

विद्ययां तन्त्राग्यां अनुवादान

DEPARTMENT OF SCIENCE AND TECHNOLOGY

NITTE UNIVERSITY TECHNOLOGY ENABLING CENTRE



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FOREVER IN OUR HEARTS



Late Sri Nitte Vinaya Hegde **Revered Founder Chancellor, NitteDU**

You may be gone, but you will never be forgotten...

Though time may pass and generations move on,
Your values will shine like an eternal dawn.
In every healed heart and enlightened mind,
Your selfless deeds, always compassionate and kind
Devoted to human service, with grace
A guiding light no darkness can erase
Though physically apart
Your beautiful memories remain in our hearts.

Sir Vinaya Hegde lived a life that chose purpose over self. To live for oneself is natural. To live for others is noble. But to devote one's life to bettering the lives of others is a virtue beyond compare with no adjectives. Sir, you were an embodiment of compassion, rare and profound. Many see suffering and feel for it, but few strive to lessen it. You did, with an unwavering and selfless act that will live forever in the hearts of many and an experience that finds no expression in words. With every life you touched and every difference you made, you immortalized yourself. You are a rare soul who lived amongst us, whose presence was a blessing to witness in our lifetime. May your policy of "Nishkam Karma" guide all of us in our daily lives.

कर्मण्येवाधिकारस्ते मा फलेषु कदाचन।
मा कर्मफलहेतुर्भूर्मा ते संगोऽस्त्वकर्मणि॥

World Antibiotic Awareness Week 2025: One Health Workshop – 24 November 2025



NitteDU, organised a One Health workshop on 24 November 2025 at Avishkar Hall, ABSMIDS as part of World Antibiotic Awareness Week 2025. The event was organized by DST-NUTEC and the FAO Reference Centre for Antimicrobial Resistance and Aquaculture Biosecurity, in collaboration with K S Hegde Medical Academy, Nitte University Centre for Science Education and Research and Nitte Institute of Allied Health Sciences.

The inauguration was marked by the lighting of the lamp by distinguished guests: President of the function, Prof Dr M S Moodithaya, Vice Chancellor, NitteDU, Chief guest Dr Dr S B Barbuddhe, Director, ICAR-National Meat Research Institute; Guests of Honour Dr S L Hoti, Emeritus Scientist, ICMR-VCRC and Dr Naveenchandra Kulal, District Surveillance Officer and One Health Nodal Officer, Dakshina Kannada;

Dr Indrani Karunasagar, Director, DST-NUTEC, welcomed the gathering, and Dr Iddya Karunasagar highlighted the global role of the FAO Reference Centre.

The workshop featured a series of engaging talks: Dr Barbuddhe outlined the evolution of One Health and India's response to zoonotic diseases. Dr Hoti discussed vector-borne diseases and the importance of sustainable mosquito management. Dr Dharamveer Shetty illustrated spillover events using Ebola and Nipah case studies and Dr Sabeena Pillai described zoonotic viral diseases. From a healthcare perspective, Dr M Mridula addressed AMR challenges in tertiary hospitals, while Dr Avinash K. Shetty, Wake Forest School of Medicine, emphasized the rising AMR burden in children and the need for clinical stewardship. The programme concluded with Dr Indrani Karunasagar's session on water safety, harmful algal blooms, and marine biotoxins.

With over 320 participants from various NitteDU institutions, the workshop fostered meaningful interdisciplinary dialogue and reinforced the collective responsibility required to address the growing global challenge of antimicrobial resistance.

International conference on AMR One Health (OH)



From 2–4 February 2026, Dr. Indrani Karunasagar and Prof. Dr. Iddya Karunasagar attended the AMR One Health (OH) Conference held in Bangkok, Thailand, a major regional meeting jointly organised by the UK FAO Reference Centre for AMR in collaboration with Mott MacDonald, the Thailand Food and Drug Administration, the Thailand Department of Livestock Development, Chulalongkorn University, Singapore NParks, and the FAO Regional Office for Asia and the Pacific, drawing nearly 150 invited delegates from government agencies, academic institutions, research organisations and private-sector bodies across South and Southeast Asia.

Representing Nitte (Deemed to be University), Dr. Indrani and Prof. Iddya contributed actively to the deliberations, sharing expertise in aquatic animal health, AMR surveillance, translational research, and the need for harmonised laboratory networks across the region. They were joined by Dr. Krishna Kumar, Dr. Deekshit, Dr. Praveen Rai, Dr. Akhila D. S. (Associate Professors), and Dr. Prithvisagar K. S. (Project Associate), who participated in technical sessions, panel discussions and networking engagements with researchers and policymakers from ASEAN countries and international partner organisations.

The conference focused on advancing antimicrobial resistance (AMR) mitigation through an integrated One Health framework, with sessions addressing regional progress supported by the Fleming Fund and discussions on AMR in bacterial pathogens with zoonotic potential, antimicrobial usage and consumption (AMU/AMC) in terrestrial and aquatic systems, AMR concerns in environmental settings, veterinary drug residues in food, and opportunities for enhanced collaboration and future capacity-building initiatives.

Through their collective involvement, the delegation strengthened institutional linkages and expanded collaborative opportunities in AMR research, capacity development and interdisciplinary knowledge exchange, reaffirming the university's commitment to contributing to regional and global AMR mitigation efforts under the One Health framework.

One-Day National Conference on Smart Biomaterials and Next-Generation Drug Delivery Platforms



Dr Indrani Karunasagar participated in the One-Day National Conference on “Smart Biomaterials and Next-Generation Drug Delivery Platforms,” organised by the Department of Pharmaceutics, NGSM Institute of Pharmaceutical Sciences (NGSMIPS) under Nitte (Deemed to be University) on 20 February 2026. Held at the Nitte University Auditorium, Paneer Campus, the conference brought together academicians, researchers, industry experts and students to explore advancements in smart biomaterials, nanotechnology-enabled drug delivery systems, and innovative pharmaceutical formulations.

Dr Indrani Karunasagar inaugurated the conference as the Chief Guest and Guest of Honour, sharing insights on the importance of translational research, interdisciplinary collaboration and emerging opportunities in next-generation therapeutics. The event featured expert lectures by distinguished resource persons including Prof. Vamsi Venuganti (BITS Pilani, Hyderabad), Dr. Saurabh Srivastava (NIPER Hyderabad) and Dr. Rahul Shukla (NIPER Raebareli), along with a technical session by Dr. Sandip Jagtap of Labindia Analytical Instruments. With 353 participants from 33 institutions and 120 oral and poster presentations, the conference served as a dynamic platform for academic interaction and knowledge exchange, enriched by Dr. Indrani’s contributions and presence.

World Food Day 2025



World Food Day 2025 was observed by NUCSER, in collaboration with DST-NUTEC, on 18 October 2025 under the theme “Hand in Hand for Better Food and a Better Future.” The program was inaugurated by the Chief Guest, Ms Sadhana Deshmukh, Director of the Staff Development Centre, Nitte (DU), and the Guest of Honour was Prof. Dr. Iddya Karunasagar, Adviser (Research and Patent), Nitte (DU). Two student events—an Extempore competition and an Ideathon—were organized as part of the celebration.

The Valedictory address was delivered by Prof Dr Indrani Karunasagar, Director of NUTEC and prizes to award winners by Prof Dr Anirban Chakraborty, Director, NUCSER.

Training programme on “Integrated Food Safety Management Regulatory Compliance Training: HACCP Training & ISO 22000 Internal Audit”



The Department of Food Science & Nutrition and the Department of Environmental Health & Toxicology, NUCSER, organised the inaugural programme of the workshop on “Integrated Food Safety Management & Regulatory Compliance Training” on 25 February 2026 at the Seminar Hall, NUCSER. The event focused on key components of food safety systems, including HACCP (CODEX), ISO 22000:2018, FoSTaC, and Pest Management, aimed at strengthening compliance and enhancing understanding of safety standards within the food sector.

Prof Dr Indrani Karunasagar, serving as the Guest of Honour, played a central role in the inauguration. Her presence underscored the importance of evidence-based food safety practices and capacity building in the areas of microbial safety, regulatory compliance, and risk assessment. Through her expertise and longstanding contributions to food safety and public health, the inaugural programme gained strong scientific grounding and provided direction for the workshop’s objectives. The programme contributed meaningfully to building awareness and technical competency among participants working toward improved food safety management.

EMERGE 2026 Innovation Festival



DST-TEC, NitteDU actively participated in EMERGE 2026, a three-day innovation festival held from 9–11 January 2026 at Tannirbhavi Beach, Mangaluru, by showcasing a portfolio of emerging and venture-ready technologies aimed at sustainability, circular economy and advanced engineering applications. The DST-TEC stall served as a platform to demonstrate practical solutions with strong commercialization potential and to engage with start-ups, investors, industry stakeholders, and the general public.

Key innovations showcased included SANGI, a dehydrator designed for visually disabled, EcoBiopoly Bags, an environmentally sustainable alternative to conventional packaging, and GoUBio, a liquid bio-fertilizer developed from cow urine, promoting eco-friendly agricultural practices and circular bio-resource utilization. These technologies highlighted DST-TEC's focus on translating laboratory innovations into field-relevant, scalable solutions addressing agri-food and environmental challenges. In addition, DST-TEC featured advanced engineering and robotics technologies, ARJUNA, an educational robotics kit, along with other robotic devices developed by the startup Newrro Robotics with support from NMIT, Bengaluru, positioned for wider adoption in institutions offering Artificial Intelligence and robotics education.

Participation in EMERGE 2026 provided DST-TEC with extensive networking opportunities, enabling interactions with venture capitalists, industry partners, start-up founders, students, and the local business community. The event enhanced the visibility of DST-TEC's technology pipeline, facilitated discussions on technology transfer and commercialization, and reinforced DST-TEC's role in bridging academia, industry and society while promoting science-driven innovation aligned with sustainability and societal impact.

Towards Sustainable and Resilient Global Ecosystems: A One Health Approach



A two-day capacity building programme titled “Towards Sustainable and Resilient Global Ecosystems: A One Health Approach” was organised by the NITTE-GoK Centre of Excellence (NITTE-GoK COE), Aquamarin, on 29-30 January 2026, bringing together experts and participants to deepen the interdisciplinary understanding of the One Health framework. Mr Prakash K V, an Entrepreneur and Innovator at ADACHI SVIPEGREEN was the Chief Guest and Prof Dr Indrani Karunasagar was the Guest of Honour for the event.

The programme highlighted the interconnectedness of human, animal, and environmental health through expert lectures and interactive discussions addressing emerging global challenges, ecosystem resilience and the role of evidence-based policy in sustainability. It provided practical insights into collaborative strategies for managing health risks and environmental threats, serving as an important platform for capacity building and knowledge exchange among students, researchers and professionals engaged in One Health.

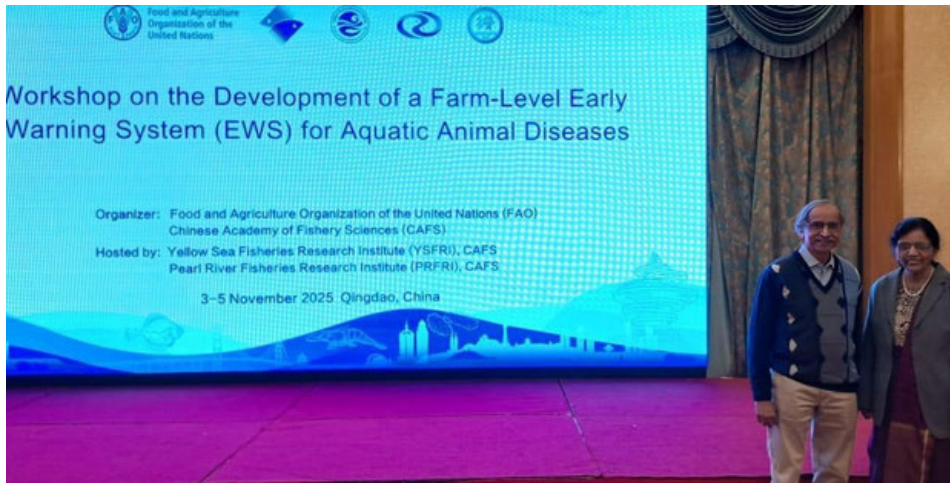
Quinquennial Review of Research and Development Programmes at ICAR-CICFR



Dr. Indrani Karunasagar served as a Member of the Quinquennial Review Team (QRT) constituted by the Indian Council of Agricultural Research (ICAR) to review the research and development activities of the ICAR-Central Institute of Coldwater Fisheries Research (ICAR-CICFR), Bhimtal, for the period 2018-2023. The QRT meeting held at Bhimtal from 5-8 January 2026 involved an evaluation of the Institute’s core programmes, scientific outputs, infrastructure, human resources, and extension activities in coldwater fisheries

During the review, progress in coldwater aquaculture technologies, fish health management, breeding and conservation initiatives, livelihood-oriented interventions, and stakeholder engagement was assessed. Dr. Indrani Karunasagar emphasised the need for effective field-level translation of research outcomes to ensure tangible benefits, improved livelihoods, and measurable on-ground impact, informing recommendations aimed at strengthening research-extension linkages and enhancing the overall effectiveness of ICAR-CICFR’s programmes.

Development of Farm-Level Early Warning System for Aquatic Animal Disease, CHINA : 3 - 5 November, 2025 Qingdao 7- 9 November, 2025 Guangzou



**7-9 November
Guangzou, China**



Dr Iddya Karunasagar and Dr Indrani Karunasagar participated in the programme on “Development of Farm-Level Early Warning System for Aquatic Animal Diseases,” held from 3-5 November 2025 at the Yellow Sea Fisheries Research Institute (YSFRI) and from 7-9 November 2025 at the Pearl River Fisheries Research Institute (PRFRI). The programme, organised by FAO in collaboration with the Chinese Academy of Fishery Sciences (CAFS), focused on strengthening aquatic animal health surveillance and developing a structured roadmap for farm-level early-warning systems. Experts from multiple institutions deliberated on risk-assessment models, disease-reporting frameworks, and rapid-response strategies for emerging aquatic diseases.

During the programme, both Dr Iddya Karunasagar and Dr Indrani Karunasagar delivered invited talks and contributed to discussions on integrating field-level diagnostics, establishing efficient data-sharing platforms, and building capacity among farmers and extension personnel to support rapid detection and response. Their participation reinforced the importance of science-driven surveillance approaches and practical, farm-oriented solutions to improve biosecurity, reduce disease outbreaks and safeguard aquaculture productivity. The initiative laid a strong foundation for more resilient aquatic animal health systems aligned with global best practices.

Aquatic Disease EWS Validation Workshop, Rome 9-11 December 2025

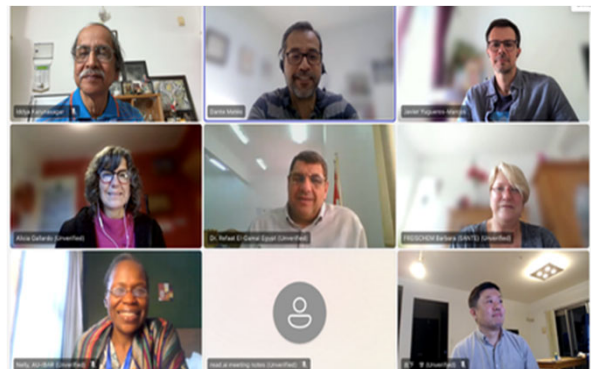


In continuation of the meetings held in China, the Aquatic Disease Early Warning System (EWS) Validation Workshop, was held from 9-11 December 2025 in Rome, Italy, Dr Iddya Karunasagar and Dr Indrani Karunasagar delivered presentations and contributed to the discussions led by the Food and Agriculture Organization (FAO). The workshop focused on evaluating the structure and operational readiness of the EWS framework for detecting and responding to aquatic animal diseases. Participants reviewed data-driven disease models, surveillance processes, and rapid-response mechanisms aimed at strengthening aquatic animal health systems at both national and farm levels.

During the technical sessions, Dr Iddya and Dr Indrani shared expert insights on refining risk-assessment approaches, improving disease-reporting pathways, and ensuring that EWS tools are practical and adaptable for aquaculture operations. They emphasized the importance of incorporating field-level diagnostics, real-time data-sharing, and capacity building for farmers, laboratories and extension personnel. Their contributions supported the development of a strengthened roadmap designed to improve biosecurity, prevent disease outbreaks and enhance the long-term sustainability of aquaculture productivity.

WOAH Expert Consultation on Aquatic Animal Health Code Updates

Dr Iddya Karunasagar was invited by the World Organization for Animal Health (WOAH) to participate in the first Ad hoc Group meeting convened for the revision of a Chapter of the Aquatic Animal Health Code. The Ad hoc Group, constituted to review and update international standards governing aquatic animal health, focused on ensuring scientific accuracy, clarity and global relevance in the revised chapter.



Through this engagement, Dr. Iddya contributed expert insights to strengthen international guidelines on aquatic animal disease management, supporting WOAH's efforts to enhance global harmonisation, improve surveillance frameworks, and promote science-based best practices for aquatic animal health worldwide.

Highlighting the importance of translational research for technology development



Dr. Iddya Karunasagar has been nominated by the Indian Council of Agricultural Research as the Chairman of the Quinquennial Review Team of the Central Institute of Fisheries Technology Cochin. Addressing the scientists of CIFT at Headquarters in Cochin, on December 22-23, Dr. Karunasagar underlined the need to carry out translational research to take the research findings to the field as technologies.

Dr. Karunasagar also highlighted the need for incubators to have staff with expertise in business development and marketing strategies so that young innovators can get support from both the technical side as well as business side.

Expert Talk on “Reprogramming Cytokine Networks: Clinical Implications for JAK Inhibitors”



A guest lecture titled “Reprogramming Cytokine Networks: Clinical Implications for JAK Inhibitors” was conducted on 27 December 2025 at 10:30 AM at Chintana Hall, K S Hegde Hospital, NitteDU. The programme brought together faculty members, researchers and students for an academic session focused on cytokine modulation and emerging therapeutic insights related to JAK inhibitors. The event was presided over by Prof Dr B Satheesh Kumar Bhandary, Vice-President (ISR & CRL), NitteDU. The Chief Guest for the lecture was Prof Dr Ram Savan, Professor of Immunology and Adjunct Professor of Microbiology, University of Washington, Seattle, USA, who delivered the keynote address on cytokine network reprogramming and its clinical implications. Prof Dr Sukanya Shetty, Vice-Dean and Professor of Biochemistry, KHEMA, attended the programme as the Guest of Honor. The programme was convened in the presence of university leadership, including, Dr Iddya Karunasagar, Dr Indrani Karunasagar and Prof Dr Anirban Chakraborty. The lecture facilitated scholarly engagement, offered current perspectives on cytokine biology, and contributed to strengthening academic dialogue in the field of immunology.

Workshop on Sustainable Waste Fibre Utilization 24 October 2025



A workshop on conversion of waste fibre to useful products was conducted by Dr Rakesh Jain, Former Director, Central Pulp and Paper Research Institute, and UNIDO Expert. The program was organized by the DST Technology Enabling Centre (DST-TEC), Nitte DU, in association with Phoenix – Biotechnology Student Association of NMAMIT, on 24 October 2025 at 10:00 AM at the Shambhavi Auditorium, APJ Kalam Block, Nitte. The programme began with a welcome by Dr Vidya S M, Professor, Department of Biotechnology, NMAMIT, followed by Dr Iddya Karunasagar, Advisor – Research & Patents, NitteDU, who introduced the speaker and highlighted DST-TEC’s role in promoting technology transfer and innovation.

Dr Nagesh Prabhu, Vice-Principal, NMAMIT, presided over the event, emphasizing the institute’s dedication to sustainability and renewable energy initiatives. Dr Jain delivered an insightful session on the potential of lignocellulosic biomass—such as bamboo, jute, bagasse, and banana coir—and outlined emerging research opportunities in enzymatic fiber processing, microbial cellulose production, and clean technologies for wastewater reduction in the paper industry. He underscored the feasibility of modern wastewater recycling systems that ensure both product quality and environmental compliance.

The event concluded with an interactive discussion, during which Dr Geetha from NMIT, Bengaluru, sought guidance on commercializing compressed coir products, and Dr. Vidya S M presented her work on bacterial cellulose-based paper. With more than 100 participants from NMAMIT, NMIT, and entrepreneurial circles, the workshop served as an informative and engaging platform for exploring sustainable bio-based technologies.

International Conference “Blue Horizon 2025: Rethinking Fisheries for a Sustainable Future” 17–18 December 2025

Blue Horizon 2025: Rethinking Fisheries for a Sustainable Future
INTERNATIONAL CONFERENCE (ONLINE MODE)
17.12.2025 - 18.12.2025 (10.00 AM - 04.30 PM)

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Dr. N. Felix
Vice-Chancellor
TNJFU

Co-PATRON
Dr. P. Chidambaram
Registrar
TNJFU

CONVENOR
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Dean i/c,
Dr. MGR FC & RI, TNR

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Assistant Professor, CFFT

Dr. M. Petchimuthu
Assistant Professor, CFFM

Plenary Speaker
"Increased incidence of infectious diseases and climate change"
Dr. Indrani Karunasagar, MSc., PhD.
Director (Projects & NuTEC, Nitte (DU)
Mangaluru, Karnataka, India

Keynote Speakers
"Aquaculture sustainability in a resource constrained world and Start-ups in Aquaculture"
Dr. Shivakumar Magada, MSc., PhD.
Former Dean and Professor of Aquatic Biology
College of Fisheries, Mangaluru,
Karnataka Veterinary, Animal and Fisheries Sciences University
Karnataka, India

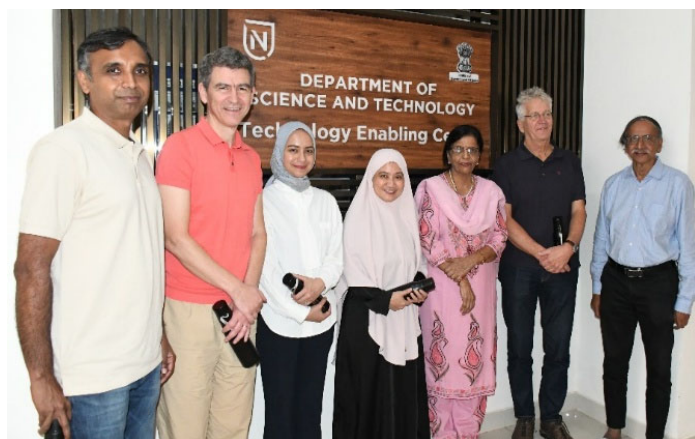
"From Risk to Resilience: The Future of Fisheries in a Warming World"
Dr. P. Deepak George, MSc., PhD.
Senior Scientist, Department of Agriculture and Fisheries
Northern Territory Government, Australia

"Bioprospecting of Marine Resources for Sustainable Exploitation"
Dr. Surendranaj Alagarsamy, MSc., PhD.
Associate Research Scientist
Kuwait Institute for Scientific Research
Kuwait

"Production and Marketing characterization for Improved Efficiency, Product Waste and Loss Reduction"
Dr. Baban Bayan, PhD, (Agri Economics)
Consultant Data Analyst
WorldFish, Cutack, Odisha, India

Dr Indrani Karunasagar was a plenary speaker at the international conference “Blue Horizon 2025: Rethinking Fisheries for a Sustainable Future”, organised by Tamil Nadu Dr. J. Jayalalithaa Fisheries University and Dr. MGR Fisheries College and Research Institute, Thalainayeru, held online on 17–18 December 2025. The programme began with a welcome by Dr. V. Rani, Convenor and Dean (i/c), followed by the presidential address by Dr N Felix, Vice Chancellor, TNJFU. Dr Indrani Karunasagar, Director (Projects & NUTEC), NitteDU, was a plenary speaker and delivered a talk on climate-linked infectious diseases, highlighting how changing environmental conditions influence the emergence and spread of pathogens in aquatic systems.

UMC Radboud and NitteDU Explore Strategic Collaboration in Genomics and Systems Immunology 18 November 2025



Team from UMC Radboud comprising Prof. Mihai G Netea and Dr. Vinod Kumar along with Prof. Anirban Chakraborty, Dr. Vinod Kumar, Dr Mohana Kumar and Dr Krishna Kumar B from NUCSER visited TEC on 18 Nov 2025 to discuss about collaboration between DST NUTEC and NitteDU- Radboud UMC Centre for Human Functional Genomics & Systems Immunology, housed at NUCSER in the near future.

The discussions focused on identifying potential joint research areas in immunology, host-pathogen interactions, and human functional genomics, along with opportunities for capacity building, faculty exchange, and collaborative funding initiatives. The visit laid the groundwork for strengthening international academic partnerships and advancing translational research through the proposed DST-NUTEC-Radboud UMC collaboration anchored at NUCSER.

VIROCON 2025: “Changing Landscapes in Human, Animal and Plant Viruses: Bridging Basic Science, Innovation and Public Health”

08–10 December 2025

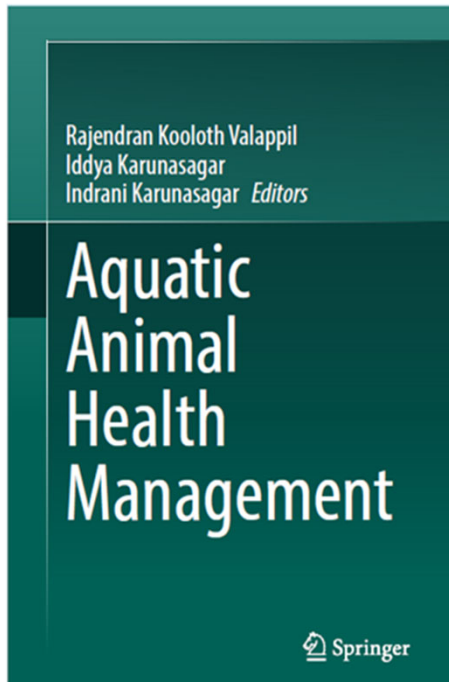


Virocon-2025, the annual international conference of the Indian Virological Society (IVS), was held from 08–10 December 2025 at the Conrad Hotel, Pune, jointly organised by ICMR–NIV, the Indian Virological Society, and the NIV Research Foundation. The conference was themed “Changing Landscapes in Human, Animal and Plant Viruses: Bridging Basic Science, Innovation and Public Health.” Dr Indrani Karunasagar participated in the event online as she was out of the country

She was invited to chair the scientific session on Development of Countermeasures, where she guided discussions on enhancing surveillance systems, strengthening translational research, and improving laboratory network coordination to address emerging and re-emerging viral threats.

The event featured plenary lectures, keynote talks, oral presentations, and poster sessions, attracting over 650 delegates from leading national and international institutions. With strong participation from experts, researchers and students, Virocon-2025 served as a significant platform for scientific exchange, emphasizing collaborative approaches to advance virology research and strengthen preparedness for future viral challenges.

Aquatic Animal Health Management – Edited Volume Overview



The book *Aquatic Animal Health Management*, edited by Rajendran Kooloth Valappil, Iddya Karunasagar, and Indrani Karunasagar, is a comprehensive reference published by Springer that addresses key aspects of aquatic animal health. The editors are distinguished experts in aquaculture and aquatic animal diseases, bringing together contributions from leading researchers and practitioners in the field. The volume covers a wide range of topics, including bacterial, viral, and parasitic diseases of finfish and shellfish, environmental influences on health, and advances in disease diagnosis and management. It also discusses emerging technologies in aquaculture, including genomics, nanotechnology, vaccines, probiotics, and cell line development.

Additionally, the book highlights policy frameworks, surveillance programmes, and international trade issues, making it a valuable resource for researchers, policymakers, and aquaculture professionals.

The book was released at the International conference on diseases in Asian Aquaculture organized by the Indian Council of Agricultural Research-Central Brackish Water Aquaculture, held in Chennai on 23-26 September 2025.

Translating Biology to Industry: A Hands-On Training on Bioprocess Technologies



Dr. Indrani Karunasagar delivered an invited talk titled “Industrial Applications of Bioprocessing: Harnessing the Power of Living Systems to Transform Modern Manufacturing” at the Industry-Academia workshop “Translating Biology to Industry: A Hands-On Training on Bioprocess Technologies,”

organised by the Departments of Bio & Nano Technology and Food Safety & Nutrition, NUCSER, on 20 February 2026.

Her address highlighted the role of bioprocessing and living systems in enabling sustainable and innovative industrial applications, while the workshop provided hands-on experience to key bioprocess operations, strengthening technical skills and fostering closer academia-industry collaboration



6 Oct : Discussion with Dr Rakesh Jain and Prof Hitha Shetty ,Department of chemistry ,NMIT on Utilisation of Agro waste and Saw mill waste to prepare useful commercial products.



7 Oct : Discussion with NMAMIT Prof Vidya along with Dr Rakesh Jain resource person for the work shop and Industry partner Mr Sitharaman, INDIC on utilisation of Agro waste to produce high quality food grade paper.



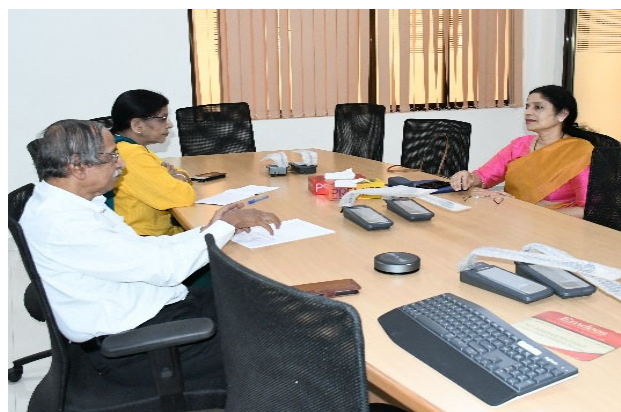
18 Nov : Discussion with Dr Mackwin Kenwood Dmello, NIAHS and students from Sahlgrenska Academy , University Of Gothenburg in Sweden on collaboration in Public health and potential training.



27 Nov : Discussion with Proprietor of Aruna Masala Mr Ananthesh Prabhu on developmental process of Spray drying and Vacuum drying of food products for export and prolonging lifespan.



15 Dec : Discussion with Start-up on product development.



25 Nov : Discussion with Dr Mithra Hegde , Dean, ABSMIDS on submission of BIRAC project regarding the Estimation of Vitamin D from Saliva as a Biomarker.

Patents granted

सर्वप्रथम पेटेंट प्रमाणपत्र



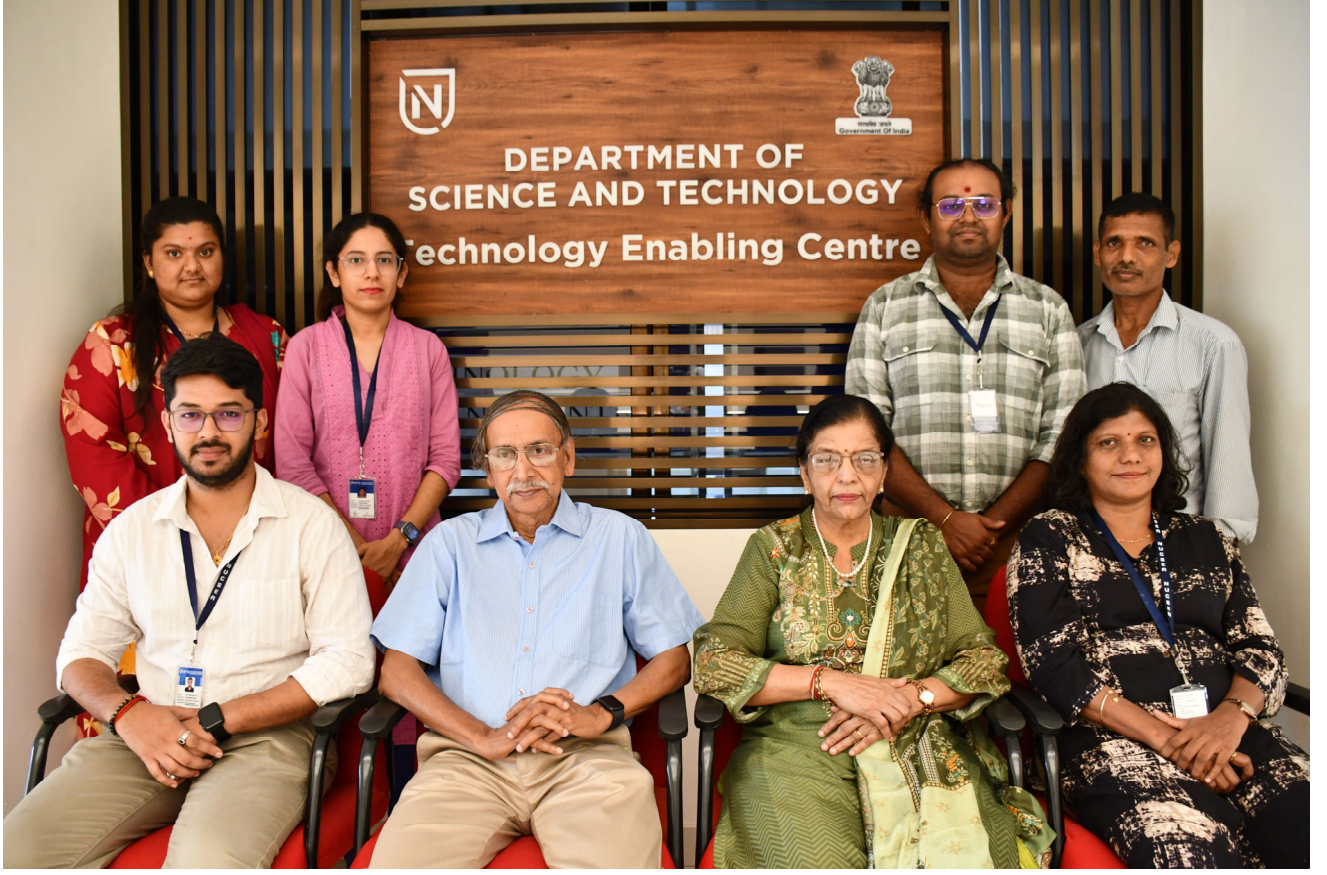
Dr. Mamatha B S and Mr. Sandeep Kumar H S of NUCSER were granted Indian Patent No. 582393 for a “Moringa oleifera-based mouthwash for periodontitis”, with support from DST-NUTEC during the patent process.

Dr. Mamatha B S and Mr. Sandeep Kumar H S of NUCSER were granted Indian Patent No. 578494 for their invention titled “Process for the Preparation of Betel Leaf Beverage with Desirable Taste and Mouthfeel,” with support from DST-NUTEC during the patent process.



Patents published

S.No	Inventors	Institution	Title of patent application	Application No.
1	Mr Yajnesh Rai K Dr. Prithvisagar K S Dr. Ashwin Rai Mr. Anand Ramakrishnan	NUCSER	Bacteriophage based biocontrol formulation for the management of Aeromonas hydrophila infection in ornamental fish	202541100985
2	Dr. Malavika Nayak Dr Risha Dutta Mr Havyas U Mr Harshith Shetty Dr. Mackwin Kenwood Demello Dr. Spoorthi Shetty Dr. Mangala Shetty Dr. Ravikiran S R Dr Madhavakrishna Maharshi Cheepinapi Dr. Joylin Roshani Dsouza Dr. Shrisharath K	NIAHS MNAMIT	AI assisted mobile solution for growth and nutrition assessment in infants and children	202541106150
3	Dr. Ashith P C Dr. Charan K S Mr Rynor Gawin Pinto Dr. Grynal D'Mello Dr. Roopa Hegde Dr. Jayaprakash Shetty Dr. Sripada G Mehandale Dr. Mackwin Kenwood Dmello	NIAHS MNAMIT KSHEMA	Unified AI-driven resuscitation device with integrated ECG and hemodynamic monitoring	202541106149
4	Dr. Biswajit Maiti Ms Ranu Yadav Dr. Ashwath Nayak	NUCSER	Process for rapid detection of Salmonella under isothermal conditions using polymerase spiral reaction (PSR) assay	202541120643
5	Dr. Biswajit Maiti Ms Ranu Yadav Dr. Ashwath Nayak	NUCSER	Process for specific detection of Klebsiella pneumoniae under isothermal conditions using polymerase spiral reaction (PSR) assay	202541120644
6	Ms Ashalatha Aribail Dr. Caroline Dsouza Dr. Krishnakumar B	NUCSER	Species-specific oligonucleotide primers targeting the pbp gene and process for rapid molecular detection of Vibrio vulnificus using loop-mediated isothermal amplification (LAMP).	202641009234



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