



# Interactive session with Agrinnovate CEO, Dr Sudha Mysore

**18 March 2022**

Nitte University DST Technology Enabling Centre in collaboration with Agrinnovate, Ministry of Agriculture and Farmers Welfare, Government of India organized an interactive session with Agro-industry representatives on 18 March 2022. Dr Sudha Mysore, Chief Executive Officer, Agrinnovate was the Chief Guest and resource person. Dr M.N. Moodithaya, Pro-Vice Chancellor, Nitte University, and president of the event highlighted the importance of bringing together research and innovation and the need to focus on novel technologies as the global trend is moving towards knowledge economy. Dr Indrani Karunasagar explained the genesis of DST Technology Enabling Centres across the entire country with one in each state. The TEC at Nitte University is handholding academic institutions and entrepreneurs and bringing about the much needed academia-industry collaboration. Dr Iddya Karunasagar explained the need for multidisciplinary approach for technology development to solve problems and how the DST TEC is contributing to achieve this goal. Dr Sudha Mysore presented examples of agri-technologies that have been commercialized through Agrinnovate. These include biofertilisers and technologies for crop enhancement for agriculture, technologies for application to dairy and food industry, disease diagnostics and vaccines for veterinary and fisheries sector. Agrinnovate has also created incubation facilities where companies wanting to scale up or field test technologies could do this in collaboration with ICAR institutions or Agricultural Universities. She explained the process of technology development that would benefit farmers, processors and agro-industries, validation of technologies and commercialization. Dr Mamatha from Nitte University Centre for Science Education and Research proposed the vote of thanks. Ms Akshatha from DST TEC compered the programme.



*“Agrinnovate acts as an interface between various institutions under the National Agricultural Research System, which includes research institutes under the Indian Council of Agricultural Research and State Agricultural universities on one side and the stakeholders of agricultural sector like farmers, agro-industry operators, postharvest and food processing industries on the other end”*



# DST TEC Nitte (DU) Signs MoU with Section Infin-8 Foundation

DST TEC, Nitte (DU) and Section Infin-8 Foundation signed a Memorandum of Understanding on 27 April 2022 to collaborate in inter and multi disciplinary research and development in health associated projects for social benefits. Dr Vishal Uchila Shishir, Director, Section Infin-8 Foundation and Shri N Vinaya Hegde, Hon'ble Chancellor Nitte (DU) exchanged the MoU. Nitte (DU) was represented by Dr Shantharam Shetty, Pro-Chancellor, Dr Satheesh Kumar Bhandary, Hon'ble Vice Chancellor, Dr Alka Kulkarni, Registrar, Dr Iddya Karunasagar Advisor Research and Patents, Dr Indrani Karunasagar, Director, Projects and DST TEC and the legal advisor Mr Nithyachetan Chakravarthi. Section infin-8 was represented by Dr Vishal Uchila Shishir and Mr Vishwas Uchila Shishir.

27 April 2022

*The MoU will help in translation of currently available technologies at DST TEC and help to find prospective start-ups and entrepreneurs for scaling up the products developed. The technologies currently available relate to nutraceuticals, ready-to-eat products and a few technologies for aquaculture.*

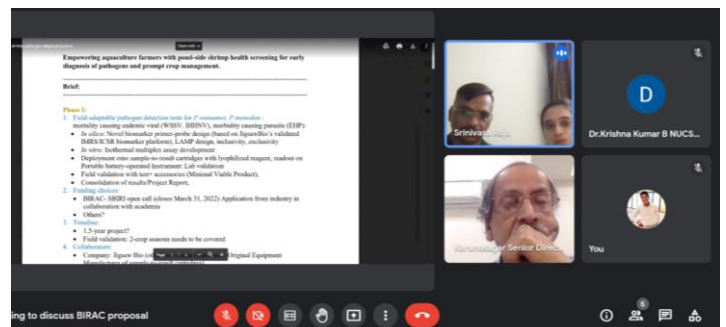


# DST TEC Nitte (DU) signs MoU with Jigsaw Bio Solutions Pvt Ltd, Bengaluru



10 March 2022

An MoU was signed between Jigsaw Bio Solutions Pvt Ltd, Bengaluru and DST TEC, Nitte University on 10 March 2022, for the development of diagnostic kits. The agreement aims to submit collaborative projects in the area of diagnostics to national and international funding agencies. The MoU was exchanged between Mr Srinivasa Raju Director, Jigsaw Bio Solutions Pvt Ltd and Dr Alka Kulkarni Registrar Nitte (DU) in the august presence of the Hon'ble Vice Chancellor Dr Satheesh Kumar Bhandary, Dr Iddya Karunasagar, Advisor Research and Patents Dr Indrani Karunasagar Director DST TEC Ms Vinutha Finance Director, the legal advisor Mr Nithyachethan Chakravarthi and DST TEC staff. The company has the reputation of expertise in molecular techniques and designing innovative, highly efficient primer/probes using proprietary genomics algorithms. Directors of the company Mr Srinivasa Raju and Shwetha Kamath Udyavara explained about the achievements and the range of technical activities of Jigsaw Bio Solutions Pvt Ltd and possible areas of collaboration. Dr Indrani Karunasagar explained the long association with the company and the discussions held with respect to the development of diagnostic kits and the role of TEC in facilitating the development and writing collaborative projects.



Series of interaction with Jigsaw Bio Solution Pvt Ltd Bengaluru and DST TEC scientists



## TEC support for Pilot scale processing of betel leaf tea

5-6 May 2022



The Technology Enabling Centre had facilitated the development of technology for production of beverage from betel leaf. A technology transfer agreement was further signed between Nitte (DU) and M/S Eshanya Beverages for commercialization of this patented technology. The DST TEC supported M/S Eshanya beverages start-up by handholding the company. This technology was successful in receiving on competitive basis seed funding from MS Ramaiah Incubator. Dr Mamatha B S from NUCSER, who helped in developing the technology and shares the patent with Mr Sandeep Eshanya, was deputed along with the research scholar Mr Nishith Kumar for rendering technical help in pilot scale processing. This was done at CFTRI, Mysore during 4-7 May 2022. The product will now be made available for pilot marketing as a start-up requirement.



## Technology transfer agreement with antidote industry New Delhi



On 31 March 2022, a technology transfer agreement was signed between Nitte (DU) and Nadia Singh Bahl and Carol Singh, Founders of ANTIDOTE Industry, New Delhi. The technology for spray dried almond milk powder was developed by Dr Mamatha BS and Dr Feby Luckose, Food Safety and Biotechnology Division, NUCSER. Spray dried almond milk powder is an innovative product that can replace conventional dairy milk for making beverages, smoothies and soups. Using spray drying technology, liquid almond milk was transformed to a dried material through exposure to high temperature air, for a very short time. By this process, the nutrients are retained in the final product. This product has long shelf-life and reduced volume for storage and transportation and was well accepted through organoleptic assessment.

**DST Technology Enabling Centre**

**Panel discussion on 'Commercialisation of Technologies'**

**OPENING REMARKS**  
**RESOURCE PERSON**  
 Date: February 8, 2022  
 Time: 14.30 – 16.00

**THEMES**

1. Reaching out to Startups & entrepreneurs
2. Tips for the process of negotiations
3. Licensing options
4. Revenue sharing

**PANELISTS**  
**MODERATOR**

**Dr Satheesh Kumar Bhandary**  
 Vice Chancellor  
 Nitte DU

**Dr K. Sankaran**  
 Advisor  
 DST TEC

**Dr Iddya Karunasagar**  
 Advisor- Research & Patents  
 Nitte DU

**Dr G. Sriniketan**  
 President IIC  
 Nitte DU

**Dr Indrani Karunasagar**  
 Director- Projects & DST TEC  
 Nitte DU

Registration link: <https://forms.gle/8Djo2DxVTRax7WME9>

# Commercialization of Technologies-Panel Discussion

**8 February 2022**

A panel discussion on commercialization of technologies was jointly organised by the Institution Innovation Council and DST TEC on 8 February 2022. Dr K Sankaran, TEC Advisor, DST Gol was the resource person cum panellist for the event. The other panellists included Dr Iddya Karunasagar, and Dr G Srinikethan. The event was moderated by Dr Indrani Karunasagar. Hon'ble Vice chancellor Dr Satheesh Kumar Bhandary opined that for any country to prosper, innovation, entrepreneurship, Intellectual property followed by commercialization of technologies is important. Converting knowledge into skills and technologies is the need of the hour. Dr Sankaran answered the various questions raised by the audience and enlightened the audience by his practical knowledge and wisdom on the various points raised. The discussions centred around various steps of enabling technologies, challenges associated with the start-ups, role of incubator, acquiring funding and how to target customers for commercialization that include the process of negotiation, licencing options, marketing, revenue sharing etc. He deliberated on how a researcher should select a problem for possible translational value. Should the primary focus of a project be social benefit of the product or the market potential? Should there be consideration on deciding whether to license an invention/ technology to an established company or form a start-up company?. There was vibrant discussion relating to several road blocks in commercialization of technologies. The event ended with vote of thanks delivered by Ms Akshatha, Project Associate, DST TEC.





# World IPR Day Theme Lecture

27 April 2022



DST -Technology Enabling Centre, Nitte DU has been in the forefront of networking for inter and multi-disciplinary translational research. Social relevance has become the theme of every initiative that the government supports. In this regard, TEC and the Institute Innovation Council, Nitte DU organized World IPR Day Theme Lecture on 27 April 2022. Dr Vishal Rao, Director, Head and Neck Surgical Oncology, HCG Cancer Centre Bengaluru was the chief guest for the occasion. The programme began with the inspiring video covering the journey of Dr Vishal Rao in developing an indigenous cost-effective voice prosthesis that has helped throat and larynx cancer patients regain their speech post-surgery. The programme was presided by the Hon'ble Vice Chancellor Prof Dr Sathish Kumar Bhandary in the august presence of Dr Alka Kulkarni Registrar, Dr Sriniketan President IIC, Dr Iddya Karunasagar, Advisor Research and Patents, and Dr Indrani Karunasagar Director Projects and TEC. Dr Indrani Karunasagar welcomed the chief guest Dr Vishal Rao and the gathering followed by Dr Iddya Karunasagar who enlightened the audience on the theme of IPR day and explained the significance of bringing a celebrated clinician scientist for the event. Dr Satheesh Kumar Bhandary in his presidential address, emphasized on developing innovative technologies to help humankind. In the medical field, developing devices would be possible only through recognising problems of patients by clinicians just the way the affordable voice prosthesis was a result of Dr Vishal Rao's inner call to help the needy who lost their voice during larynx surgery following cancer . In his talk titled "Possibility to Actuality", Dr Vishal detailed his motivational journey and urged the audience to think differently on solving problems and not shy away from confronting issues with "out of the box" approach to solve problems. His inspirational talk left the audience spell bound and was a huge success that was followed by an interactive session with the active participation of faculty and students from various institutes of the district.



***"COVID-19 crisis has brought about years of change in health industry and accelerated technology translation. It has been the most productive phase in recent years with the global community of scientists from different fields coming together to address the pandemic. This unprecedented time has led the health professionals to join hands with scientists from pharmacy engineering, social sciences, basic sciences, mathematic modelling etc to achieve the impossible in solving the threat that loomed large on the human race. Clinical scientists would play an important role in bringing innovation in medical field. Predictive, precision and personalised medicine is the future. Productivity happens through collaboration, not through competition."***

**NITTE**  
(Deemed to be University)

Department of Science and Technology  
Ministry of Science and Technology  
**DST Technology Enabling Centre**

**National Technology Day Lecture**

Date: May 11, 2022 Time: 10:30 am -12:00

**Opening remarks**  
Prof. Dr Sathesh Kumar Bhandary  
Vice Chancellor  
Nitte (Deemed to be University)

**Speaker**  
Prof. B Gurumoorthy  
Professor & TEC-EAG Member  
IISc, Bangalore

**Moderator**  
Prof. Dr Indrani Karunasagar  
Director, Projects & DST TEC  
Nitte (Deemed to be University)

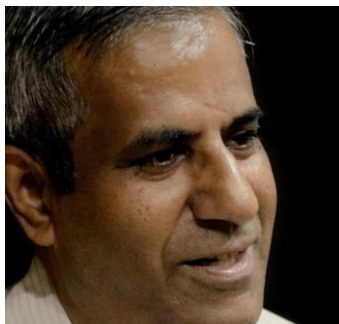
**Register here**  
Mode: Online  
  
<https://forms.gle/g33hpGRXgg6jX6rX8>

DST NU-TEC, 2nd floor, NIA-NICO building, Paneer Campus Deralakatte Mangaluru. [www.dstnutec.in](http://www.dstnutec.in)

# National Technology Day Lecture

11 May 2022

It was fortuitous for the TEC at Nitte (DU) to have Prof B Gurumoorthy, TEC-EAG member and an acclaimed technologist, Indian Institute of Science, Bengaluru as the resource person on the occasion of National Technology Day on 11 May 2022. A webinar themed “Innovation by design” was addressed by Prof Gurumoorthy on this day which is celebrated to mark the entry of India as a member of the elite nuclear technology group of countries. Dr Indrani Karunasagar, in her opening remarks introduced the resource speaker of eminence for the occasion and explained the theme of the day i.e. 'Integrated Approach in Science & Technology for Sustainable Future'. She detailed the efforts of the university towards generating skilled manpower with potential to face the scientific and social challenges in this competitive world with a high degree of credibility, integrity and ethics. The prime responsibility of TEC is to address social causes through relevant research, take it to the masses and provide solution to problems. Prof Gurumoorthy enlightened the audience with his humour and lucid style on the process of innovation, technology readiness level (TRL), issues in translating output from academia to products in market place with focus on “Design”. The Q and A session following the presentation was highly interactive and productive as it provided the much needed understanding and reality check in taking research through the various TRL’s.



*“Academicians most often find difficulty in the process of transition of technology from TRL4 to the next levels due to the cost involved with trial, certification, compliance and various other requirements. Thus it is necessary for them to get exposed to industries/market place to understand the gap between prototype and product manufacturing and to bring in the business perspective. Innovation ecosystem requires essential resources such as knowledge, finance service and manpower and these elements should play together for the effective transition from lab concept to market. Public funded/government aided research play a major role in the transition of technology.”*





Nitte University Centre for  
Science Education and Research

DST Technology  
Enabling Centre



INTELLECTUAL  
PROPERTY INDIA



NIPAM  
NATIONAL IP AWARENESS MISSION

NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION WEBINAR

## IPR and its protection in India

**WELCOME REMARKS**



**Dr Anirban Chakraborty**  
Director  
NUCSER

**RESOURCE PERSONS**



**Dr Sharana Gouda**  
Asst Controller of Patents & Designs  
Patent Office, Chennai



**Shri Abhishek Singh**  
Examiner of Patents & Designs  
Patent Office, Chennai

**ORGANISER**



**Dr Iddya Karunasagar**  
Advisor- Research & Patents  
Nitte DU

**REGISTER HERE**



<https://forms.gle/fvPY5aC8bT5FkmCC9>

**MAY 12, 2022**  
**10:30 AM**

e- Certificate will be sent to all those who register and attend session

DST NU-TEC, 2nd floor, NIA-NICO building, Paneer Campus Deralakatte Mangaluru | [www.dstnutec.in](http://www.dstnutec.in)

## National Intellectual Property Awareness Mission Webinar


### IPR and its protection in India


12 May 2022

As a part of national intellectual property awareness mission webinar series, “IPR and its protection in India” was organised by DST TEC in collaboration with IP India, NIPAM and NUCSER on 12 May 2022. Keynote speakers of the webinar were Dr Sharana Gouda, Assistant Controller of Patents and Designs, Patent office, Chennai and Shri Abhishek Singh, Examiner of patents and designs, Patent office, Chennai. Dr Anirban Chakraborty welcomed the resource persons and explained the importance of the webinar as India is rapidly moving in patenting inventions to establish her supremacy globally in startups and entrepreneurship. Shri Abhishek Singh discussed on patent rights, copyrights, trademark, design, ideation expression, economic rights and moral rights with interesting examples. He explained the entire process of application filing, including examination, the legal process and the fee involved at every stage until granting of patent. Dr Sharan Gouda spoke on patentability criteria under various sections with appropriate examples. Dr Iddya Karunasagar, as the research and patent advisor of the university moderated the entire session and provided inputs.

**NITTY-GRITTY DETAILS:**

- Criterion: Novelty/ Inventive Step/Industrial Applicability
- Non-Patentability
- Forms Required
- Fee
- Processing
- Examination route
- Time Lines





**INDUSTRIAL DESIGNS**

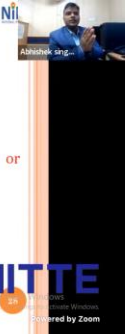
The Designs Act, 2000  
The Designs Rules, 2001  
The Designs (Amendment) Rules, 2021(latest)


DESIGN means –  
-----features of shape, configuration, pattern, ornament or composition of lines or colours

-----applied to any article

-----by any industrial process or means

-----judged solely by the eye.











# TEC MEETS INDUSTRIES FOR COLLABORATIONS



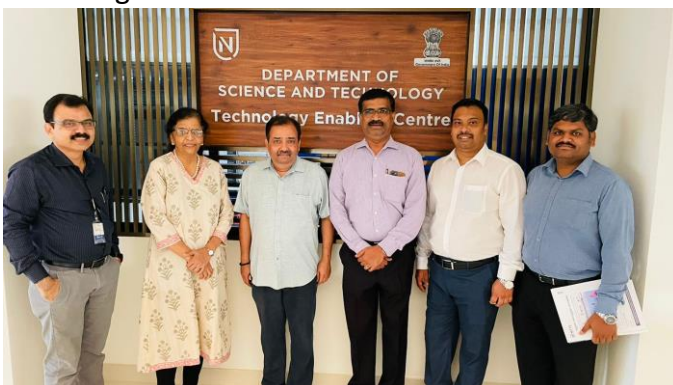
Continued interaction on 17 March 2022 with the project leaders and scientists involved in the CAMPCO funded project.



Director of Section Infin-8 foundation visits DST TEC on 11 April 2022 for exploring possible collaboration and technology transfer.



Dr. Sudha Mysore, Chief Executive Officer, Agrinnovate, Ministry of Agriculture and Farmers Welfare, Government of India visited TEC on 18 March 2022 and interacted with researchers from various institutes on translational projects to be taken up by entrepreneurs through government funding schemes



Dr Rajesh Shenoy, Director, Padmashree group of Institutions with officials from Syncorp Health, Bengaluru visited TEC facility on 12 May 2022 to explore the possibility of research collaborations with institutes of Nitte (DU). Dr Praveen Shetty Director R&D accompanied the guests and participated in the discussion.







Dr Iddya Karunasagar Advisor Research and Patents Dr Indrani Karunasagar Director TEC visited on 16 May 2022, Medorganics India Pvt Limited, leading manufacturer of Herbal & Nutraceutical Products based at Baikampady, Mangaluru for collaborations related to technology transfer and commercialization of products available at the Technology Enabling Centre and support the industry with patenting their products.



Team DST TEC, Principal investigators and research scholars associated with the CAMPCO funded project visited on 11 March 2022 the Central Arecanut and Cocoa Marketing and Processing Cooperative (CAMPCO) factory and areca farms at Puttur, Dakshina Kannada, as a part of project initiation to understand the issues and concerns of the areca farmers.

## Research Scholars visit TEC



The research directorate in collaboration with IIC arranged a visit on 18 May 2022 to the DST Technology Enabling Centre followed by an interactive session. The purpose of the visit was to introduce the TEC that has been set up for the state of Karnataka, to the research scholars. During the interactive session, Prof Dr Iddya Karunasagar advisor Research and Patents explained the philosophy of setting up such centres in the country and its vision and mission. He enlightened the research scholars on how TEC could facilitate translational research by connecting the results of research to industry. It could network candidates with industry for professional support and play a role in improving the outcome of the research leading to technology transfer, help with startups or patenting. About 30 PhD scholars from the constituent institutes of Nitte (DU) participated in the session in two batches. A glimpse of ongoing activities at TEC and the efforts at bringing together academia and industry was briefly explained. Various products and technologies available at the centre was showcased to motivate them.



An online signing of MoU was executed between the officials of Nitte (DU) and University of Alberta, Canada on 09 May 2022 . This was followed by an online meeting on 27 May 2022 wherein the scope of the MoU together with possible collaborative projects between ABSMIDS and University of Alberta faculty were discussed.



Dr Indrani Karunasagar was invited as a technical expert to evaluate an “aquaculture project with Israeli technology” presented to Technology Development Board, DST on 11 March 2022



Discussion on 19 March 2022 with Dr Bharathi Prakash, Head of the department of Microbiology, University College Mangalore on the possible areas of collaboration, handholding of UG students in executing socially relevant research projects and networking



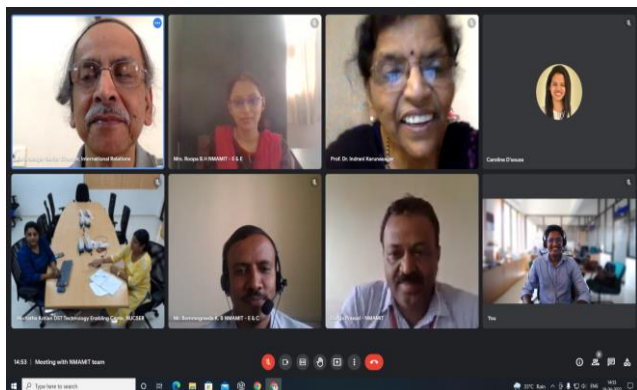
Dr YM Jayaraj Pro Chancellor Shri Balaji Vidyapeeth, Puducherry visited the Technology Enabling Centre on 16 April 2022 and appreciated the efforts of scientists in developing products ready for technology transfer.



Dr Joydeep Nag, Chartered accountant, Head & Advisor, Technology Enabling Centre, Amrita Vishwa Vidyapeetham visited Nitte (DU) TEC facility on 25 March 2022 to discuss collaborative activities that could aid translational research. He proposed the submission of joint research projects in areas of common interest.



# Enabling Translational Research Projects through collaborations with academia



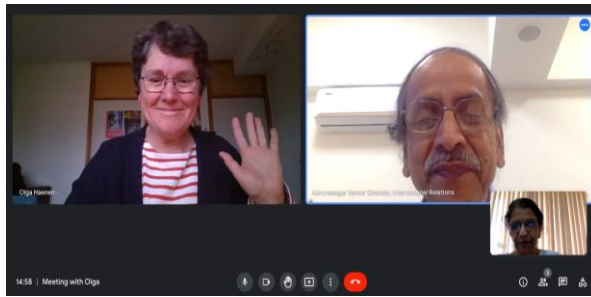
Nitte (DU) TEC facilitated discussion between the faculty of NMAMIT, award winners at the medical hackathon that included Dr Roopa Hegde, Dr Durgaprasad, Mr Bommegowda and Mr Pradyumna with Dr Pradeep Shenoy Nephrologist on the project, “Sensor based detection of urine volume in urine bag and bedwetting”. The interaction was held during 18-22 April 2022.



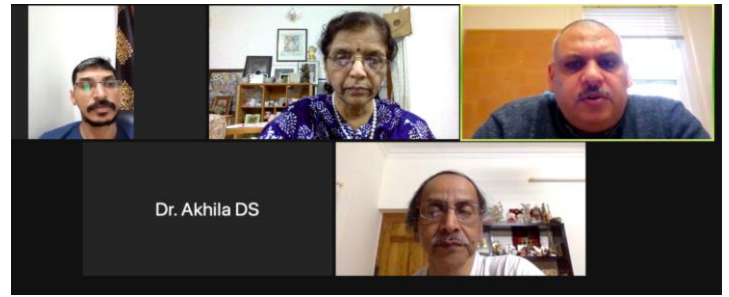
Dr Arvind Singh, reader at Physical Research Laboratory Ahmedabad and recipient of DST Swarna jayanthi project award visited TEC on 25 April 2022 to discuss the climate change project on “Ocean alkalinity enhancement”. Dr Singh made a presentation on the objectives and methodology to the research team members, met the Director Dr Anirban Chakraborty, and visited NUCSER, the site of project execution.



Patent related meetings held on 10 March 2022 and 30 April 2022 and advisory provided to researchers on their innovations.



Online meeting with Dr Olga Haenen, Netherlands on 15 March 2022 for the finalization of FAO book chapters on Bacterial fish diseases and their management.



Meeting on 6 April 2022 with Prof Maged Hemida, Department of Veterinary Biomedical Sciences, College of Veterinary medicine, Long Island University, New York with faculty from NUCSER to collaborate in the area of molecular virology and Bioinformatics based research



Indo-German Science & Technology Centre (IGSTC), of the Department of Science and Technology (DST), Government of India, and the Federal Ministry of Education and Research (BMBF), Government of Germany supports applicants for Industrial training fellowship by encouraging young research scholars to pursue applied research. Ms Akshatha K, PhD scholar at NUCSER is in discussion with Dr Sebastian Eggert, Cellasys GmbH Kronburg Germany to develop a project on microphysiometry. Meeting was on 23 and 29 March 2022.



Ms Rashmi Theresa Dsouza a post graduate student was mentored for ThinkSwiss Research scholarship on “TSP tail sheath proteins of vibrio phages as potential biocontrol agent for human pathogenic vibrio” to work at Zurich University of Applied Sciences, Centre for Food Safety and Quality Management, Switzerland under Prof Dr Lars Fieseler.



Discussion on 1 April 2022 with Dr Luis Fernando Patino Hoyos and Valentina Marmolejo Quintero, faculty of agricultural science from The Jaime Isaza Cadavid Colombian Polytechnic for the visit of MSc student to Nitte (DU) to carry out a project on Fusarium infection of banana under the guidance Dr Neetha Nirupam, Bioresources Division, NUCSER. Signing of MoU between Nitte (DU) and Columbian University is in progress.





Mentoring multi-Institutional team of five institutes for DBT Team Science Grant India Alliance involving NUCSER, Nitte(DU), Central University Tripura, Institute of Chemical Technology, Mumbai, ICMR-National institute of Occupational Health, Ahmedabad, Gujarat and Madras Medical Mission, Chennai on “Combating multi-drug resistance Gram-negative bacteria using novel chemical entities”.



Meeting on 26 May 2022 with Faculty from School of Biotechnology, Amritapuri Dr Bipin Nair Dean, Dr Geetha Kumar Professor and Dr Anusha Rohit, Head of Microbiology and chair infection control Madras Medical Mission for developing a collaborative project on AMR

## Project Details

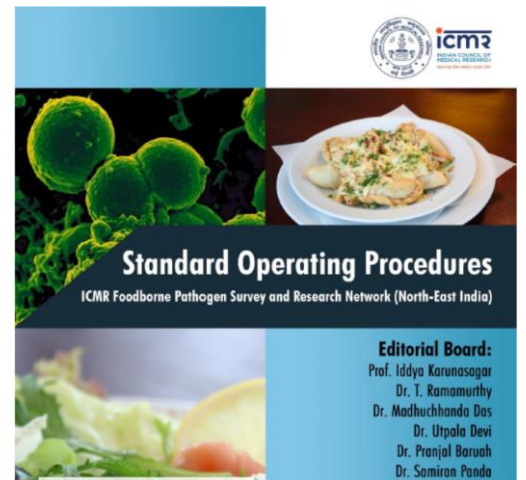
Project Topic	Institutions involved	Status of the project
"Innovative biomarker discovery and development of near-farm shrimp health screening molecular diagnostics for early detection of pathogens to empower aquaculture farmers"	NUCSER, Genomix Carl Pvt Ltd and Jigsaw Bio Solutions Pvt Ltd	Submitted to BIRAC for funding
Development of spray dried almond milk powder	NUCSER & ANTIDOTE	Submitted for BIRAC seed funding
Efficacy of locally isolated microbial consortium in waste management, general sanitisation and agriculture	Varanashi Foundation	Submitted for BIRAC seed funding
Developing one health approach for control of antimicrobial resistance pathogens in humans, animals and aquaculture in China and India	Norwegian University of Life Sciences NMBU, University of Bodo and NUCSER	Submitted to Research Council of Norway for funding



The three-day national conference on virology, VIROCON was held during 26-28<sup>th</sup> march 2022. The conference with the theme ‘Emerging and Re-emerging Viral Diseases - Climate Change Impacts and Mitigation’ was conducted by Microbiology department, AIIMS-Bibinagar under the aegis of Indian Virological Society. Prof Dr Iddya Karunasagar, National Advisory Committee member IVS, was awarded the highest oration award – Shyama Prasad Raychaudhuri oration Award for his lifetime contribution to Virology. Dr Indrani Karunasagar, Vice President (Veterinary Virology), IVS chaired the session in the Joint Symposium: ‘Climate Change: Impact on human life, livestock & crops and delivered the keynote address’. Other lead speakers included Dr Arun Dhar, University of Tucson, Arizona and Dr Neeraj Sood, NBFGR, Lucknow.



Dr Indrani Karunasagar delivered a keynote address on aquatic health, AMR and climate change and Dr Iddya Karunasagar gave a lead presentation on fish safety during 12th Indian Fisheries and Aquaculture Forum (IFAF) held during 5-7 May, 2022 at Chennai, organised by Dr J Jayalalitha Fisheries University, with the theme “Fish for Nutritional Security and Economic Sustainability”.

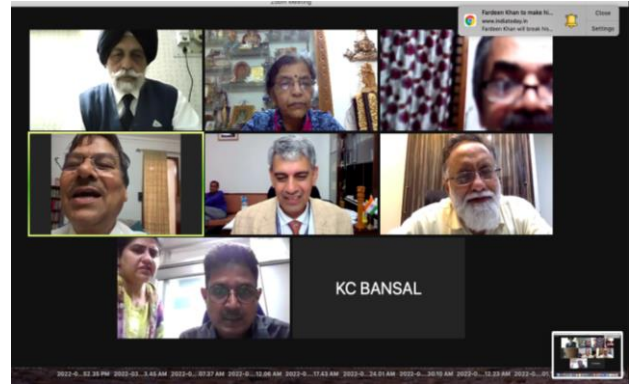


Dr. Iddya Karunasagar was the key note speaker at the ICMR Training Programme on Foodborne diseases organized by the National Institute of Cholera and Enteric Diseases, Kolkata on March 28 2022. Standard Operating Procedures for investigation of foodborne diseases, edited by a team led by Dr. Iddya Karunasagar was released by Dr. Balaram Bhargava, the Director General of ICMR, in the presence of Dr. Samiran Panda, Additional Director General, ICMR.

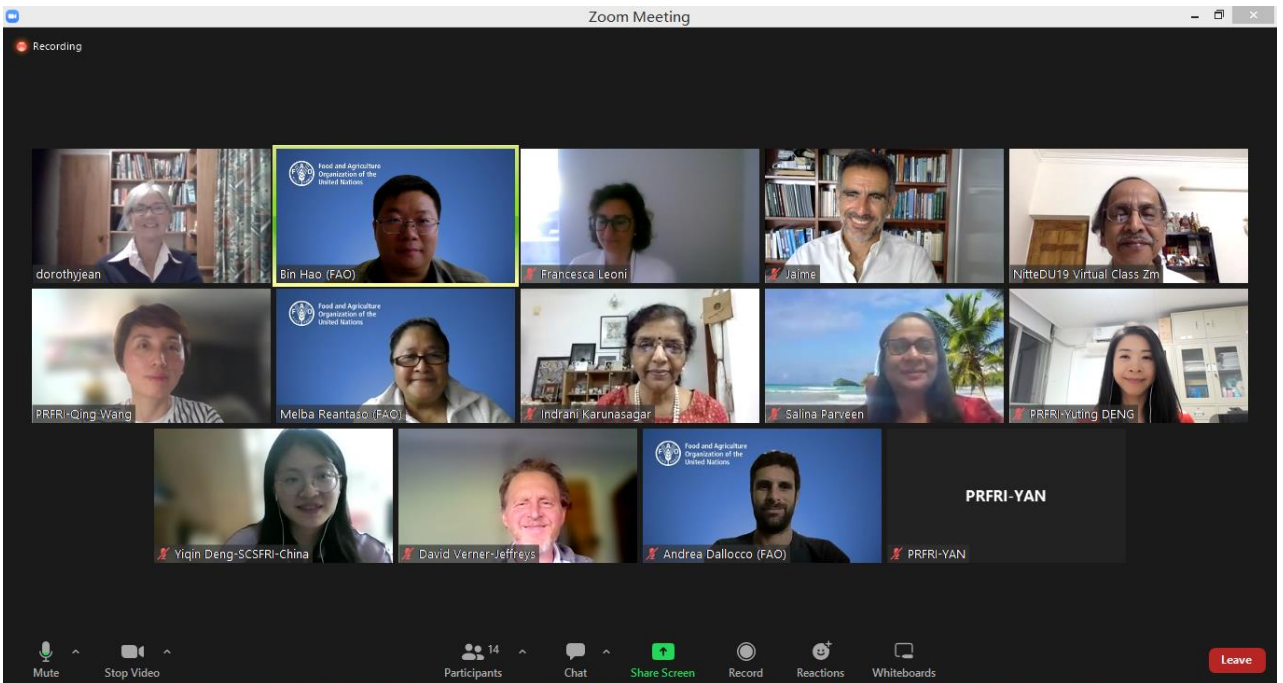




The Central Instrumentation facility with sophisticated instruments was awarded to Mangalore University by the DST-PURSE. Dr Indrani Karunasagar was the chief guest at the National Workshop on the theme “Usage of sophisticated instruments” and delivered the key note address on 4 April 2022.



Dr Indrani Karunasagar was a member of the ICAR-NASF expert technical committee to evaluate projects in the broad area of “Biotechnology, genomics and allele mining in plants, animals and fisheries” during 7-8 March 2022



DST TEC organises FAO Expert Meeting on microbiological risk profile FAO Expert meeting on developing risk profile for antimicrobial resistance in *Vibrio parahaemolyticus* was hosted by DST TEC Nitte DU on May 19, 2022. The Expert meeting was coordinated by Dr. Iddya Karunasagar and Dr. Indrani Karunasagar and was attended by Dr. Jaime Martinez Urtaza from University of Barcelona, Spain, Dr. Parveen Salina from University of Maryland, US; Dr. Dorothy Jean, Consultant from New Zealand, Dr. Francesca Leoni, Istituto Zooprofilattico Sperimentale, Ancona, Italy; Dr David-Verner Jeffreys, CEFAS, UK; Dr. Son Radu from Malaysia; Dr. Qing Wang and Yiqin Deng from Pearl River Fisheries Research Institute, China. FAO was represented by Dr. Melba Reantaso and Hao Bin. The expert meeting discussed *V. parahaemolyticus* as a sea foodborne pathogen and shrimp pathogen, current knowledge about antimicrobial resistance in this organism and the possible human health impacts of antimicrobial resistance in this organism. This Expert meeting will be followed up with drafting a risk profile document. This will be the first attempt to apply Codex Guidelines on risk analysis for foodborne antimicrobial resistance.



## Editorial team

**Dr Iddya Karunasagar** *Advisor-Research & Patents*

**Dr Indrani Karunasagar** *Director-Projects & DST NU-TEC*

### TEC Faculty

**Dr Caroline Dsouza**



**Ms Akshatha K**



**Mr Anoopkrishna K**



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