatam, Director, CSIR–CFTRI. During the event, CSIR–CFTRI's Annual Recognitions for the year 2024–25 were presented.



Visitors

- A Group (16 Members) of North East Media Representatives, representing Meghalaya and Tripura States, visited CFTRI and its facilities on 17th October 2025 to get first-hand exposure to significant initiatives and success stories of Central Government Schemes & Programmes in various sectors across Karnataka.

- On November 7, 2025, Shri C. N. Shiva Prakash, Managing Director of Karnataka State Agricultural Processing and Export Corporation (KAPPEC), Bengaluru; Shri Shiva Kumar, CEO of Karnataka Agribusiness Development Corporation (KABDC), Bengaluru; Shri Venugopal G. R., Consultant of the Agri Export Cell, KAPPEC, Bengaluru; along with several other officials, visited CSIR–CFTRI, Mysuru to discuss potential collaborations with respect to short-term training programmes for entrepreneurs, conducting technical workshops, facilitating technology transfer, and promoting food processing industries across Karnataka. The delegation also toured the Common Incubation Facility Centres, including the Coffee Processing Unit and the Banana Processing Unit, which have been established at CSIR–CFTRI under the PMFME scheme.



- A delegation of Tripura Government Officials comprising Shri Hirendra Debbarma, Joint Director of Agriculture – Nodal Officer, TRESP for Agri-Horti PIU; Shri. Biplab Majumdar, Post-Harvest and Marketing Specialist – TRESP and Shri Akash Debbarma, Programme Manager, Agri & Horti – TRESP, visited the Institute on 28 November 2025 to initiate collaborative projects in respect of technology transfers, product development, capacity building, consultation, etc.



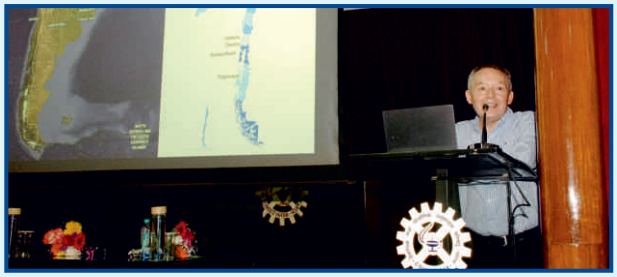
- As part of the Refresher Course of ASC Senior Officers, 5 Officers and 2 Staff from the Defence Institute of Biodefence Technologies, Mysuru, visited CSIR-CFTRI and its facilities on 11th December 2025. They visited the CFTRI Showcase, FS&AQCL and ISMT facilities.

- 13 Faculty of Catering Training, No. 4 Training Battalion, ASC Centre and College, Bengaluru, visited the campus as part of the Officer Catering Course for Officers from the Army, Navy and Air Force on 17th December 2025, who visited various facilities like the CFTRI Showcase, FS&AQCL and the ISMT plant.

Technical and Invited Talks

- Shri. K. Ravi Kumar, Controller of Administration, delivered a talk on “CCS Conduct Rules” to the staff of CFTRI on October 8, 2025.

- Sergio Javier Levia Poveda, Associate Professor, Universidad Austral de Chile, Chile, gave an invited talk entitled “Bioprospecting of Marine Bacteria” on October 9, 2025. The talk was organized by the Association of Microbiologists India, Mysore Chapter, in association with the CSIR-CFTRI.



- Shri. K. Ravi Kumar, Controller of Administration, delivered a talk on "Service Matters and Personal Claims" in respect of vigilance angle to the staff of CFTRI on 14th and 20th November 2025.



- An awareness talk on “Sexual Harassment at Workplace and the law” was organized on 18th December 2025. The resource person Smt. Sheela Ganesh, Asst. Professor, JSS Law College, Mysuru presented the talk. Staff members and students have attended the programme and gained more insights on the topic. Dr. H. Umesh Hebbar, Chief Scientist and Head, Food Engineering Dept. was present as Director's nominee. Dr. C.D. Nandini, Chief Scientist and Head, Molecular Nutrition Dept. has coordinated the event.



- A technical talk was arranged on 26th December, 2025, featuring Dr. Sridevi Sureshkumar, ARSC Future Fellow, and Dr. Sureshkumar Balasubramanian, Professor, School of Biological Sciences, both from Monash University, Clayton campus, Australia. Dr. Sridevi spoke on “Plants to Humans: Arabidopsis for Translational Research,” and Dr. Sureshkumar spoke on “RNA Splicing: Lessons from Millions of GWAS”.

Awards and Prizes

- The Agri-Horticulture Section of CSIR-CFTRI has secured the First Prize in the category of Main Lawn Flower Decoration in 2025 Dasara Flower Show Competition organized by the Directorate of Horticulture, Government of Karnataka.



Retirees

- Shri Prakash N, Principal Technical Officer, Food Engineering
- Shri Chandrashekara N, Sr. Technician (2), Food Packaging Technology
- Shri A.Nagendar, Senior Technical Officer, CSIR-CFTRI Resource Centre, Hyderabad
- Dr. Dayal Kumar Ahuja, Principal Technical Officer, CSIR-CFTRI Resource Centre-Mumbai
- Dr. Padam Prakash Gothwal, Chief Scientist, CSIR-CFTRI Resource Centre-Lucknow
- Dr. Parigi Ramesh Kumar, Chief Scientist, TTBD (I&P)
- Dr. Padmavathi T, Principal Technical Officer, FOSTIS/Library

Ph.D.s Awarded by AcSIR



Pallavi B V (2025), *Bioavailability and Efficacy Studies of Vitamin D3 Fortified Wheat Flour Based Product* [Guide: Dr. Inamdar Aashitosh Ashok, Chief Scientist, Department of Flour Milling, Baking and Confectionery Technology ; Co- Supervisor: Dr. Harish Prashanth K V, Principal Scientist, Department of Biochemistry]



Salony Azam Sheikh (2025), *Studies on ALA Rich Oil and Proteins from Silk Industry By-Products for Amelioration of Arthritic Inflammation and Product Development* [Dr. Sridevi Annapurna Singh, Director (Former) and Chief Scientist, Traditional Foods and Applied Nutrition ,CSIR-Central Food Technological Research Institute]



Athira C (2025), *Development of Recombinant, Chimeric Antimicrobial Peptides for Salmonella* [Dr. Rajagopal K, Chief Scientist, Department of Biochemistry]



Aswathi K N(2025) *Development of pulped natural coffee process: Microbial and biochemical characterization for quality improvement* [Dr. Pushpa S Murthy, Chief Scientist, Department of Plantation Products, Spices & Flavour Technology]



Shikku Premachandran M (2025) *Extraction And Characterization Of Bioactive Metabolites And Value Addition Of Allspice (Pimenta Dioica L.) Leaves* [Dr. Pushpa S Murthy, Chief Scientist, Department of Plantation Products, Spices & Flavour Technology]



Prachi Aparichita Patra (2025) *Non-conventional approaches for the isolation of biomolecules from kokum fruit (Garcinia indica Choisy) for functional attributes* [Dr. Nagarajan S, Chief Scientist, Department of Plantation Products, Spices & Flavour Technology]



Abhimanyu Singh (2025) *Enrichment of Medium Chain Triglycerides in Edible Oils via Fractionation and its Utilization* [Dr. Umesh Hebbar H, Chief Scientist, Department of Food Engineering]



Nethravathy M U(2025) *Studies on Nannochloropsis oceanica: Global transcriptome profiling and evaluation of functional implications of its EPA rich biomass to ameliorate liver fibrosis* [Supervisor: Dr. Sreedhar R V, Principal Scientist, Department of Plant Cell Biotechnology; Co-Supervisor: Dr. Azam Yakub Sheikh, DST Inspire Fellow (Former), Department of Plant Cell Biotechnology]



Sunil Kumar B T(2025) *Melanin from Nigerseed Hulls: Characterization, Bioactivities and Applications* [Dr. Sridevi Annapurna Singh, Director (Former) and Chief Scientist, Traditional Foods and Applied Nutrition ,CSIR-Central Food Technological Research Institute; Co-Supervisor: Dr. Umesh Hebbar H, Chief Scientist, Department of Food Engineering]



Trisha Tissopi (2025) *Production of transglycosylating α-glucosidase from Aspergillus sp. and its application in development of resistant starch- rich product* [Supervisor name: Dr. MVRK Sarma, Principal Scientist, Department of Microbiology & Fermentation Technology]



Saravanan M (2025) *Characterization and evaluation of Cassia auriculata extracts for anti-diabetic potential by in vitro and in vivo studies* [Dr. Muthukumar S P, Chief Scientist, Department of Biochemistry]



Rixon Raj (2025) *Enhancement of Anthocyanin Content in Black Carrot Roots: Encapsulation and Bioavailability Assessment in In vitro and In vivo Models* [Dr. Nandini P Shetty, Senior Principal Scientist, Department of Plant Cell Biotechnology]

Cathrine M S B (2025) *Development of plant-derived nanovesicles containing bioavailable phytoferritin-Fe complex for the management of iron deficiency anemia* [Dr. Gopinath M, Senior Principal Scientist, Department of Molecular Nutrition]





Archana V Remesh (2025) *Stored product insect pest management using plant-based aroma compounds* [Dr. C S Vivek Babu, Senior Principal Scientist, Department of Food Protectants & Infestation Control]



Drishya P K (2025) *Isolation and preparation of bioactive analogous compounds from Nigella sativa L. seeds and their functional attributes* [Guide: Dr. Nagarajan S, Chief Scientist, Department of Plantation Products, Spices & Flavour Technology]

Select Publications

- Hitlamani, Veeranna; Ashok Inamdar, Aashitosh, *Effect of milling methods on acrylamide levels in chapatti and poori* (2025) Food Chemistry, 490, art. no. 145195,. **[IF: 9.8]**

- Yashwanth, B. S.; Biswal, Vijay Laxmi; Suhas, R.; Chaudhari, Sachin R.; Naveen, Jayapala; Murthy, Pushpa Srinivas Keshava, *Fortification of coffee with iron compounds to enhance its micronutrient profile* (2025) Food Chemistry, 489, art. no. 144964, **[IF: 9.8]**

- Ambujakshan, Anu; Baskaran, Revathy, *Insoluble and soluble dietary fiber from banana (Musa spp. Grand naine) flower and bract as potential functional ingredients: In vitro studies on functional, adsorption and antioxidant properties* (2025) Food Chemistry, 495, art. no. 146334 **[IF:9.8]**

- Bethi, Cathrine Monica Spandana ; Kumar, Meghana N. ; Kalarikkal, Sreeram Peringattu ; Janakiraman, N. ; Sundaram, Gopinath Meenakshi , *Fenugreek-derived exosome-like nanovesicles containing bioavailable phytoferritin for the management of iron deficiency anemia* (2025) Food Chemistry, 490, art. no. 145088 **[IF:9.8]**



International Workshop on “Advances in Wheat and Flour Quality Analysis: Techniques and Applications”



GI Mahotsav 3.0

Published by

DIRECTOR
CSIR-CFTRI, Mysuru
director.cftri@csir.res.in

Visit us @
www.cftri.res.in