सीएसआईआर
CSIR
भारत का नवाचार इंजन
The Innovation Engine of India

CSIR Women Achievers in STEM


CSIR Network of
R&D Laboratories
Jammu
Palampur
Dehra Dun
Chandigarh
Roorkee
Ghaziabad
Pilani
Delhi
Lucknow
Jorhat
Dhanbad
Bhopal
Durgapur
Jamshedpur
Bhavnagar
Kolkata
Nagpur
Bhubaneswar
Pune
Hyderabad
Goa
Chennai
Bangalore
Mysore
Karaikudi
Thiruvananthapuram
Schematic diagram. Not to scale

सीएसआईआर
CSIR
भारत का नवाचार इंजन
The Innovation Engine of India

CSIR Women Achievers in STEM

Compiled by

CSIR- National Physical Laboratory

April, 2023

Thousands of women are contributing to CSIR's growth in scientific, technical and administrative cadres.

Salute to all of them!

"Science needs women,
and women need science.
The world cannot afford to lose
the contributions of half its population."

-Christiane Nüsslein-Volhard
German Biologist

Contents

सीएसआईआर

CSIR

भारत का नवाचार इंजन

The Innovation Engine of India

डॉ. (श्रीमती) एन. कलैसेल्वी
सचिव
वैज्ञानिक और औद्योगिक अनुसंधान विभाग तथा
महानिदेशक
Dr. (Mrs) N. Kalaiselvi
Secretary
Department of Scientific & Industrial Research and
Director General

सत्यमेव जयते

भारत सरकार
विज्ञान और प्रौद्योगिकी मंत्रालय
वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद
वैज्ञानिक और औद्योगिक अनुसंधान विभाग
Government of India
Ministry of Science and Technology
Council of Scientific & Industrial Research
Department of Scientific & Industrial Research

Foreword

It gives me immense pleasure to write the foreword of this compendium on 'CSIR Women Achievers in STEM' compiled by CSIR-NPL.

This compendium is a record of major achievements and contributions of more than hundred CSIR women achievers. The actual number is surely much more than what has been compiled. These few represent all the women who have worked/ are working tirelessly in all CSIR laboratories in their respective roles. Today, CSIR is proud to have many women in leadership roles, a feat achieved rarely by any other R&D organization of the country. We have to further encourage and support more women to lead various programs, projects and laboratories of the CSIR system in the coming years. I personally wish to see bigger and better future versions of this compendium.

CSIR-NPL deserves to be congratulated for creating this compendium from idea to final form. Hon'ble Minister Dr. Jitendra Singh emphasized that each of 37 CSIR laboratories should organize a 'One Week One Lab (OWOL)' campaign to showcase CSIR's innovations, contributions and technological breakthroughs.

I am happy that CSIR-NPL is celebrating women in STEM as one of the theme areas during its OWOL campaign. This compendium is a fitting tribute to CSIR women achievers which I hope will be appreciated by all and will inspire many girls and women to study and make career in STEM.

April 10, 2023
New Delhi

N.Kalaiselvi
(N.Kalaiselvi)


सी एस आई आर - राष्ट्रीय भौतिक प्रयोगशाला
CSIR-National Physical Laboratory
राष्ट्रीय मापिकी संस्थान
National Metrology Institute
NPL
INDIA

सी.एस.आई.आर. – राष्ट्रीय भौतिक प्रयोगशाला
C.S.I.R. - NATIONAL PHYSICAL LABORATORY
डॉ. के.एस. कृष्णन् मार्ग, नई दिल्ली–110012 (भारत)
Dr. K. S. Krishnan Marg, New Delhi-110012 (India)

प्रो० वेणुगोपाल आचन्टा
निदेशक

Prof. Venugopal Achanta
Director

Message

As the custodian of national measurement standards in the country, CSIR-National Physical Laboratory (CSIR-NPL) has pioneered in setting up and disseminating standards within the country. In its journey of more than 76 years, not just as the National Metrology Institute (NMI) of India, CSIR-NPL has notable contributions covering wide ranging areas and provided solutions to challenging problems of industrial and strategic needs. CSIR-NPL is continually contributing to the economic growth and quality infrastructure of the nation. As one of the first few flagship laboratories conceived in pre-independent India, CSIR-NPL has always been a centre of curiosity for various learned academicians, high-profile dignitaries, political leaders, young students and public visitors. In order to raise awareness and highlight contributions of CSIR labs, Hon'ble Minister of State (I/c) for S&T, Earth Science & DoS, Dr. Jitendra Singh Ji coined the idea of 'One Week One Lab (OWOL)'. Each of the CSIR laboratories are organizing theme based events over one week to showcase lab's contributions and innovations. As a part of CSIR-NPL's OWOL campaign, one of the theme areas is to celebrate contributions of women in STEM. This compendium is a compilation of some of the notable CSIR women achievers in STEM. The motivation for this compendium is our own hon'ble DG Ma'am, Dr. N. Kalaiselvi who has broken the glass ceiling to be the first ever woman DG of CSIR in its 80 years of history. The inputs for this compendium were sought from all CSIR labs and all the received inputs have been compiled. CSIR-NPL salutes all the women for their contributions to the growth of CSIR. This compendium is just a means to express gratitude to all the CSIR women achievers and will also serve as a record to motivate and inspire more women to join STEM and make significant contributions in the nation's growing S&T portfolio.

April 10, 2023
New Delhi

(Venu Gopal Achanta)

Phone : +91-11-45609201, 45609301 **Fax :** +91-11-45609310
e-mail : director.npl@nic.in **Website :** www.nplindia.org


वैज्ञानिक तथा औद्योगिक
अनुसंधान परिषद्
council of scientific &
industrial research

First Woman Director General of CSIR

Dr. N. Kalaiselvi

Director General CSIR

Secretary, DSIR

dgcsir@csir.res.in

Broad Area of Research Work

Electrochemical Power Systems, Energy Storage and Electrocatalytic Applications

Major Achievements & Contributions

- Stree Ratna Award by The Fine Arts Society, Mumbai 2023
- Nambikkai Award, 2022 by Ananda Vikatan, Chennai 2023
- Puthiya Thalaimurai Tamilan Award for Science & Technology by Puthiya Thalaimurai, Chennai 2023
- C. V. Raman Mahila Vijnana Puraskara at 12th National Women's Science Congress held at Mysore 2019
- Theme Director, Renewable and Non-renewable Energy and Devices, CSIR 2019
- Elected Secretary, Society for Advancement of Electrochemical Science and Technology (SAEST) 2017-2019
- Most Inspiring Women Scientists and Engineers-2015 (Engineering Watch, New Delhi)
- Materials Research Society Medal / Award (MRSI, Bangalore) 2015
- INSA–NRF Exchange Program of Scientists to visit KERI, South Korea 2011
- Raman Research Fellowship (CSIR, India) to visit the University of Texas at Austin, USA 2009
- Brain Pool Fellowship of Korea (South Korea) 2003
- INSA Visiting Fellowship (INSA, India) 1999

- Significant contribution in the area of electrochemical power systems and in particular, development of electrode materials, custom designed synthesis methods, optimization of reaction parameters and electrochemical evaluation of indigenously prepared electrode materials for their suitability in energy storage device assembly
- Major contribution in lithium and beyond lithium batteries, supercapacitors and waste-to-wealth driven electrodes and electrolytes for energy storage and electrocatalytic applications
- Developed several technologies for industries as well as strategic sectors e.g. modified electrode materials for high energy and high power lithium battery applications, novel/tailor-made electrodes for aqueous and non-aqueous lithium battery, polymer based electrolytes, ionic liquid based electrodes and electrolytes and exploration of bio ionic liquids crystalline electrolytes for extended electrochemical potential windows
- Guided several students, published many research papers, aided in technology transfers to industries
- Member of several national/international committees

Dr. N. Anandavalli

Director

CSIR - Structural Engineering Research Centre (CSIR-SERC), Chennai

anandi@serc.res.in

Broad Area of Research Work

Structural Engineering

Major Achievements & Contributions

- Elected Fellow of Indian National Academy of Engineering
- Nominated Member of the Syndicate of University of Madras, Chennai
- Nominated Member of Planning Board of Bharathidasan University, Tiruchirapalli
- Nominated Member of Senate of Bharathidasan University, Tiruchirapalli
- Elected Fellow of Institution of Engineers (India)
- Recipient of Dr. M. Ramaiah Prize
- Recipient of 'John C Gammon Prize'
- Elected Member of American Society of Civil Engineers
- Recipient of Raman Research Fellowship
- Recognised as one of the "India's Most Inspiring Women Engineers & Scientists for the year 2014" by Engineering Watch
- Recipient of "The Sir Arthur Cotton Memorial Prize, 2003" from Institution of Engineers (India)
- Significant research contributions include enhancing the shock resistance capability of new and existing structures with application in strategic sector

CSIR-SERC

ENGINEERING SUSTAINABLE STRUCTURES

Dr. Radha Rangarajan

Director

CSIR-Central Drug Research Institute (CSIR-CDRI), Lucknow

director@cdri.res.in

Broad Area of Research Work

Drug Discovery and Development, Antimicrobial Resistance

Major Achievements & Contributions

- Awarded "Biotech Startup of the year" by Government of Karnataka, 2021
- Recipient of Award of Excellence-Women in R&D by FICCI, 2019
- Selected for the "Champions of change" initiative of the Honorable Prime Minister, Shri Narendra Modi, 2017
- Discovery Award for a rapid diagnostic test to detect infections from Nesta, UK, 2016
- Received Best Woman Entrepreneur led Start-up Award by TV5, Hyderabad, 2013
- Awarded the Firestone medal for outstanding undergraduate research at Stanford University, 1992
- Two decades of active involvement in translational research and product development in the public health arena
- Working closely and promoting interface between academia, start-ups, and industry
- Experience in drug discovery, diagnostics, and medical devices sector
- Core research interests are in basic and translational aspects of antibiotic resistance including novel approaches to diagnosing and treating drug resistant infections

Dr. Ranjana Aggarwal

Director

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), New Delhi

director@niscpr.res.in

Broad Area of Research Work

Bio-organic Chemistry, Science Communication & Policy Research

Major Achievements & Contributions

- Commonwealth Fellowship awarded by ACU, London
- Visiting Professorship awarded Trinity College Dublin, Ireland
- Dr. Basudev Banerjee Memorial Award
- Prof. S. S. Katiyar Endowment Award.
- Keerti Puraskar by Ministry of Home Affairs, GoI
- Contribution to Indian Knowledge System, Ministry of Education
- Sectional President, Chemical Science Section 108th Indian Science Congress
- Engagement in Capacity Building programme and promotion of Gender Sensitization and Skill Development
- Science-Society connect: Creating rural livelihood through S&T intervention
- Communication of Scientifically Validated TAK on social media #SWASTIK
- Significant contribution in studies on interaction of biomolecular with small organic compound to explore their anticancer, anti-inflammatory and antimicrobial potential and recently, in inculcation of scientific temper through Science Communication

Dr. Sridevi Annapurna Singh

Director

CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

sridevi@cftri.res.in

Broad Area of Research Work

Protein Chemistry and Technology

Major Achievements & Contributions

- Honorary Fellow of Karnataka Science and Technology Academy 2022
- Member of Vision Group on Biotechnology Karnataka Innovation and Technology Society, DeitY, BT and S&T, Government of Karnataka 2022 till date
- Member, Design Reviews of Human Centric Products for Gaganyaan Mission (ISRO) 2021
- Elected Fellow of INF-Kraft, USA 2006
- Young Scientist Travel Award (Expo 2000) at Hannover, Germany- 2000
- DAAD Fellow (Sandwich model) 1996-98
- Developed several technologies to combat malnutrition and promotion micronutrient fortified foods with better solubility and digestibility.
- Developed technology on heat resistant white sesame seeds
- Significant societal contributions in the basic studies on malnourished children and on enzyme structure-function-stability relationship for improved nutrient density of energy food for distribution in anganwadis and disaster management
- Guided several research students and contributed to several papers and technologies

Dr. Sridevi Jade

Head & Outstanding Scientist

CSIR-Fourth Paradigm Institute (CSIR-4PI),
Bengaluru
head@csir4pi.in

Broad Area of Research Work

Data Intensive Modelling and Research, GNSS based Geoscience Studies

Major Achievements & Contributions

- National Mineral/Geoscience Award for year 2008 in 2010 for distinguished contribution in the field of disaster management
- Sir CV Raman Young Scientist award for year 2002 in 2004 for exceptional contribution to Earth & Engineering Science
- Led several multi-institutional hazard mitigation projects in most difficult terrains (Ladakh, Kashmir, Northeast, Andaman's) spread across the country which resulted in first time precise estimates of crustal motion and strain models for Indian plate interior and boundaries thus providing recurrence rate of large earthquakes in India
- Pulished several high-quality papers and the work done on "Disaster Management: Synthesis of Modelling, Measurements and Data Analytics" was covered in 80 success stories of 80 years of CSIR
- Revival of the CSIR centralized HPC facility with ~ 3 PetaFlops of computing system with AI and ML capability in addition to the traditional computing
- Commissioning of 1.2 PetaFlops GPU based computing platform (donated by AMD INC., USA to CSIR) for exclusive COVID research by Indian researchers

Dr. Suman Kumari

Director

CSIR- Central Glass & Ceramic Research Institute (CSIR-CGCRI), Kolkata

director@cgcri.res.in

Broad Area of Research Work

Basic & Applied Materials Research

Major Achievements & Contributions

- Fellow of the National Academy of Sciences of India in 2018
- Best Metallurgist of the Year Award by Ministry of Mines, GoI in 2012
- Fellow of the Indian Institute of Ceramics in 2007
- Vasvik Award in women category in 2004
- MRSI Medal in 2004
- CSIR Raman Fellowship in 2002
- CSIR Young Scientist Award in Engineering Sciences in 1999
- Contributed very significantly to the understanding of mechanisms and the development of advanced ceramics and their coatings, high-temperature materials & composites for different industrial applications
- As Director of CSIR-CGCRI, ensuring technology transfers, strategic projects& human resource development of the institution

Women Leaders Steering the CSIR

Dr. Jyoti Yadav
Head, CSIR-RAB

Dr. Geetha Vani Rayasam
Head, CSIR-HRDG

Dr. Viswajanani J. Sattigeri
Head, CSIR-TKDL

Dr. Purnima Rupal
Head, CSIR-SCDD

Dr. Rama Swami Bansal
Head, CSIR-ISTAD

Mrs. Dolly Chaudhary
Head (IT)

Dr. Vibha Malhotra Sawhney
Head CSIR-IP/TMD

CSIR-INDIA
सीएसआईआर
CSIR
भारत का नवाचार इंजन
The Innovation Engine of India

Dr. A. Hepsiba Kiranmayee

Principal Scientist

CSIR-Central Electronics Engineering Research Institute
(CSIR-CEERI), Pilani
kiran@ceeri.res.in

Broad Area of Research Work

Spectroscopy, Instrumentation, Pattern Recognition

Major Achievements & Contributions

- National Tech Excellence Award for Women Scientist in Translational Research (Young) by TDB, DST 2022
- Dr. Swaraj Srivastava Memorial Award" of 2015 at CSIR-CEERI, Pilani
- Design and development of handheld milk adulteration detection system for detection of various adulterants and handheld milk fat measurement system for domestic usage
- Development of rapid milk analyzer and milk densitometer
- Development and application of various pattern recognition techniques and chemometrics for qualitative and quantitative analyses in food and agriculture sector
- Studies on spectroscopic platforms and applications (NIR and MIR) for various sectors (food, agriculture and health)
- Contribution in the development of Edible Oil Analyser (based on NIR spectral analysis) and Fluorescence based HCHO tester
- Led many projects, published papers and guided research students

Dr. A. Mercy Latha

Principal Scientist

CSIR – Central Electronics Engineering Research Institute
(CSIR-CEERI), Pilani
mercy@ceeri.res.in

Broad Area of Research Work

Microwave Tubes, Terahertz Imaging & Spectroscopy

Major Achievements & Contributions

- Dr. (Mrs.) Swaraj Srivastava Memorial Research Encouragement Award 2020
- Dr. (Mrs.) Swaraj Srivastava Memorial Award for Best Woman Researcher2016
- All India IEEE MV Chauhan Award 2015
- Motorola Scholar's Award 2009
- Major contributions are in the design of novel multi-stage depressed collectors (MDCs) and innovative MDC development technologies, namely compact MDC technology, single-insulator MDC technology, and multi-envelope MDC technology, particularly for traveling-wave tubes
- Contributed majorly to the development of terahertz (THz) imaging system mainly suitable for non-destructive evaluation
- Actively engaged in employing THz imaging and spectroscopy systems for various applications such as cancer margin assessment, thickness estimation studies, material parameter extractions, defect identification in composite materials, porosity estimation of pharmaceutical samples, THz component characterization, etc

Dr. A. Kanchanadevi

Principal Scientist

CSIR- Structural Engineering Research Centre (CSIR-SERC), Chennai

kanchana@serc.res.in

Broad Area of Research Work

Structural Engineering

Major Achievements & Contributions

- Recipient of IEI Young Engineer Award for the year 2020-2021 by the Institution of Engineers (India)
- Major scientific contribution in seismic performance assessment of beam-column sub-assemblages (BCSA) of different design evolutions
- Significant contribution in the area of analytical formulations for the design of single and double haunch retrofit for seismic upgradation of deficient BCSAs
- Developed innovative steel bracket and haunch hybrid retrofit for earthquake damaged BCSAs
- Studied correlation of the damage progression in corrosion damaged BCSA under reverse cyclic loading
- Contributed in the development of efficient shear connector system for concrete composite segmental slabs and interface detailing for composite girders with corrugated steel web

Dr. Anu Raghunathan

Senior Principal Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

anu.raghunathan@ncl.res.in

Broad Area of Research Work

Systems Biology and Metabolic Engineering

Major Achievements & Contributions

- FICCI FLO (Pune) Women Achiever Award (for innovation in science and tech), 2022
- IRCC Award for maximum citation, "Simultaneous Saccharification and Fermentation of Starch to Lactic Acid in the Journal of Process Biochemistry", 2010
- Coordinator/Principal Investigator of genome sequencing and surveillance of SARS CoV2 at NCL for Pune/Maharashtra region during the pandemic
- Coordinator/Principal Investigator of Vaccine response network (VISION) at NCL for immune surveillance to understand long term immunogenicity of the Pune population to Covishield and Covaxin
- Setting up pipelines and workflow of synthetic biology and metabolic engineering for value added products of indolocarbazoles, non-ribosomal peptides and polyhydroxyalkanoates
- Associate Editor, Biosystems, Elsevier Publications, 2018 November onwards

Dr. Anuradha Shukla

Chief Scientist

CSIR – Central Road Research Institute (CSIR-CRRI),
New Delhi
anuradha.crri@gmail.com

Broad Area of Research Work

Environmental Aspects of Road Traffic & Transportation

Major Achievements & Contributions

- Prestigious Fulbright-Nehru Environmental Leadership Program Fellowship (2009-2010)
- IUSSTF (Indo-USS&T Forum) competitive grant-in-aid Award for bilateral Indo-US workshop on "Road Transport & Climate Change" (2010-2011)
- Chairperson, Solid Waste Management Sectional Committee CHD- 33, Bureau of Indian Standards (BIS) Govt. of India (2014 -till date)
- Expert Member of many Technical Committeesof MoEF and CC, Indian Road Congress (IRC), BIS, DST and many more.
- Chairperson, Subcommittees on Guidelines on Noise Barriers, (G-3) (2018- 2021) and Sub-Committee on Environment, International Road Federation (IRF), (India Chapter) 2011
- As Head, Transport Planning & Environment at CRRI, received the Best Division Award successively for three years 2008-09, 2009-10 & 2010-11 on outstanding R&D performance of Division (instituted by CRRI)

Dr. Anuya Nisal

Principal Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

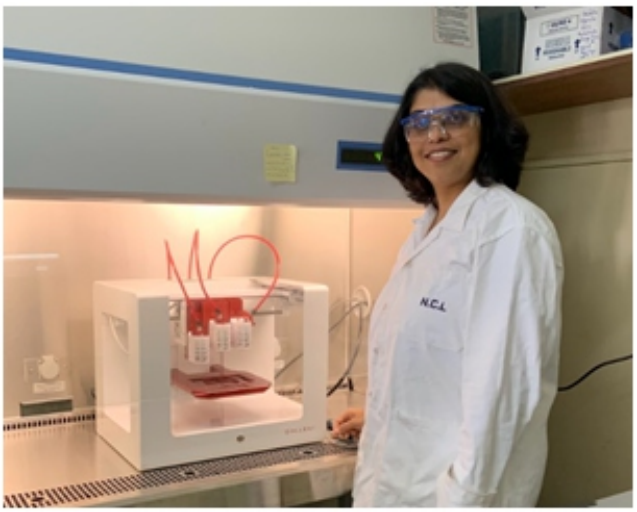
anuyarh@gmail.com

Broad Area of Research Work

Polymer Science and Engineering

Major Achievements & Contributions

- VASVIK Smt. ChandabenMohanbhai Patel Industrial Research Award for Women Scientists 2021
- Indian National Academy of Engineering - Young Entrepreneur Award 2020
- Leaders in Innovation Fellowship, Royal Academy of Engineering, UK, 2020
- TIE-BIRAC-WiNER Awardee 2019
- Entrepreneurial journey featured in Book published by BCIL titled "Trailblazers – Mapping the journey of Young Bio-entrepreneurs"
- Led and executed several grant-in projects from CSIR, DBT, DST-SERB, BIRAC, etc
- Lead inventor for a technology patent on silk for tissue regeneration
- Published several papers, guided many post doctoral, Ph.D and M.Tech/MSc. Students
- Transferred a technology to an Indian company in 2020 for indigenous production of nasopharyngeal swabs that are used for collecting samples for COVID-19 testing



Dr. Aradhana Mishra

Principal Scientist

CSIR – National Botanical Research Institute (CSIR-NBRI)
Lucknow
mishra.a@nbri.res.in, mishramyco@yahoo.com

Broad Area of Research Work

Plant Microbe Interaction, Green Nanotechnology.

Major Achievements & Contributions

- Excellence in Research Award by Samagra Vikas Welfare Society (SVWS) in 2020
- Women Scientist Award, 2019- awarded by The Biotech Research Society, India
- DST Fellowship under Women Scientist Scheme A (WOS-A) in 2011
- DST Fellowship under Women Scientist Scholarship Scheme (WOS-A) in 2007
- Significant contribution in the studies on bio-inspired nano-materials synthesis and plant-microbe interaction during abiotic and biotic stresses
- Developed three products: Bioagent for controlling Fusarium wilt and charcoal rot disease, Herbal Nanoemulsion for skin care and against dermal pathogens and Microfluidized nanoemulsion for management of charcoal rot and anthracnose disease in soybean
- Published several research papers and filed a number of patents

Dr. Aradhana Mishra with Dr. Sahil Mahfooz, Dr. Sumit Soni, Dr. Satyendra Pratap Singh, Dr. Shipra Pandey, Dr. Arpita Bhattacharya, Dr. Ved Prakash Giri, Dr. Nishtha Mishra, Priyanka Chauhan, and Pratibha Verma

Dr. Aradhana Mishra with Dr. Nishtha Mishra , Dr. Ved Praksh Giri, Priyanka Chauhan, Ashutosh Tripathi Pratibha Verma, Pallavi Shukla ,Navinit Kumar, Priya Verma, Vinita Tiwari

Dr. Asha Chaubey

Senior Principal Scientist

CSIR – Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu

achaubey@iiim.res.in

Broad Area of Research Work

Biological Sciences, Microbial Biotechnology

Major Achievements & Contributions

- Bharat Ratna Rajiv Gandhi Gold Medal Award in 2022 by Global Economic Progress and Research Association
- BOYSCAST Fellowship by the DST
- Contributed in the area of biopharmaceutical enzyme and bioactive compounds from natural resources.
- Significant contribution in understanding of molecular modelling and docking to better understand the mechanism of drug interactions.
- Worked on enzymology, biotransformations, enzyme immobilization and bioprocess development
- Led several consultancy and industrial project and contributed to many technology transfers
- Development of zinc gluconate (natural vitamin C) formulation for immunity improvement in COVID-19 patients

Dr. Asha Syamakumari

Chief Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

sk.asha@ncl.res.in

Broad Area of Research Work

Polymer Chemistry

Major Achievements & Contributions

- CRSI Bronze Medal for the year 2014 for significant contributions to Chemistry
- Science and Engineering Research Board (SERB) Power Fellow 2022. She bagged the fellowship for a proposed project involving the development and scaling-up of p-Conjugated Polymers for Energy Storage Applications using a now in-house synthesis facility available at the CSIR - National Chemical Laboratory (NCL)
- Recognition of research in chemistry by Chemical Research Society of India with CRSI Bronze medal, 2014
- Research focus is in the emerging areas of 3D printing or Additive Manufacturing, with applications ranging from automotive industry to biomedical materials

Dr. B. S. Sindu

Principal Scientist

CSIR – Structural Engineering Research Centre (CSIR-SERC), Chennai

sindu@serc.res.in

Broad Area of Research Work

Nano-Engineering, Multi-scale Modelling, Strain Hardened Cementitious Composites, Structural Engineering

Major Achievements & Contributions

- IEI Young Engineers Award 2021-2022 in Civil Engineering
- Best Ph.D. Thesis in Concrete Award 2020 (National Level) from Indian Concrete Institute (ICI)
- 'IGSTC Post-Doctoral Industrial Fellowship' as a Guest Scientist in Fraunhofer SCAI, Germany in 2022
- Significant contribution in the modelling, design and engineering of high strength concretes, composites etc.
- Provided Engineering Solutions to Indian Railways through many railway projects for evaluating the structural adequacy of railway bridges
- Contributed to several research papers and book chapters

Dr. Beena Kumari

Principal Scientist

CSIR – National Metallurgical Laboratory (CSIR-NML),
Jamshedpur
beena@nmlindia.org

Broad Area of Research Work

Human Resource Management, Software Development & Database Management, Business Development

Major Achievements & Contributions

- CSIR-Technology Award for Technology Marketing & Business Development in 2021, 2015, 2010
- Skoch Order of Merit for top 100 ICT projects in India 2020, 2019
- Skoch Silver Award for Digital Inclusion in 2012
- Best Jury Award for Innovative Initiatives in Governance for the project "Web based information system for managing manpower utilization in projects of R&D organization" at eWorld Forum in 2011
- Published many papers, filed more than ten Copyrights and developed several websites since 2009
- Contributed to many IT developments and implementations in the lab in the G2E, G2B, G2C and G2P perspective
- Working towards Digital India/ NeGP inclusion, better positioning and image building of the organization in the eyes of external stakeholders by developing software and websites

Dr. Bhagyalakshmi Neelwarne

Chief Scientist

CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

bneelwarne@gmail.com

Broad Area of Research Work

Food Biotechnology

Major Achievements & Contributions

- Elected "Fellow" for National Association for Plant Tissue Culture and Biotechnology (November, 2005)
- Crawford Fund Award, Australia - to visit laboratories involved in tropical fruit crop research and assist in Tissue culture and genetic transformation of Mango (Nov 2000-Feb 2001)
- DST-Australia, Visiting Fellowship Award (April-October 1985)
- Fellowship by Danish Govt. to work at State Plant Pathology Institute, Denmark. (Nov. 1981- October 1982)
- Best technology Award conferred by CSIR-CFTRI for developing virus free clones of an endangered variety of banana - NanjanaguduRasabale banana and transferring the technology to three different firms
- Seven Best paper Awards at International Food Convention –2000, 2008, 2009 & 2013
- Led translational research food biotechnology lead to novel processes, scaled-up in bioreactor with integrated systems for down-stream processing of target metabolites
- Responsible for rescuing from extinction of an endangered very important Mysore-land-mark variety of banana through tissue culture technique
- Contributing to industry, academics and women empowerment
- Published more than 100 papers, 12 patents, contributed to several books and technology transfers

cftri

Giving Food a Future

Dr. Bharathi Bai J. Basu

Chief Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL), Bengaluru

bharathijbasu@gmail.com

Broad Area of Research Work

Surface Engineering

Major Achievements & Contributions

- Significant contribution in the area of Pressure Sensitive Painting (PSP) has been recognized and appreciated by international PSP community
- Developed the stable binary PSP coating suitable for the surface pressure mapping of aircraft models for wind tunnel studies
- Developed several analytical procedures for the determination of constituents in various materials and some of these were useful for industries
- Developed cost-effective sol-gel and polymer based hydrophobic and superhydrophobic coatings for aircraft applications
- Developed different types of ice-phobic coatings (in collaboration with IISc) for fabrication of an ice adhesion tester to evaluate the ice adhesion strength of coatings
- Developing eco-friendly sol-gel nanocomposite coatings for the corrosion protection of aerospace AA2024 aluminum alloy

Dr. C. Bharathi Priya

Principal Scientist

CSIR – Structural Engineering Research Centre (CSIR-SERC), Chennai

bharathipriya@serc.res.in

Broad Area of Research Work

Smart Materials and Smart Structures in Structural Engineering

Major Achievements & Contributions

- Awarded the Post-Doctoral Industrial Fellowship-2021 funded by DST - Indo-German Science and Technology Center (IGSTC) for research at Darmstadt, Germany
- Significant contributions in the development and application of smart materials and smart control techniques for effective seismic disaster mitigation and structural health monitoring
- Expertise in earthquake engineering and structural dynamics
- Filed patent and contributed to book chapters
- Contributed several research papers in journals and conferences

Dr. C. S. Sindhuja

Scientist

CSIR – National Geophysical Research Institute (CSIR-NGRI), Hyderabad

cssindhuja@ngri.res.in

Broad Area of Research Work

Geochemistry

Major Achievements & Contributions

- Young Scientist Award 2020 by Telangana Academy of Sciences
- Significant contribution in the area of precambrian biogeochemistry, gold mineralization and sedimentology
- Contributed to understanding biogenically mediated metallogeny and also delineated the contrasting depostional features of Archean and Proterozoic carbonaceous phyllites
- Working on to explicitly elucidate the evidences for gradual evolution of the Earth's biosphere, atmosphere and lithosphere during the Archean-Proterozoic eras and studying the evolving biogeochemical changes and mellatogenic processes during the Precambrian time
- Published several research articles in high impact factor peer reviewed international journals
- Contributing to several grant-in aid projects of societal relevance

Dr. Chandrani Prasad Verma

Senior Principal Scientist

CSIR – Central Institute of Mining and Fuel Research (CSIR-CIMFR), Dhanbad

chandrani@cimfr.nic.in

Broad Area of Research Work

Rock Mechanics and Numerical Modeling

Major Achievements & Contributions

- HIRKANI Award 2006 for becoming "First Lady Mining Engineer of India"
- CSIR Technology Award 2011
- First Ladies Award by the President 2018
- Serving Mining Industry in Production and Safety through R&D on Mining methods Design for coal as well as metal mines, Stability analysis, Support design, Instrumentation, Slope stability, Highwall Mining design, Ground Control, etc.
- More than 15 years' experience in the field of Rock Mechanics and Numerical Modeling with special reference to the application of Numerical Modeling in Mine Design in coal as well as non-coal sector
- Research interest includes stability analysis of underground structure, pillar design, slope design, support design, web pillar design in highwall mining, etc.
- Led several projects and published many research papers

Dr. Charu Lata

Principal Scientist

CSIR – National Institute of Science Communication
& Policy Research (CSIR-NIScPR), New Delhi
charulata@niscpr.res.in

Broad Area of Research Work

Biological Sciences

Major Achievements & Contributions

- Elected Fellow of the Int. Society of the Environmental Botanists (ISEB), 2021
- SERB Early Career Research Award 2018
- Indo-Australia Early & Mid-Career Researchers Fellowship 2016-17 by the Indian National Science Academy (INSA)and supported by Department of Science & Technology (DST)at the University of Queensland, Brisbane, Australia
- INSA Medal for Young Scientists 2014
- SERB Women Excellence Award 2014 by Science and Engineering Research Board (SERB), Department of Science & Technology, GoI
- NASI Young Scientist Platinum Jubilee Award (2012) in the field of Plant Sciences, Agriculture and Environment by the National Academy of Sciences, Allahabad, India
- DST INSPIRE Faculty Award in 2011
- Significant work in the field of crop improvements especially abiotic stress responses and tolerance in crop plants with focus on research areas pertaining to the elucidation of mechanisms regulating abiotic stress tolerance in legumes and cereal crops through transcriptomics, transgenics and small RNA profiling
- Guided several Ph.D. students and published many papers

Dr. D. Kalpana

Principal Scientist

CSIR – Central Electrochemical Research Institute (CSIR-CECRI), Karaikudi

drkalpanaa@gmail.com

Broad Area of Research Work

Materials Electrochemistry, Supercapacitors and Fuel Cells

Major Achievements & Contributions

- Elected Fellow of Academy of Sciences, Chennai
- INSA visiting scientist fellow during April 2016 to June 2016 at Materials Research Centre, Indian Institute of Science, Bangalore
- Received Young Scientist Award at the Second International conference on electroactive polymers: Materials and devices (ICEP 2007)
- Significant contribution in the area of synthesis of various types of nanomaterials, and high surface area carbons for the application of Li-ion batteries, Ni-MH batteries, supercapacitors and fuel cells
- Development of conducting carbon, metal oxide and polymer-based supercapacitors, and synthesis and activation of carbon from various natural sources/ recycling of waste materials into valuable energy products
- Indigenous development of portable fuel cell power centre that combines low-cost fuel cells weighing 125 gms and a solid hydrogen cartridge
- Worked on several projects and published many research papers

Dr. Daya Soni

Principal Scientist

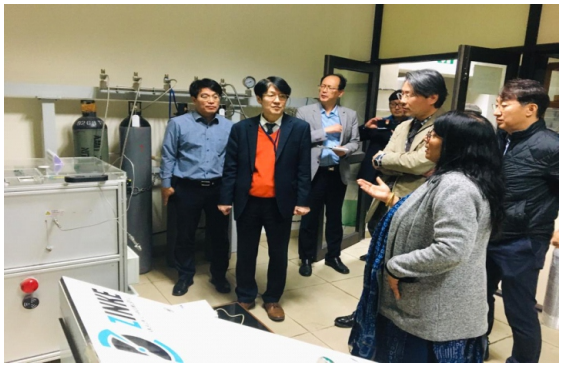
CSIR – National Physical Laboratory (CSIR-NPL),
New Delhi
dsoni@nplindia.org

Broad Area of Research Work

Metrology in Chemistry, Gas Metrology, Air Quality Measurements

Major Achievements & Contributions

- Product Development Awards (02 Nos) in 2017 for CRM on Bituminous Coal and High Purity Gold
- CSIR-NPL Technology License Award 2017
- Developed many primary reference gas mixtures (PRGMs) for gas industries, gas measurement laboratories, ISRO, PRL and many automobile industries
- Contributed in development of many Certified reference materials; CRMs including High purity gold, Quartz, Bituminous coal etc
- Coordinated first National Proficiency Testing (PT) in Gas area with CPCB for many state pollutions laboratories
- Successfully participated in inter comparisons in metal and gas areas at APMP and CCQM platform; also coordinated international Pilot study in APMP region with KRISS Korea
- Contributed in many patents, book chapters, more than 80 research papers and guided many MSc/ M Tech/ Ph.D students
- Qualified Assessor for ISO/IEC 17025 and ISO 17034



Dr. Debashri Ghosh

Principal Scientist

CSIR-Central Glass and Ceramic Research Institute (CSIR-CGCRI), Kolkata

debashri@cgcri.res.in

Broad Area of Research Work

Fiber Optics and Photonics

Major Achievements & Contributions

- Received Dr. Debabrata Basu Memorial Award for the Best Young Researcher at CSIR-CGCRI, Kolkata in 2012
- Recipient of IITD-FOS Photonics Award in the international conference Photonics - 2008 at IIT Delhi
- Recipient of 'Early Career Research Award' Scholarship under the National Scholarship Scheme of the Govt. of India.
- Working on developing different types of photonic crystal fibers for bio-medical and industrial applications.
- Involvement in the fiber laser development activities for application in strategic and industrial sectors.
- Research contributions include photonic crystal fibers, nonlinear optics, specialty optical fiber fabrication and fiber lasers.
- Contributed to patents and sveral research publications

Dr. Divya Agrawal

Principal Scientist

CSIR-Central Scientific Instruments Organisation
(CSIR-CSIO), Chandigarh
divyaagrawal@csio.res.in

Broad Area of Research Work

Avionics Instrumentation

Major Achievements & Contributions

- Recipient of IEI Young Engineers Award 2021-22
- Recipient of National Tech Excellence Award 2022
- Recipient of Women Scientist in Translational Research by Technology Development Board (DST)
- Recipient of CSIR Technology Award 2020 - Most Significant Technology of the Five-Year Plan
- Recipient of CSIR Young Scientist Award (Engineering Sciences 2019)
- Recipient of CSIR Technology Award 2018 - Certificate of Merit in Physical Sciences including Engineering
- Major contributions are in the field of avionics instrumentation for design & development of technologies like LED based NVG compatible Wing & Fin Navigation Lights for LCA, LED based Taxi Landing Lights for LCA, Head Up Display, Military Aviation HUD Test Platform, etc
- Primary research focused on creating modular and customizable designs, certification as per various military standards and system design to ensure high reliability, low power consumption, compactness, ruggedness & multimode operation for prolonged operation
- Significant contribution in the field of avionics to make the nation self-reliant in this key strategic sector

Dr. Durba Sengupta

Principal Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

d.sengupta@ncl.res.in

Broad Area of Research Work

Computational Chemistry, Computational Biology

Major Achievements & Contributions

- Featured in 75 scientists under 50 Book (DST, Govt. India), 2022
- Featured in 75 Women in STEAM (PSA, Govt. India and British Council), 2022
- Best scientist Award (under 40), CSIR-NCL, Pune, 2019
- Elected Member of Indian National Young Academy of Science (INYAS), 2018
- Recipient of Ramalingaswmi Fellowship (2011)
- Recipient of Ramanujam Fellowship (2011)
- Led several grant-in adi projected funded from CSIR, DBT, SERB, DST (2011-to date)
- Established a framework to identify the physico-chemical design principles underlying biological processes at the membrane
- Significant contribution in the studies on the structure, dynamics and organization of membranes and membrane proteins from the atomistic level to the systems
- Expertise in multi-scale simulations, molecular modelling and electrostatic calculations and compare to bio-physical techniques such as FCCS, cyro EM and electrophysiology

Dr. Girija Gopalratnam

Chief Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL), Bengaluru

girijagr@gmail.com

Broad Area of Research Work

Parameter Estimation and Multi Sensor Data Fusion

Major Achievements & Contributions

- Indo-US Science & Technology Forum (IUSSTF) sponsored participation in the Science Technology & Innovation Policy (STIP) Executive Education Program at the John F. Kennedy School of Government, Harvard University, USA in 2008
- CSIR Technology Shield for the year 2003 (awarded to the Flight Mechanics and Control Division FMCD) for contribution to "Integrated Flight Mechanics and Control Technology for Aerospace Vehicles" for acquiring the state-of-the-art analytical, computational and algorithmic expertise
- NAL Foundation Day Award 1996
- Led many teams and received Outstanding Performance Award for Design, Development and Project execution
- More than 75 research publications in peer reviewed journals and conferences; Co-authored two books

Dr. Harsha Bajaj

Scientist

CSIR – National Institute for Interdisciplinary Science & Technology (CSIR-NIIST),Thiruvananthapuram

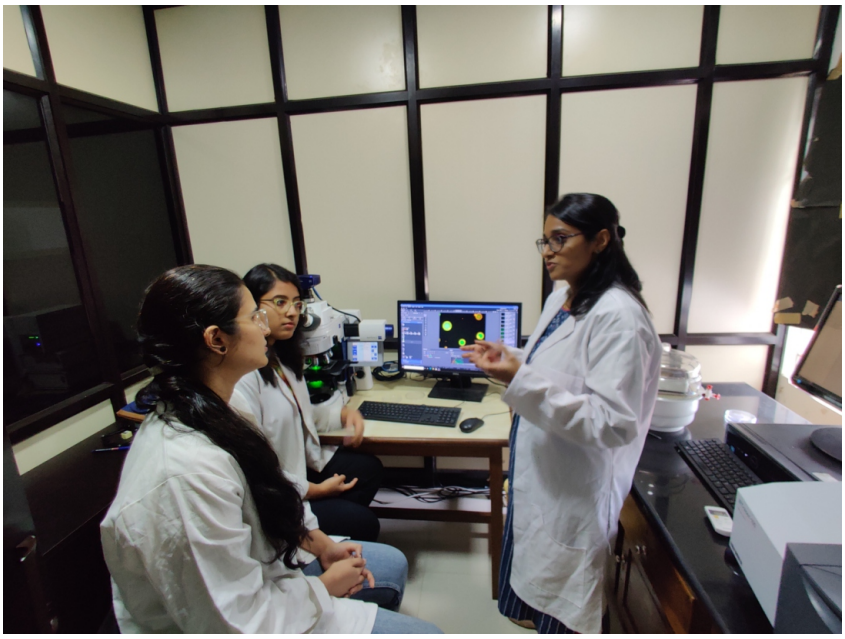
harshabajaj@niist.res.in

Broad Area of Research Work

Membrane Biology and Synthetic Biology

Major Achievements & Contributions

- NASI-Young Scientist Platinum Jubilee Award- 2022
- DST- INSPIRE Faculty Award- 2020
- DBT- Har Gobind Khorana Innovative Young Biotechnologist Award- 2018
- Significant contribution in the study to quantify membrane transport and membrane bending process in bacterial membranes to understand their role in resistance and membrane vesicle biogenesis
- Current research focus on assembling programmable 'synthetic cells' for biotechnological applications
- Published several research papers



Ms. Hemavathi S

Scientist

CSIR – Central Electrochemical Research Institute (CSIR-CECRI), Karaikudi

hemavathi@cecri.res.in

Broad Area of Research Work

Energy Technologies, Renewable Energy, Battery Technologies, Battery Management

Major Achievements & Contributions

- Best Young Scientist Award - National Faculty Award 2021-2022
- Proof of concept awarded and rewarded - 'Design of smart two-wheeler electric car in Covid-19 scenario - smart mobility – 2021
- Developed Indigenous Smart Battery Management System for Two-wheeler Vehicle applications under the CSIR-FTT project
- Significant contribution in the development of methodology of hybrid modeling with data driven technique algorithm for estimation of battery status of charge and health
- Developed Battery Management System for 250W and 1kW Redox flow battery modules for Renewable energy storage applications.
- Contributed to several projects and published many research papers

Dr. Indira Rajagopal

Chief Scientist

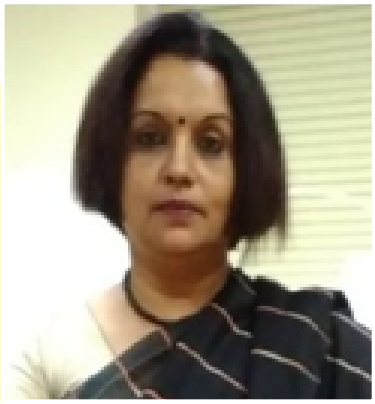
CSIR – National Aerospace Laboratories (CSIR-NAL),
Bengaluru
rajagopalandrsr@gmail.com

Broad Area of Research Work

Surface Engineering

Major Achievements & Contributions

- Vocational Excellence Award, Rotary Club of Madras Northwest, 2006
- Recipient of Commendation Certificate from DG, CSIR,1994
- FICCI Award for contribution to Physical Sciences, 1996-1997
- ASI Award, 1994 and MRSI Medal, MRSI, Surface Engineering
- NDRC Award for development of Sun Shield Mirrors (INSAT2), 1993
- CSIR Technology Prize, CSIR,Technology Development, 1992
- VM GATGE Award, Aeronautical Society of India, 1990
- NAL Outstanding Technology Award, NAL, 1989,1990 & 1991
- VASVIK Award and Gold medal, Engineering Applications of Metal Finishing, 1989
- NM Sampat Award, Electro Chemical Society of India, 1988.
- Shri Hari Om Ashram Award, Contribution to utilisation of Solar Energy, 1989
- President of the Royal Society of Chemistry (Deccan Section) 1999-2001
- Senior DAAD Fellow, Clausthal University, Clausthal, Germany,1999
- Significant contribution in the area of material science especially surface engineering



Dr. Jui Chakraborty

Principal Scientist

CSIR - Central Glass and Ceramic Research Institute (CSIR-CGCRI), Kolkata

jui@cgcri.res.in

Broad Area of Research Work

Healthcare Applications using Glass and Ceramics

Major Achievements & Contributions

- Awarded CSIR Raman Research fellowship, 2011
- Received MRSI 'Young Scientist' Award, 2002
- Recipient of CSIR 'Quick Hire' Fellowship, 2001
- Invited member of the Humboldt foundation for an Indo-German collaboration in the area of 'Bioinspired Materials'
- Development of process technologies on nanoceramic based drug delivery system, bioactive coating on load bearing implants
- Development of ceramic based antacid that has been patented in India and USA
- Development of unique bioactive glass based wound care matrices for chronic wounds due for clinical trial under the PPP model of Govt. of India
- Contributing towards the defense sector of the country via a unique bioactive glass based haemostatic dressing, necessary for the soldiers in the battlefield, with 'Make in India' mission and is solely an indigenous initiative

Dr. Jyoti Jog

Chief Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

jyotijog@gmail.com

Broad Area of Research Work

Polymer Science

Major Achievements & Contributions

- Significant contribution in the field of polymer physics, crystallization, blends, composites, nanocomposites and electrospinning
- Expertise in Material Characterization, Nanomaterials, Thin Films and Nanotechnology, Polymer Characterization etc.
- Published more than 100 papers in high impacvt factor journals
- Guided several research students and contributed to book chapters

National Chemical Laboratory

Dr. K. Annapurna

Chief Scientist

CSIR - Central Glass and Ceramic Research Institute (CSIR-CGCRI), Kolkata

annapurnak@cgcri.res.in

Broad Area of Research Work

Specialty Glass Development and Production

Major Achievements & Contributions

- Recipient of R. L. Thakur Award for Young Scientists in 1998 from Indian Ceramic Society
- Research and development of strategically important technology denied specialty glasses, for thermal imaging applications including their process technology
- Development of Sm-doped lithium aluminosilicate glass for improvement in the Nd-YAG laser performance under Xenon flash lamp excitations by 15-20%
- Establishment of Architectural Glass Research and Testing facility at CGCRI which has been recognized as testing center by Bureau of Indian Standards
- Contributions in understanding of structure and property studies of rare earth/ transition metal doped glasses and transparent glass-ceramics for photonics and energy applications
- Published several highly-cited research papers

Dr. K. S. Rajam

Chief Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL), Bengaluru

rajamsed@gmail.com

Broad Area of Research Work

Metal Finishing & Surface Engineering

Major Achievements & Contributions

- NM Sampat Award from the Electrochemical Society of India
- Lifetime Achievement Award from the Electrochemical Society of India
- Significant contribution in the area of research on a scientifically interesting amorphous/ nanocrystalline Ni-P surface coatings and worked on a wide range of binary, ternary and quaternary surface films and coatings with interesting properties
- Developed the second-generation sun shield mirrors for passive radiative coolers of VHRR for ISRO satellites and LNC cooler conical sun shields for space programs
- Published more than 150 research papers and developed several technologies for the strategic space sector
- Major contribution in the technology development of high-speed copper deposition for manufacture of ultra-high efficiency solar cells, Ni-Diamond composite coatings, plasma nitriding of slat tracks of landing gears of LCA
- Worked on high temperature solar selective coatings, super hard coatings for cutting tools multi-layer coatings and nanoscale architecture, solid oxide fuel cells, magnetic sensors, self-cleaning coatings, plasma based biomedical coatings

Dr. Kalpana Haresh Mody

Chief Scientist

CSIR – Central Salt and Marine Chemicals Research Institute
(CSIR-CSMCRI), Bhavnagar
kalpanamody16@gmail.com

Broad Area of Research Work

Microbiology, Environment Impact Assessment (EIA) and Environmental Audit

Major Achievements & Contributions

- Vikram Sarabhai Award from Government of Gujarat in the field of Industry for the work on "New products and processes in the area of salt: From concept to commercialization" for year 2005-06
- CSIR Technology Award in the field of Biological Science & Technology for the "Development of large-scale cultivation of Eucheuma and production of kappa carrageenan therefrom" in 2001
- More than 84 publications in national and international journals
- Five patent granted and three technologies licensed with many products in market
- Guided several M.Sc. and Ph.D students
- Led numerous Grant-in projects and developed technologies
- Major R &D areas are value added products development from seaweeds; bioprospecting of extremophilic bacteria for application-based product development,marine and ambient environmental monitoring etc

Dr. Kalyani Vijayan

Chief Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL), Bengaluru

kvnalbang@gmail.com

Broad Area of Research Work

Polymers, Structural Crystallography, Liquid Crystals, Metal Fatigue, Materials Science

Major Achievements & Contributions

- Developed a software package called 'AEROPOLYMERS' encompassing crystallographic, mechanical and miscellaneous data on polymers used in aerospace and a property-based selection module which was linked to NAL's website in 2007
- Outstanding performance award in the area of Basic Research for her investigations on Kevlar fibers in 1992
- Advisory consultant to Raman Research Institute (RRI), Bangalore for research programme on liquid crystalline materials from 1987 -89
- Selected for INSA - Royal Society Exchange programme in 1991 under which she visited several laboratories in U.K
- Guided several research students for Ph.D degree
- Contributed in 76 research publications in refereed journals, 30 NAL documents and presented 85 papers in conferences, seminars and lectures

Dr. Lakshmy Parameswaran

Chief Scientist

CSIR –Central Road Research Institute (CSIR-CRRI),
New Delhi
lakshmyparam@gmail.com

Broad Area of Research Work

Bridge Engineering, Wind Engineering, Sustainable Construction Materials

Major Achievements & Contributions

- Commendation Certificate from IRC-2006, 2009 & 2013
- Eminent Women Engineer Award, 2012
- Visiting Scholar, JHU USA, 1991
- BOYSCAST Fellowship, 1990-91
- Significant contribution in patended technology for vehicle Mounted automatic controlled Mobile Bridge Inspection device; technology transferred to two industries.
- Expertise in bridge aerodynamics and contribution in development of code of practices and design guidelines for bridges by IRC based on the research carried out at SERC (G) and CRRI, are being used by Bridge designers and maintenance Engineers all over the country

Dr. Lalitha R. Gowda

Chief Scientist

CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

lrgowda2k11@gmail.com

Broad Area of Research Work

Structural Biology, Food Safety and Food Analysis

Major Achievements & Contributions

- AFST(I)-FSSAI award, 2020 for contributions in the field of Food Safety
- FSSAI 'Eat Right Award' in the Professional Category on World Food Safety Day 2019
- Nominated as Chairman of Test Methods for Food Products Sectional Committee, FAD 28 of Bureau of Indian Standards, New Delhi in 2014
- Nominated to Genetic Engineering Appraisal Committee, MoEFC&C, GoI (2008-2011)
- Sir C. V. Raman Young Scientist Award in 1997 from Karnataka State Government
- Conferred with Honorary Fellowship in Biochemistry and Biophysics by Karnataka Science and Technology Academy, Department of S&T, Government of Karnataka
- Specialization in the areas of structural and molecular characterization of plant proteins, protein engineering and detection methods for the evaluation of genetically modified organisms and food safety issues
- Successfully implemented a free E-learning programme under aegis of AOAC India chapter for food analysts across the country
- Instrumental in getting the three State Food Laboratories of Karnataka ISO/IEC 17025: 2017 certification

Dr. M. S. Meera

Senior Principal Scientist

CSIR - Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

pmc@cftri.res.in

Broad Area of Research Work

Development of Innovative Processing Technologies for Grains like Millets and Rice

Major Achievements & Contributions

- Lead a mega project to Establish Centre of excellence for millets and incubation centre.
- Developing of processing protocols to enhance the shelf-life of sorghum and pearl millet flour from 5 days to 8 months
- Development of an alternate technology to accelerate the ageing of freshly harvested Basmati rice in a short duration of 15-30 days, without destroying the aroma component and unique cooking characteristics
- Modification of millet starch as ingredients in food formulations with low glycemic index
- Utilization of pulse-by products as an alternative source for texturized vegetable protein

cftri

Giving Food a Future

Dr. M. Keerthana

Senior Scientist

CSIR – Structural Engineering Research Centre (CSIR-SERC), Chennai

keerthana@serc.res.in

Broad Area of Research Work

Wind Engineering, Structural Engineering

Major Achievements & Contributions

- Awarded the prestigious IGSTC (Indo-German Science & Technology Centre) Post-Doctoral Industrial Fellowship (PDIF) at Fraunhofer IWES, Germany in 2022
- Springer Best Paper Award at the Tenth Structural Engineering Convention (SEC-2016.
- Contributed to the numerical simulation of flow around structures/structural components using Computational Fluids Dynamics and testing of boundary layer wind tunnel of wind sensitive structures.
- Worked on the development of experimental framework for studies on aeroelastic phenomena in long-span bridges
- Significant contribution in the studies on wind induced peak pressures on low-rise and high-rise buildings and investigations of wind effects on floating offshore wind turbines and solar PV supporting structures

Dr. M. Sujata

Chief Scientist

CSIR-National Aerospace Laboratories (CSIR-NAL), Bengaluru

msujata@nal.res.in

Broad Area of Research Work

Structural Health Monitoring of Bridges and Energy Harvesting under Moving Traffic

Major Achievements & Contributions

- Expert member: Aeronautical Research and Development Board, DRDO- Materials & Manufacturing panel from 2019-2022
- Recognized for Outstanding Contributions to Aerospace Sector in India during the AeroIndia 2019 exhibition in Bengaluru
- Young Metallurgist Award of the Year 2001 by Ministry of Steel and Indian Institute of Metal, Calcutta.
- Project leader for the aircraft incident/accident investigation activity since 2014
- CSIR-NAL signatory for qualification and certification of material as per DGAQA and DGCA norms.
- Two publications recognized as Editor's Choice Articles of Journal of Failure Analysis and Prevention
- Represented as a member of the Courts of Inquiry investigating into fighter aircraft accidents in the country
- Significant contribution in various projects for Indian Air Force, Indian Navy, Army Aviation, Indian Coast Guard, Hindustan Aeronautics Limited, Gas Turbine Research Establishment, Aeronautical Development Agency etc

Dr. Madhulika Bhati

Principal Scientist

CSIR – National Institute of Science Communication
& Policy Research (CSIR-NIScPR), New Delhi
madhulikabhati@niscpr.res.in

Broad Area of Research Work

Science, Technology and Policy Studies, Energy, Environment and Sustainable Development Goal

Major Achievements & Contributions

- Centre for International Postgraduate Studies of Environmental Managament(CIPSEM) Fellowship, TU Dresden, Germany (2021-2022)
- Raman Research Fellowship (2020-2021)
- Invited as Distinguished Fellow at Chinese Academy of Science and Technology for Development (CASTED), Beijing, China in2019
- Invited as Distinguished Fellow at Chinese Academy of Science and Technology for Development (CASTED), Beijing, China in 2016
- Research Fellowship by Central Pollution Control Board (2002-2003)
- Research focus is manly scientometric- and analytics-based research to provide Value added insights through aligning data analytics lifecycle with current science and technology policy analysi
- Significant contribution in assessing the socio-economic and environmental impact of technologies, CSIR-Hydrogen mission, ILO Green Energy Assignment, UN Sustainable Development assignment as experts

Dr. Manju Nanda

Chief Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL), Bengaluru

manjun@nal.res.in

Broad Area of Research Work

Safety Critical Flight Software

Major Achievements & Contributions

- Awarded IGSTC – WISER fellowship 2022for research at DLR Germany
- NAL Award for Excellence in Design, Development and Project Execution for SARAS Display System"
- CSIR-NAL Best Woman Scientist Award 2014
- CSIR-NAL Best Innovation Award 2014
- Awarded Certificate of Appreciation for SARAS PT1N prototype Light Transport Aircraft
- Awarded Excellence in the area of "Design, Development and Certification of FPGA based ARINC 818 Fiber Channel Protocol for Avionics".
- Pioneered, first in India, safety critical embedded software applications for National Civil Aircraft programs (SARAS, HANSA-NG and HAP)
- Spearheaded evolution and deployment of state-of-the-art software engineering technologies, and methodologies for international DO standards (DO-178C, DO-331, DO-330, and ARINC653) for current and future National aerospace applications
- Created breakthrough software certification solutions enabling civil and defense certification agencies to be self-reliant
- Enhanced embedded safety critical software intellectual capital of CSIR-NAL and leveraged it to augment capabilities of aerospace organizations such as NAL, CEMILAC, ADE, ISAC, HTSL etc

Dr. Manjusha Vilas Shelke

Senior Principal Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

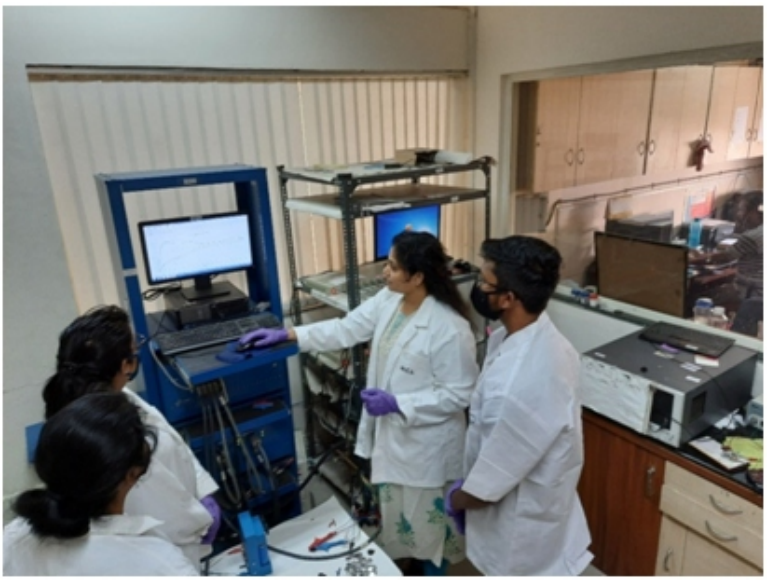
mv.shelke@ncl.res.in

Broad Area of Research Work

Materials and Devices for Energy Storage (Rechargeable Batteries)

Major Achievements & Contributions

- Recipient of Fulbright-Nehru academic & professional excellence fellowship 2022-23
- SERB-POWER fellowship 2021 by the Science & Engineering Research Board of Govt. of India
- Elected as Kavli fellow by National Academy of Sciences (NAS), USA 2015
- Elected Fellow of Maharashtra Academy of Sciences (MAS), 2018
- Developed excellent conversion, alloying anode materials for lithium-ion batteries (LIBs) with high energy density, longer cycle life and superior rate capability. Her efforts are focused to develop indigenous solutions for battery storage and she is working on beyond Li-ion technologies like Li-Sulphur, Na-ion and Li/Na-metal batteries to contribute to the national challenge of 'self-reliance/make in India'



Dr. Mita Tarafder

Chief Scientist

CSIR – National Metallurgical Laboratory (CSIR-NML), Jamshedpur

mt@nmlindia.org

Broad Area of Research Work

Computational Materials Science, Skill and Entrepreneurship Development

Major Achievements & Contributions

- Recipient of CSIR Technology Award for years 2021, 2015, 2011 and 2010 in the Business Development and Technology Marketing as a team member
- Woman Achiever by Rotary Club of Jamshedpur, 2021
- Recipient of Women Entrepreneurs Award by Kaushish Trust, 2016
- Recipient of Award for community development by Hindustan Newspaper, 2016
- Received M S Khan Memorial Award, Indian Institute of Metals, 2014
- Lady Engineer Award by Institution of Engineers, India in 2011
- NML Award for Excellence for in-house research, 2005 & 2004
- Cambridge Commonwealth Fellowship by Cambridge Commonwealth Society in 1990
- Significant research contribution in finite element modeling (FEM) and computational fracture mechanics
- Leading projects supported by the DST for Women Technology Park and Science, Technology and Innovation for the S&T community

Dr. Mugdha Gadgil

Senior Principal Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

ncl.poona@gmail.com

Broad Area of Research Work

Biochemical Engineering

Major Achievements & Contributions

- CSIR Young Scientist award in Engineering sciences, 2012
- Significant contribution in the studies of biophramaceuticals and therapeutic glycoproteins.
- Contributed to understanding and demonstration of cell culture factors modulating glycosylation.
- Studied for the first time, effect of trace metal variability on glycoform under some metabolic constraints acquired knowledge of such interactions can contribute towards the rational design of trace metal composition in any medium
- Demonstrated the expression of varying glycoforms of a therapeutic glycoprotein from the same cell line by varying external supplementation of sugars by genetically engineering the nucleotide synthesis pathway
- Guided several students and published many research papers

National Chemical Laboratory

Dr. Mukti Advani

Principal Scientist

CSIR – Central Road Research Institute (CSIR-CRRI),
New Delhi
mukti.crri@nic.in

Broad Area of Research Work

Sustainable Transport

Major Achievements & Contributions

- Contributed as work package leader in a project named SUSTRANS which was awarded titled SKOCH Order-of-Merit Award 2015
- Contributed to Indian Road Congress (IRC codes) committees and formulation of many guidelines for road safety
- Executive Board Member, Transportation Research Group of India (TRG)
- Governing Council Member, International Road Federation (India Chapter)
  Associate Member, Institute of Engineers (India)
- Contributed in many grant-in did projects in area of developing models for road safety, transportation and contributed in many books chapters
- More than 80 publications in reputed journals, national and International conferences

Ms. N. Vasumathi

Principal Scientist

CSIR-National Metallurgical Laboratory (CSIR-NML), Jamshedpur

vasumathi@csircmc.res.in

Broad Area of Research Work

Mineral Processing

Major Achievements & Contributions

- V.A. Altekar Award for the Best Technology developed/transferred, 2020
- Recipient of Tamotia Award (Environment category), 2019
- Recipient of Technology Award for most significant CSIR technology, 2014
- Scientific contributions focused on process flow sheet development for low grade ores and recovery of values from tailings by flotation
- Major contribution in pilot-scale column flotation technology demonstration and commercialization of column flotation technology
- Developed new bio-degradable eco-friendly single flotation collector for fine coal and graphite
- Worked on the development and performance evaluation of environment friendly flotation reagents for cement manufacturing
- Surface clay contamination reduction on quartz and feldspar and beach sand heavy minerals using environment friendly natural surfactants
- Contributed to the development of value-added products from mineral/mining wastes/rejects

Dr. Naga Vara Aparna Akula

Principal Scientist

CSIR – Central Scientific Instruments Organization (CSIR-CSIO), Chandigarh

aparna.akula@csio.res.in

Broad Area of Research Work

Intelligent Sensing Systems

Major Achievements & Contributions

- Distinguished Young Alumni Professional Excellence Award 2022 by NIT, Warangal
- IET Young Woman Engineer Award, 2021 by the Institution of Engineering and Technology (IET), UK
- Awarded IEEE Young Technologist of the Year by IEEE Delhi section, 2020
- ICCB Conservation Technology Award by Society for Conservation Biology
- IEI Young Engineers Award 2017-2018 by The Institute of Engineers (India)
- Represented India under the Computational Intelligence theme at the BRICS Young Scientist Conclave 2016
- Research contributions in the design, development and commissioning of intelligent sensing and alert systems for strategic and seismic applications and wildlife monitoring
- Developed 'iTrinetra- AI powered surveillance system', for use by intelligence agencies
- Developed radiometric image analysis tool for DRDO and Naval Research Board
- Significant contribution in technologies for public safety, wildlife monitoring and strategic applications

CSIR-CSIO

Dr. Namrata Rastogi

Principal Scientist

CSIR –Central Drug Research Institute (CSIR-CDRI), Lucknow

namrata.rastogi@cdri.res.in

Broad Area of Research Work

Chemical Sciences

Major Achievements & Contributions

- Bronze Medal-2022 by Chemical Research Society of India (CRSI)
- "Distinguished Woman Scientist-2019" Award in Chemical Sciences by Indian Society of Chemists & Biologists
- CSIR-CDRI's Incentive Award-2015 and 2019
- Gregynog Young Chemist for Organic Synthesis Workshop-2015, Wales, UK
- INSA-DFG fellowship, University of Regensburg, Germany (July-September, 2014)
- DST-SERB Core Research Grant (2017-2020) & (2020-2023)
- DST-Fast Track Award for Young Scientists (2014-2017)
- Significant contribution in the CSIR-CDRI's drug discovery program in the area of parasitic diseases, developing small molecules against Leishmania and Malaria parasite particularly

Dr. Nasreen Ghazi Ansari

Chief Scientist

CSIR – Indian Institute of Toxicology Research (CSIR-IITR), Lucknow

nasreen@iitr.res.in

Broad Area of Research Work

Analytical Chemistry (Regulatory Toxicology)

Major Achievements & Contributions

- Significant contribution in development of micro-extraction method for contaminants and toxicants in environmental and biological matrices
- Developed biodegradable carrier for nanoparticles from waste to wealth for remediation of heavy metal in waste water
- Involved in third-party testing for various industries and regulatory agencies for policy adherence and formulation
- Led Accreditation activity for NABL as Signatory, Chemical Sciences and GLP Head GLP -Archive for more than a decade
- Guided several students and published many papers

Dr. Naveet Kaur

Scientist

CSIR – Central Road Research Institute (CSIR-CRRI),
New Delhi
nkaur.crri@nic.in

Broad Area of Research Work

Structural Health Monitoring of Bridges and Energy Harvesting under Moving Traffic

Major Achievements & Contributions

- 'INSPIRE Faculty Award' by DST, Govt. of India. (2016-2022)
- The video demonstration of the research work was selected among the 19 best across the world for an event 'SHM in Action' in IWSHM-9 (2012)
- Rashtrapati Guide: Highest award for Bharat Scouts & Guides awarded by President of India (2002)
- Led many Grant-in Projects and Publications: 1 Book, 5 Book Chapters, many international journal and conference papers
- Two patents and one technology transfer to the industry

Dr. Nazia Abbas

Senior Scientist

CSIR – Indian Institute of Integrative Medicine (CSIR-IIM), Jammu

nazia.abbas@iiim.ac.in

Broad Area of Research Work

Plant Molecular Biology

Major Achievements & Contributions

- SERB Women Excellence Award SERB-DST 2019
- INSA (Indian National Science Academy) Medal for Young Scientist 2016
- DST INSPIRE Faculty Award 2014
- Contributed in the development of Plant Molecular biology lab at IIIM Srinagar
- Contributed in the development of Plant growth facility for the in vitro growth of plants at CSIR IIIM branch Srinagar
- Maintained and extended gene bank of experiment farm at Srinagar
- Contributed in preservation and maintenance of some endangered medicinal plant species at institutional farms
- Guided several research students, published many papers and book chapters and led various grant-in aid projects

Dr. Neha Khatri

Principal Scientist

CSIR – Central Scientific Instruments Organisation (CSIR-CSIO), Chandigarh

nehakhatri@csio.res.in

Broad Area of Research Work

Optical System Design, Micro & Nano Fabrication, Advanced Instrumentation Engineering

Major Achievements & Contributions

- Recipient of SERB Women Excellence Award 2022 by Science and Engineering Research Board (DST)
- Recipient of IEI Young Engineer Award 2021 – 22 in the Mechanical engineering discipline
- Recipient of INAE Young Engineer Award 2021 for notable contribution in the area of ultra-precision machining
- Recipient of Raman Research Fellowship for the year 2021 to carry out Research at College of Optical Sciences, University of Arizona, Tucson, USA
- Significant contributions in the areas of ultra-precision machining, specifically in diamond machining technology, and nano-finishing of precision optical components
- Development of micro-machining process chains and fabrication protocols for difficult-to-cut materials.
- Significant contribution in design and development of Silicon mirrors for focusing of X-rays, development of indigenous avionics components and technologies for low-vision aid for nearly blind people as well as development of precision instrumentation towards whole slide digital microscopy for biomedical imaging
- Expertise in Ultra precision machining of optics, improving the figure and finish accuracy in nanometric range, Optical system design and fabrication of precision optical elements for X-Rays and Infrared rays, Simulation based modeling

CSIR-CSIO

Dr. Ing. Nidhi Chaturvedi

Senior Principal Scientist

CSIR – Central Electronics Engineering Research Institute
(CSIR-CEERI), Pilani
nidhi@ceeri.res.in

Broad Area of Research Work

Compound Semiconductor Devices, Engineering Design, Biosensors

Major Achievements & Contributions

- "Certificate of Appreciation" in 2022 from DST, Govt. of Rajasthan for commendable contribution in the field of Science & Technology
- "Token of Appreciation" in 2021 for GaN HEMT research from SPARC, India
- "Dr. (Mrs.) Swaraj Srivastava Memorial Research Encouragement Award" for Women, 2019-2020, CSIR-CEERI, Pilani, India
- "Arvind prem smriti award", Young scholar of year 2000, India
- Contribution in the area of devices based on Gallium Arsenide, Gallium Nitride, and Gallium Oxide FETs/HEMTs (discrete and MMICs) for high power, high voltage, sensing and biosensing applications
- Significant contribution in the area of GaN HEMTs on Sapphire, SiC and Si based new generation of high efficiency, high-power devices
- Development of GaN HEMTs based biosensors for Cancer and TBI detection
- Development of GaN power HEMT device for L and X band operation
- Major contribution in the development of AGaN/ GaN high power transistor
- Fabrication of switch mode and low noise GaN MMICs
- Development of C band high power GaAs MESFET
- Successfully executed several national/international projects
- Published more than 75 papers, guided several B. Tech, M. Tech and Ph.D. students

Dr. Nimisha Vedanti

Senior Principal Scientist

CSIR-National Geophysical Research Institute
(CSIR-NGRI), Hyderabad
vedanti@ngri.res.in

Broad Area of Research Work

Exploration Geophysics, Time Lapse Seismic, Inverse Theory, Reservoir Geophysics

Major Achievements & Contributions

- Krishnan Gold Medal by Indian Geophysical Union 2017
- KR Gupta Medal by Geological Society of India 2015
- National Geo-science Award (Govt. of India) 2012
- CSIR-Young Scientist Award 2009
- Indian Science Congress Association- Young Scientist Award 2008
- Elected Fellow of Geological Society of India
- BOYSCAST Fellowship of Department of S&T, Govt. of India
- CSIR-Raman Research Fellowship, Govt. of India
- Significant contribution in tracking of thermal front in low producing onshore- heavy-oil field 'Balol', situated in Cambay basin, India and assessment of CO2-EOR potential of a declining oil field, 'Ankaleshwar'
- Working on integrated study of Deccan basalts of India to understand its petrophysical, elastic and geochemical properties
- Guided research students and published many papers in reputed journals

Dr. Nita Dilawar Sharma

Chief Scientist

CSIR – National Physical Laboratory (CSIR-NPL),
New Delhi
ndilawar@nplindia.org

Broad Area of Research Work

High Pressure Physics, Raman Spectroscopy, Pressure Standards

Major Achievements & Contributions

- Asia Pacific Metrology Program (APMP) Iizuka award 2004
- CSIR-young scientist award 2001
- IUMRS young Researcher award 1998
- Established two laboratories for pneumatic pressure and raman spectroscopy
- Established five calibration and measurement capabilities (CMC) for pneumatic pressure
- Developed software for uncertainty measurement in pressure and automated data acquisition of differential pressure measurement
- Significant contribution in studies of free standing diamond thin films.
- Guided several students and published many research papers

Dr. Niti Kumar

Principal Scientist

CSIR-Central Drug Research Institute (CSIR-CDRI), Lucknow

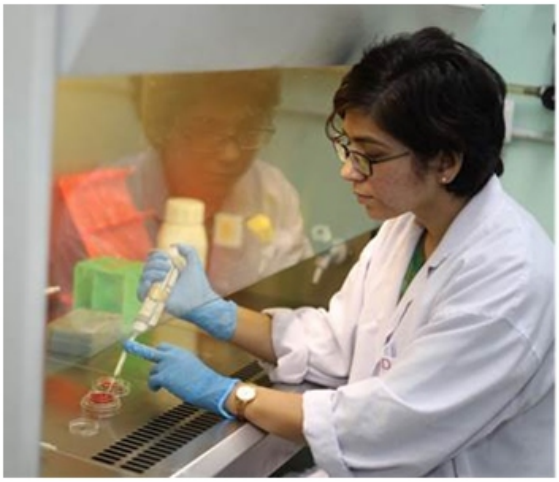
niti.kumar@cdri.res.in

Broad Area of Research Work

Molecular Biology and Biochemistry

Major Achievements & Contributions

- Swarnajayanti Fellowship 2021 by Department of Science and Technology
- SERB Women Excellence Award 2020 by Department of Science and Technology
- Innovative Young Biotechnologist Award (IYBA) 2015 by Department of Biotechnology
- Ramalingaswami Fellowship (2013-2018) by Department of Biotechnology
- INSA Medal for Young Scientist 2010
- Participated in open-source drug discovery initiatives such as Medicines for Malaria Venture (MMV), Malaria Drug accelerator
- Significant contribution in the area of quality control processes adopted by a cell during stress and infection using different biological systems to understand critical pathway(s) involved in genome and proteome maintenance that help in restoration of cellular homeostasis
- Contributed to intensive research which led to technology transfers



Dr. P. Nisha

Principal Scientist

CSIR – National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram

pnisha@niist.res.in

Broad Area of Research Work

Food Science and Technology

Major Achievements & Contributions

- Recipient of Prof. Gurcharan Singh Bains Award2021 by Association of Food Scientist and Technologists of India (AFSTI)
- Recipient of Raman Research Fellowship
- Secretary of the Association of Food Scientists and Technologists, India (AFSTI), Thiruvananthapuram chapter
- Expertise in interdisciplinary research in Agro-processing
- Development ofnewer approaches in food science and technology.
- Development of technologies related to the post-harvest processing of agricrops
- Research contributionsin post-harvest technology by developing value added products greatly impacting the agriculture sector of the state via collaborative projects with the State Agriculture Department, Govt. of Kerala
- Contributed to several projects and publications

Dr. P. Kamatchi

Senior Principal Scientist

CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai

kamat@serc.res.in

Broad Area of Research Work

Earthquake Engineering

Major Achievements & Contributions

- Brij Mohal Lal Memorial Prize from Institution of Engineers, 2017
- Awarded Raman Research Fellowship, 2013
- Developed a technology on "Dual Slab Floor Isolation Technology for Seismic Damage Mitigation"
- Leading Advanced Seismic Testing and Research Laboratory of CSIR-SERC
- Significant contribution in earthquake engineering, site-specific analysis, artificial neural networks, concrete structures, collapse capacity analysis, tuned mass dampers etc
- Published several research papers in Indian and international journals

Dr. P. Kanakalatha

Chief Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL), Bengaluru

kanakalatha.p@gmail.com

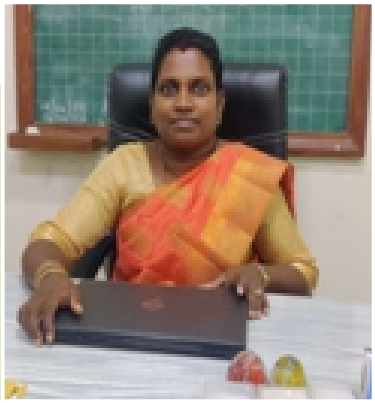
Broad Area of Research Work

Carbon Fibres and Prepregs

Major Achievements & Contributions

- NRDC Award for Development of Aramid Fibers in 1986
- Significant contribution in the process development of special polymers and polymeric products including aramids like Kevlar and Nomex, high temperature resins systems for prepregs and carbon fiber precursors
- Involved in the development of fiber spinning technologies for wet spinning of acrylic fibers for Carbon fibers,wet & dry jet spinning of Aramid fibers
- Major contribution in setting up the 20 Tonne capacity Carbon fibre Pilot plant at NAL, Bangalore, the only one in India
- Developed processes technologies for polymerisation, continuous carbon fibre precursor spinning and continuous carbonisation at the 20-tonne pilot plant
- Contributed to several process designs, technology transfers and facility creations
- Led many projects related to carbon fibers for the strategic sector

CSIR-NAL



Dr. P. S. Ambily

Principal Scientist

CSIR – Structural Engineering Research Centre (CSIR-SERC), Chennai

ambilyps@serc.res.in

Broad Area of Research Work

Sustainable Cementitious Composites

Major Achievements & Contributions

- Prof. V. Ramakrishnan Young Scientist Award, 2018, Indian Concrete Institute
- Young Engineer Award, 2017 ICI (Chennai Centre)
- UltraTech Award -2017 for Outstanding Young Concrete Engineer of Tamil Nadu
- Best researcher Award, 2015 EET CRS 3rd Technology Achievement Award-2015, for Best Researcher Award, Tamil Nadu
- 'Corrosion Awareness Award-2014' in the category of 'Excellent Laboratory Award' by NACE International Gateway India Section for the year 2014
- Governor nominated senate member of University of Madras (2018 - 2021)
- Significant contribution in the area of concrete 3D printing and Carbon capture utilization and sequestration

Dr. P. S. Rajini

Senior Principal Scientist

CSIR- Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

rajini29@yahoo.com

Broad Area of Research Work

Food Safety, Pesticide Toxicology, Nutritional Biochemistry

Major Achievements & Contributions

- Served as Co-tutor for Leadership Development Programme conducted by CSIR (2008-2010).
- Significant contribution to alternate animal model which included investigations into the mechanism/s of action of pesticides in the nematode, Caenorhabditis elegans; bioactives and amelioration of toxicity.
- Notable work in experimental toxicology using rodents wherein pesticides-induced disruption of glucose homeostasis; pancreatic damage induced by organophosphorus insecticides and their attenuation by plant-based dietary factors etc. were studied.
- Guided several Ph.D. students and published many papers

Dr. P. Sujatha Devi

Chief Scientist

CSIR – National Institute for Interdisciplinary Science & Technology (NIIST), Thiruvananthapuram

psujathadevi@niist.res.in

Broad Area of Research Work

Chemical Science & Technology

Major Achievements & Contributions

- Appointed Associate Editor, RSC Advances 2022
- Chemical Research Society of India Bronze Medal 2018
- Fellow of the Royal Society of Chemistry (FRSC) UK 2017
- MRSI- Materials Science Annual Prize 2017
- Fellow, West Bengal Academy of Science and Technology 2012
- P. K. Kunju Sahib award for Excellence in Chemistry 2010
- MRSI Medal 2008 by the Materials Research Society of India
- Dr. Lakshmi Gold Medal 2005 by the Indian Association of Solid-State Chemists and Allied Scientists (ISCAS)
- Rheometric Scientific-ITAS National Award 1998 by the Indian Thermal Analysis Society in co-operation with Rheometric Scientific, UK
- Dr. R. L. Thakur Memorial National Award for Young Scientists 1997
- Significant contribution in the area of processing and characterization of functional materials for applications ranging from fuel cell, solar cell, chemical and biosensors
- Published more than 100 research articles, many book chapter and six patents

Mrs. Padma Madhuranath

Chief Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL), Bengaluru

padma.nath@gmail.com

Broad Area of Research Work

Flight Simulation, Air Traffic Management Simulation and Analysis

Major Achievements & Contributions

- CSIR Shield for Engineering Technology 2003 awarded to the NALteam lead by Padma Madhuranath in the area of Flight Simulation
- NAL Technology Shield for Out Standing Achievement 2001
- LCA Control Law Design, Certification and Successful Flight Tests presented as National Control Law Team Member
- FICCI's Outstanding Woman Professional 1998-99
- NAL. award for outstanding performance for Design, Development and Validation of a Real Time Flight Simulator 1994
- Development of ALLS Software for Development of Control Law 1991
- Design Contributions to Accoustic Test Facility1987
- Guest Scientist at DLR, West Germany1985 - 86
- Significant contribution in the area of flight simulations of light combat aircraft, ELS - Engineer in the loop simulation facility and Air Traffic Management Simulation and Analysis of Air Space and Air Traffic

Dr. Pinjala Lathasree

Chief Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL),
Bengaluru
platha@nal.res.in

Broad Area of Research Work

Flight Dynamics and Simulation, Flight Control and Air Traffic Management and Simulation.

Major Achievements & Contributions

- Awarded CSIR-technology shield for carriage handling and store release studies for a fighter aircraft upgradefor the year 2019
- Awarded CSIR-NAL technology shield for the years 2012, 2017 and 2019 for contributions to transport and fighter aircraft programs
- Awarded CSIR-technology shield for integrated flight mechanics and control technology for aerospace vehicles in 2003
- Led the project teams in many areas including development of aircraft and missile performance models for integration with Integrated Air Command and Control System
- Significant contribution in setting up HANSA NG simulator with single window projection system during March 2022

Dr. Pooja Devi

Principal Scientist

CSIR-Central Scientific Instruments Organisation(CSIR-CSIO), Chandigarh

poojaiitr@csio.res.in

Broad Area of Research Work

Materials Engineering for Energy and Environmental Applications

Major Achievements & Contributions

- Received CSIR Raman Research Fellowship (2022)
- Listed in Eminent 125 women in Science by CII Compendium released by PSA (2022)
- Recipient of NASI- Young Scientist Platinum Jubilee Award (2021)
- Elected Member, National Academy of Science in India (NASI) (2021)
- Recipient of IEI Young Engineer Award (2020-21)
- Recipient of INAE Young Engineer Award (2020)
- Recipient of Associateship, Indian National Academy of Engineers (INAE, 2020)
- Recipient of SERB Women Excellence Award (2020)
- Recipient of GC Jain Memorial Best Thesis Award, Mat. Res. Soc. of India (2020)
- Recipient of Haryana YuvaVigyanRatan Award (2019)
- Recipient of Young Associateship, Indian Academy of Sciences (2019-22)
- Recipient of Young Scientist Award by Indian Science Congress (2019)
- Recipient of Young Scientist Award Int. Soc. for Energy and Environment (2019)
- Recipient of BRICS Young Scientist Award (2018)
- Recipient of Indo-US WARI fellowship (2018)
- Recipient of Canadian Commonwealth fellowship (2010)
- Contributions to science communication and promotion of science activities in schools through CSIR-JIGYASA and INYAS, INSA platforms.

Dr. Poonam Arora

Senior Principal Scientist

CSIR-National Physical Laboratory (CSIR-NPL),
New Delhi
arorap@nplindia.org, poonam.arora@gmail.com

Broad Area of Research Work

Time & Frequency Metrology, Atomic Clocks, Optics & Photonics

Major Achievements & Contributions

- Senior Member, International Union of Radio Science (URSI) 2022
- Elected Fellow of IETE 2022
- Recipient of Haryana Yuva Vigyan Ratna Award 2017
- Recipient of CSIR-NPL Technology Award 2017
- Recipient of DST Young Scientist Award project 2016
- Recipient of the CSIR-Young Scientist Award 2012
- Recipient of the URSI Young Scientist Award 2011
- Recipient of the Early Career Award at CPEM 2010 Conference held at South Korea.
- Significant contribution to the development of India's first indigenously developed laser-cooled Cesium atomic fountain approved as a Primary Frequency Standard by BIPM making India one in only ten countries having developed such a standard
- Contribution to the developemnet of second Cesium fountain laboratory,back-up timescale lab and FonOclock - telephone time dissemination technology
- Development of the interactive working models of atomic clocks
- Contribution to the Indian Standard Time (IST) generation and dissemination

Dr. Poonam C. Singh

Principal Scientist

CSIR – National Botanical Research Institute (CSIR-NBRI), Lucknow

pc.singh@nbri.res.in

Broad Area of Research Work

Plant-Microbe Interactions

Major Achievements & Contributions

- Young Scientist Award by Association of Microbiologists of India. November, 2004
- Developed microbes-based bio-formulation for controlling fungal diseases in gladiolus, tomato, chickpea and betelvine
- Developed microbes-based technology for sodic soil reclamation by utilizing rice straw
- Organized training programs for popularization of biofertilizers and biopesticides use among farmers, on 'Quality production of biofertilizers and biopesticides' for officials of Govt. biofertilizer production units
- Imparted floral craft trainings to village women under institutional women empowerment program
- Published several papers, book chapters and patents, coordinated several projects

Dr. Poonam Singh

Principal Scientist

CSIR – Central Electrochemical Research Institute (CSIR-CECRI), Karaikudi

poonam@cecri.res.in

Broad Area of Research Work

Microbiologically Influenced Corrosion, Biological Fouling, Bioremediation, Toxicology

Major Achievements & Contributions

- Elected Executive Council member of Bioinformatics and Drug Discovery Society, India (2017 onwards)
- Prof. K. R. Laumas Memorial Oration Award in 2012
- CSIR Technology Award for Innovation - 2009 as a Team member for Development of Synthetic Endoperoxide Antimalarials as Substitute to Artimisinine Derivatives at CSIR-CDRI, Lucknow
- Associate & Fellow of Academy of Sciences for Animal Welfare (F172/2010)
- Significant contribution in the area of drug discovery and development with specific interest to Preclinical Toxicology, Hematotoxicology, Reproductive Toxicology (Teratogenecity and Male fertility studies)
- Major research focus currently is on understanding microbiologically influenced corrosion, its causes, mechanism and prevention in industrial installations. Another thrust area of research interest is bio remediation of wastewater with specific interest to textile dyes and effluents
- Guided several research students and published many papers

Dr. Prabha P

Principal Scientist

CSIR – Structural Engineering Research Centre (CSIR-SERC), Chennai

prabha@serc.res.in

Broad Area of Research Work

Steel Structures, Steel-Concrete Composite Structures

Major Achievements & Contributions

- Best Ph.D. Thesis in Concrete Award 2017 by Indian Concrete Institute (ICI-National Chapter).
- Contributed in revisions of many Indian Standards for steel and building constructionsas expert member in many Bureau of Indian Standard (BIS) Committees
- Contributed for development of many technologies including Prefabricated hospital structures (PreTal) for CSIR's fight against COVID-19 in 2020
- Guided many M. Tech students and published several papers
- Contributed to many projects for industries and developedrelevant technologies

Dr. Prapulla S. G.

Chief Scientist and Head

CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

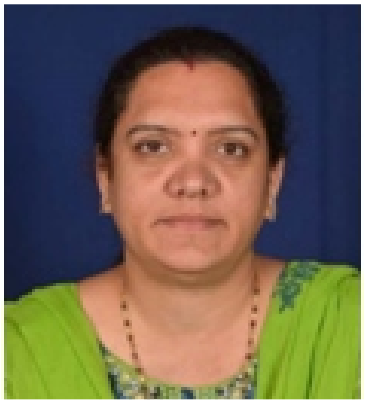
sgpsh@yahoo.co.in

Broad Area of Research Work

Fermentation Technology with a special reference to Prebiotics and Probiotics

Major Achievements & Contributions

- Recipient of UNSECO Young Woman Scientist Award for research related to bio-technologically important products of industrial relevance (1990)
- Recipient of German Academic Research Foundation (DAAD) fellowship to carry out advanced research in the field of microbial flavours (1988-1989)
- The technology for the production of Fructooligosaccharides, a well-known prebiotic, developed at CFTRI by the team lead by self has successfully been transferred to the industry (2010-2012)
- Exemplary work in the area prebiotics, desired food ingredients and the food of choice for probiotics, the healthy inhabitants of the human colon
- Contributed to a large number of publications and patents



Dr. Pratima Meshram

Principal Scientist

CSIR – National Metallurgical Laboratory (CSIR-NML), Jamshedpur

pratima@nmlindia.org

Broad Area of Research Work

Science, Engineering and Technology in Metal Extraction and Recycling

Major Achievements & Contributions

- Prof. Shilowbhadra Banerjee Award 2010 at CSIR-NML, Jamshedpur
- Indo-Finish Mobility Program Fellowship 2019for research visit at Lappeenranta University of Technology, Finland
- CSIR-Raman Research Fellowship 2021-22 for research at the University of British Columbia, Vancouver
- Initiated first in India work on recycling of nickel-based batteries for rare earth extraction
- Principal inventor in CSIR's first indigenous process for extraction and separation of all metals from mixed chemistry scrap lithium-based batteries
- Published several research papers and filed many patents

Dr. Priyanka Agnihotri

Principal Scientist

CSIR – National Botanical Research Institute (CSIR-NBRI), Lucknow

p.agnihotri@nbri.res.in

Broad Area of Research Work

Angiosperm Systematics, Conservation Biology and Climate Change

Major Achievements & Contributions

- Elected member of National Academy of Sciences India (NASI) 2018
- Sri Shivamangal Singh Smriti Srivatsa Paryavaran Sanrakshan Samman in 2016
- Prof. Hira Lal Chakravarty Memorial Award for outstanding research achievements in the field of Plant Sciences from Indian Science Congress Association (ISCA) in 2015
- Elected Fellow of Association for Plant Taxonomy from the Association for Plant Taxonomy 2014
- A.P. Das Biodiversity Medal for contribution to the knowledge of Himalayan Plant Diversity from East Himalayan Society for Spermatophyte Taxonomy in 2014
- Woman Scientist Medal for significant contribution in the field of Plant Systematics & Conservation from Indian Botanical Society in 2013
- Elected Fellow of Ethnobotanical Society from the Society of Ethnobotanists 2013
- Dr. V. Mudgal Medal for Young Taxonomist from Association for Plant Taxonomy in 2012
- Significant contribution to the existing knowledge of Angiosperm Systematics along with studies on complex Himalayan genera and documented taxonomic diversity and phylogeny, its functional role and prospective uses
- Discovered more than 20 species, published more than 100 papers and guided several Ph.D. students

Dr. Priyanka Heda Maheshwari

Principal Scientist

CSIR – National Physical Laboratory (CSIR-NPL),
New Delhi
hedap@nplindia.org

Broad Area of Research Work

Development of Carbon Materials for Energy, Industrial & Societal Applications

Major Achievements & Contributions

- Recipient of the NRDC National Meritorious Invention Award 2018
- Recipient of the CONNECT Follow up grant 2015 by the Alexander von Humboldt Foundation, Germany
- CSIR Young Scientist Award 2012 (in Engineering Sciences)
- Development of porous conducting carbon paper, catalyst and bipolar plate for fuel cell applications
- Development of carbon-based anode for rechargeable Li-ion/ Na-ion batteries
- Development of carbon/ carbon composite materials as electrodes for supercapacitor
- Development of carbon fiber-based heating element
- Synthesis and modification of multiwalled carbon nanotubes and development of multifunctional carbon nanotubes based nano composites
- Development of certified reference material of 'Graphitized Petroleum Coke' BND™ 5102. (Certified for Ash, Sulphur, and Heat of Combustion)
- Development of Particle board/ PWC Material from agro and polymer wastes
- Development of activated carbon for water purification
- Guided several research students and published many papers

Mrs. Priyanka Jain

Senior Principal Scientist

CSIR-National Physical Laboratory (CSIR-NPL),
New Delhi
jainp1312@gmail.com

Broad Area of Research Work

Impedance and DC Metrology

Major Achievements & Contributions

- Significant contribution in the area of impedance and high voltage DC metrology
- Realized inductor from a standard capacitor using commercial LCR meter with the same order of uncertainty as obtained using well-known Maxwell Bridge techniques
- Implemented software lock-in amplifier with 24-bit DAQ and LabVIEW software for impedance metrology applications which can be used as a digital detector in a ratio comparison bridge.
- Contribute to 33 CMCs (Calibration and Measurement Capabilities) listed in the BIPM-KCDB database for DC (Voltage, Current, Resistance and DC Voltage Ratio), Impedance (Capacitance, Resistance, Inductance, AC voltage ratio) and High voltage DC (Divider, Probe, Source)
- Participated in APMP.EM-S15 inter-comparison between NMI Thailand, NIM China and NPL India for high-frequency capacitance standards (1 pF, 10 pF, 100 pF and 1000 pF) from 10 kHz to 1 MHz.
- Participated in BIPM.EM-K13.a and b International key Comparison of Resistance (1 Ω and 10 kΩ) between BIPM, France and NPL India
- Working on to develop a digitally assisted IVD Calibration Bridge for ac voltage ratio calibration

Dr. Pushpa S. Murthy

Senior Principal Scientist

CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

pushpa@cftri.res.in

Broad Area of Research Work

Food Science and Technology

Major Achievements & Contributions

- Mentor for ATAL Incubation Center, Coffee Board of India. GoI (2020-2022)
- Distinguished Researcher in Food Biotechnology, International Research Awards Council, 2020.
- Annual Institute Award, for External cash flow for CFTRI (2019-2020)
- Biotechnologist Award from SCIRE Science, 2019
- Har Gobind Khorana Best Scientist Award for Food Biotechnology, Bose Science Society in 2019.
- Distinguished Biotechnologist Award, VIRA 2019, Venus Foundation, Chennai
- Elected Fellow of Bose Science Society, Affiliated with Vigyan Prasar, DST, GoI
- Best Technology Transfer for the year 2016-2017, awarded by CSIR-CFTRI
- Microbiologist Award-2017, by SCIRE Science
- UNU-KIRIN fellow for the year 2014-2015, National Food Research Institute, Japan
- Elected Fellow of Society for Applied Biotechnology - 2012
- Significant work in extraction bioactives from spice, plantation crops, valorization of byproducts and application of Nutraceutical/functional molecules in food models and assessment of microbial food safety
- Guided several Ph.D. students, has many publications, contributed to patents and grant-in projects

Dr. R. Nandini Devi

Senior Principal Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

nr.devi@ncl.res.in

Broad Area of Research Work

Heterogeneous Catalysis

Major Achievements & Contributions

- Contributed to materials discovery for sustainability and pollution mitigation
- Significant contribution in encapsulation of metal nanoparticles within mesoporous silica and ultra small metal nanoclusters encapsulated within silica nanospheres for bio-imaging and bacterial detection
- Development of noble metal incorporated structured oxides for water gas shift reaction for hydrogen production, dense ceramic membranes for oxygen enrichment in coal combustion processes and photocatalytic water splitting
- Solar energy utilization and electrochemistry for energy devices and electrochemical conversion to value added chemicals
- Guided several students and published many papers

Dr. R. Sarada

Chief Scientist

CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

sarada_ravi@yahoo.com

Broad Area of Research Work

Algal Biotechnology (Food Science and Biotechnology)

Major Achievements & Contributions

- CFTRI Foundation Day Award for the Best Research Publication in basic sciences for the year 2021-22.
- CFTRI Foundation Day Award for the Best Research Publication in applied sciences for the year 2018-19.
- Third Best Technology Prize for the technology of Nutrachikki with added Spirulina Technology Day event organized by the Institute in 2017
- Programme monitoring member for BCIL-DBT sponsored project under SBIRI Scheme 2009-2011
- CFTRI Foundation Day Award for best paper published in basic sciences for the year 2008
- Member National Academy of Sciences, India (Allahabad) 2007
- CFTRI Foundation Day Award for best individual scientific and technical contributions for the year 2004..
- R&D pursued in the area of algal biotechnology and utilization of microalgae as a source of food and nutraceutical supplement for the benefit to society and industries
- Contributed for more than 15 patents and several technology transfers. Also, led numerous grant-in projects and published more than 100 papers

Dr. Rakhi R. B.

Principal Scientist

CSIR – National Institute for Interdisciplinary Science & Technology (CSIR-NIIST),Thiruvananthapuram

rakhiraghavanbaby@niist.res.in

Broad Area of Research Work

Applied Physics-Nanotechnology

Major Achievements & Contributions

- UGC-FRP Assistant Professorship, UGC, Govt. of India, 2017
- Ramanujan Fellowship from SERB-DST Govt. of India in 2015
- SABIC International Post-doctoral Fellowship Award for 2012 and 2013
- Prof. A. L. Laskar Award for the best Ph.D. thesis in Physics from IIT Madras, 2009
- Significant contribution in the area of electrochemical energy storage devices
- Published more than 75 highly-cited research papers
- Ccurrent research interests include functional nanomaterials, nanocomposites, layered materials (Transition Metal Dichalcogenides and MXenes), nanotechnology-enabled energy storage devices, electrocatalysis, and electrochemical sensors

Dr. Revathy Baskaran

Senior Principal Scientist

CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

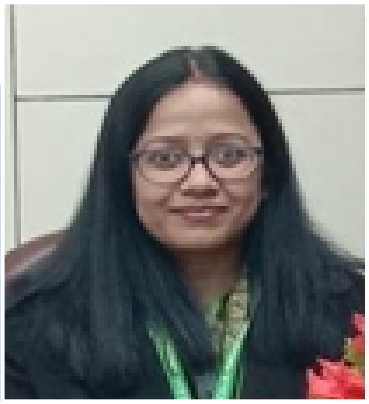
revbas@cftri.res.in

Broad Area of Research Work

Post Harvest Technology and Processing of Fruits and Vegetables

Major Achievements & Contributions

- Extensive work on characterization of fruit pigments, ripening chemistry and value addition has lead to number of publications, product development and process technologies
- Intensive research conducted on around 30 vegetables led to several publications, patents and technology transfers
- Significant work on Extension of storage life of cut fruits and vegetables fall under consumer's preference and food of convenience, with great potential for marketing
- Biopreservation of sugarcane chunks is a chemical free technology, transferred to Industry.
- Protocol developed on storage and transportation, was transferred to the Vietnam collaborators successfully
- Basic research on mango carotenoids, ripening chemistry of wood apple, west-indian cherry and chemistry of processing pear have lead to publications and processes



Dr. Richa Rai

Senior Scientist

CSIR – National Botanical Research Institute (CSIR-NBRI), Lucknow

richa.rai@nbri.res.in

Broad Area of Research Work

Climate Change and Urban Air Pollution

Major Achievements & Contributions

- "Environmentalist of the Year Award 2022" by National Environmental Science Academy (NESA)
- "Max Planck-India mobility" Award jointly funded by Max Planck Group, Germany and Department of Science and Technology, New Delhi (2014- 2018)
- Notable contributions are in the field of eco-physiological responses of agricultural crops (wheat, rice, legumes, and millets) and trees under climate change using air exclusion techniques like Free Air CO2/O3 concentration enrichment, Free Air Temperature Enrichment (FATE) and open top chambers (OTCs)
- Conducted first of its kind study on "Crop loss assessment under ambient air pollution around Varanasi" using air exclusion techniques (OTCs) in India focusing assessment of agricultural yield losses due to tropospheric O3 in rural areas

Dr. Rina Sharma

Chief Scientist

CSIR-National Physical laboratory (CSIR-NPL),
New Delhi
rina@nplindia.org, sharma.rina1@gmail.com

Broad Area of Research Work

Laser Physics, Optoelectronics, Length, Dimension and Nano-metrology

Major Achievements & Contributions

- CSIR Young Scientist Award in Physics 1995
- Recipient of BOYSCAST Fellowship for working at PTB, Germany
- Chair BIS Sectional Committee PGD 25
- Lead assessor and Faculty for ISO IEC 17025, ISO IEC 17043 and Evaluator ISO 17011
- Evaluator for Asia Pacific Accreditation cooperation (MRA) since 2005
- Coordinated SAARCPTB project on the development of metrology infrastructure in SAARC region
- Establishment of Iodine stabilized He Ne Laser- The primary standard and other facilities for realization of SI Unit Metre and its dissemination
- Significant contribution in establishing 47 Calibration Measurement Capability (CMCs)
- Generic Development of Nano-metrology for Nanotechnology for the first time in India
- Development of Indian standards related to dimension measuring Devices/ instrument
- Engagement in Capacity Building and Human Resource Development in metrology and accreditation since 1996
- Coordinated a large number of training programmes, initiated a course under integrated skill development programme of CSIR in 2017 on Precision Measurement and Quality Control. It started as certificate course and now runs as PG Diploma under aegis of AcSIR at CSIR NPL
- Science-Society connect: promotion of Gender Sensitization , Skill Development and Jigyasa Programmes and Convenor of Indian Woman Scientist Association (IWSA)-Delhi Branch

Dr. Ritu Srivastava

Senior Principal Scientist

CSIR – National Physical Laboratory (CSIR-NPL),
New Delhi
ritu@nplindia.org

Broad Area of Research Work

Organic/Inorganic Optoelectronics Devices and Luminescent Security Ink Pigments

Major Achievements & Contributions (Awards/ Honors)

- 5th VENUS INTERNATIONAL RESEARCH AWARDS – VIRA 2019
- Development and Maintenance of organic semiconductor laboratory
- Significant contribution in R&D in the area of development of novel inorganic/organic/perovskite materials, nano and 2D materials, and its application in fabrication of optoelectronics devices like organic light emitting diodes, photovoltaic cells, organic thin film transistors and organic light emitting transistors and luminescent security ink pigments
- Guided several research students, contributed to many know-how transfers, national and international patents
- Led several activities such as Chairman of NPLONE program of CSIR-NPL, President of NPL Colony RWA
- Led numerours grant-in projects and published more than 150 papers and many book chapters

Dr. Saman Habib

Chief Scientist

CSIR – Central Drug Research Institute (CSIR-CDRI), Lucknow

saman_habib@cdri.res.in

Broad Area of Research Work

Infectious Disease Biology, Malaria and Population Genetics

Major Achievements & Contributions

- JC Bose National Fellow (2021-2026)
- Elected Fellow, Indian National Science Academy, New Delhi (from 2021)
- Elected Fellow, Indian Academy of Sciences, Bangalore (from 2016)
- Elected Fellow, The National Academy of Sciences India, Allahabad (from 2015)
- National Women Bioscientist Award (Young category), Department of Biotechnology, Govt. of India (2012)
- CSIR Young Scientist Award, CSIR (2001)
- INSA Young Scientist Medal and Award (1996)
- L. S. S. Kumar Award of the Indian National Science Academy (1996)
- Contributions to malaria biology add significantlyto the understanding of host-pathogen interaction in the context of vulnerable Indian populations

Dr. Sandhya Mishra

Emeritus Scientist

CSIR – Central Salt & Marine Chemicals Research Institute
(CSIR-CSMCRI), Bhavnagar
smishra@csmcri.org

Broad Area of Research Work

Marine Microbiology/ Microalgal Biotechnology

Major Achievements & Contributions

- Recipient of 2nd CIPET National Award for Technology Innovation in Green Polymeric Materials & Products (Govt. of India), 2011
- Recipient of Dr. Vikram Sarabhai Award, 2005
- Significant contribution in Bioprospecting of marine ecosystem for various potential applications with integrated approach to greener environment for the human health
- Developed biodiesel from naturally occurring marine microalgal mats and microalgae cultured in open saltpans through efficient upstream and downstream processing
- Demonstrated, for the first time, utilization of microalgal based biodiesel for running the unmodified vehicle in India
- Guided dissertation students to proliferate the knowledge and skills

Dr. Sangeeta Sahoo

Senior Principal Scientist

CSIR-National Physical Laboratory (CSIR-NPL),
New Delhi
sahoos@nplindia.org

Broad Area of Research Work

Condensed Matter Physics and Quantum Electrical Metrology

Major Achievements & Contributions

- Member of the BIS panel "LITDC/P 5 Quantum Computing" (from 2015)
- Bronze medal from 26th Army Science Conference at Orlando, Fl, USA in 2008
- Leading the Quantum metrological activities on the establishment of the electrical standard of current in the country
- Development of new synthesis process to grow ternary nitride and silicide-based nano and microcrystals for photon sensing applications
- Significant contribution in the development of carbon nanotube-based biosensor for biomedical applications and in first experimental demonstration of magnetic doping induced quantum phase slip process in superconducting films
- Major contribution for the development of a successful generic synthesis protocol to fabricate transition metal nitride based disordered superconducting thin films for the use in QPS and other nano-photonics related applications (e.g. SNSPD)
- Major contribution to the successful fabrication and demonstration of disorder-tuned phase slip effects and quantum phase transitions in ultra-thin disordered superconducting TiN films and patterned structures
- Guided several research students and published number of papers in high-impact factor journals

Dr. Sarika Maitra Bhattacharyya

Senior Principal Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

mb.sarika@ncl.res.in

Broad Area of Research Work

Soft Condensed Matter

Major Achievements & Contributions

- SERB- POWER Fellowship 2021
- DST Young Scientist Project Grant 2009
- CSIR research fellowship in Physics 1994
- Significant contribution in the area of time dependent statistical mechanical theories with long range and microscopic interactions, dynamics in supercooled liquid regime, interplay between diffusion and activated motion, interaction potential and its effect on the dynamics, thermodynamics and dynamics in glassy system etc
- Contributing at the international level in the supercooled liquid community and published many research papers

National Chemical Laboratory

Dr. Sarmishtha Palit Sagar

Chief Scientist

CSIR – National Metallurgical Laboratory (CSIR-NML),
Jamshedpur
sarmi@nmlindia.org

Broad Area of Research Work

Sensors and Devices for Process Monitoring in Steel Industry

Major Achievements & Contributions

- Recipient of Tata InnoVistaAward 2022 in the "Most Innovative Partner" Category
- Scientific Advisory Committee member of European project under Horizon 2020
- Recipient of National NDT Award for International Recognition, 2017
- Recipient of Lady Engineer Award, 2012
- Recipient of Raman Research Fellowship of CSIR, 2008
- Recipient of National NDT award in R&D, 2005
- Development of unprecedented technology for breakout prevention in an industrial billet caster
- Development of sensing device for defect detection and classification of wires drawn at high speed, technology has been transferred to a MSME company
- Technology development for measuring fluid flow rate through a narrow tube which is being explored for on-board life assessment of Indian spacecraft

Dr. Sharda V. Joshi

Senior Principal Scientist

CSIR – Central Salt and Marine Chemicals Research Institute
(CSIR-CSMCRI), Bhavnagar
nirav2014in@gmail.com

Broad Area of Research Work

Water Desalination, Reverse Osmosis Membrane Technology

Major Achievements & Contributions

- Gujarat Government Award 2005
- CSIR Technology Award 2004
- DAAD Fellowship
- Significant contribution in water purification technologies
- Worked on the development of different types of membranes like Cellulose Acetate(CA-CTA) membrane, polyamide and polysulfone membrane and Ultrafiltration (UF) membrane for various applications and water desalination
- Expertise in the characterisations of different membranes by determining Pure Water Permeability (PWP) , Reverse osmosis (RO) and UF
- Another area of contribution was development of Thin Film Composite membrane (TFC) for getting maximum pure water and high salt rejection
- Worked on Installing RO plants in various parts of India and provided guidance for preparing mobile water purification plants which are useful during natural calamities

Dr. Sheela K. Ramasesha

Senior Principal Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL), Bengaluru

sheela.ramasesha@gmail.com

Broad Area of Research Work

Materials Science

Major Achievements & Contributions

- Kamala Sohonie Memorial Award given by Indian Chemical Society, 2021
- Member of the Executive Council of Plaksha Centre for Clean Energy, 2020
- Ecomagination champion award at GE, 2007
- Materials Research Society of India (MRSI) medal for 2001
- C.V. Raman Young Scientist Award for 1999 awarded by the KSCST
- Featured in "Lilavati's Daughters" brought out by The Indian Academy of Sciences. for highlighting successful woman professionals in science
- UNESCO certificate of Recognition (1990)
- Published more than 100 papers in peer reviewed journals and many international patents
- Designed and installed a 20 kWp solar photovoltaic system on the roof-top of IISc library
- Developed low-cost fabrication of semi-transparent inorganic solar cells for use as windowpane and skylight coatings

CSIR-NAL

Dr. Shilpi Kushwaha

Scientist

CSIR – Central Salt & Marine Chemicals Research Institute
(CSIR-CSMCRI), Bhavnagar
shilpik@csmcri.res.in

Broad Area of Research Work

Chemical Sciences

Major Achievements & Contributions

- CSIR-Young Scientist Award 2021
- OLF Award from CIES, USA 2014
- Fulbright Post-Doctoral Fellowship 2013-14
- Significant contribution in the innovative research on the extraction of Uranium from secondary sources such as seawater and acidic effluents using crystalline thin films and polymer nanorings
- Expertise in the area of materials design, functionalization of polymers, supra-molecules, nanomaterials, spectroscopic techniquesm surface chemistry etc.
- Research focus on extraction of Uranium from natural sources i.e., seawater; and Uranium recovery from anthropogenic sources i.e., mine tailings, synthetic nuclear effluents, and contaminated water
- Worked on function specific materials design, synthesis, characterization and investigation of secondary interactions led molecular and supra-molecular self-assemblies
- Published several research papers in reputed journals and conferences

Dr. Shobhana Dey

Senior Principal Scientist

CSIR – National Metallurgical Laboratory (CSIR-NML),
Jamshedpur
sd@nmlindia.org

Broad Area of Research Work

Mineral and Coal Processing, Surface Chemistry

Major Achievements & Contributions

- Recipient of MEAI - NMDC Award for 2020
- NML Best In-house Project 2008
- National Research Foundation (NRF) fellowship provided by South Africa Government in 2008
- Developed dry processing technology for high ash non-coking coal for thermal power plants and DRI application
- Developed process flow sheets for low-grade waste dumped limestone, high siliceous limestone for reducing flux grade material and cement making, respectively
- Expertise in the area of dry beneficiation of low-grade iron ores and coal, development of process flow sheet for industrial minerals, froth flotation, fluid dynamics and enhanced gravity separation etc.
- Significant contribution in R&D studies for producing value-added product from lean grade ores, waste mines dumped and plant reject to conserve the primary resources and protect the environment.

Dr. Shubha V.

Distinguished Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL), Bangaluru

vshubha_nal@rediffmail.com, vshubhanal@gmail.com

Broad Area of Research Work

Airport &Thermophysical Instrumentation, Materials Science, High Pressure Science

Major Achievements & Contributions

- CSIR Platinum Jubilee Technology Innovation Award 2016
- First Make in India Award 2015
- NRDC Award 2014
- IETE Award 2013
- IESA Technovation Award - 2013
- Significant contribution in the development of Drishti and Aviation weather Monitoring Systems for safe Airport operations. Many of these are deployed in India
- Contributed in the development of indigenous technology for thermophysical characterization of materials at high pressures and temperatures
- Study of Rare earth Materials, Semiconductors and Alloys at High Pressures and Temperatures.
- Major area of work was focused on thermoelectric materials for renewable energy sector, development of Infrared detector materials and sensors, piezo electric materials and coatings for Structural Health Monitoring and MEMS
- Aided in many technology transfers and contributed to several patents and copyrights
- Guided many research students and published more than 90 papers

Dr. Shubhangi B. Umbarkar

Senior Principal Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

sb.umbarkar@ncl.res.in

Broad Area of Research Work

Chemical Science, Catalysis

Major Achievements & Contributions

- Featured in the 2nd ed.of'She Is: 75 women in STEAM in India' by Office of the Principal Scientific Advisor to GoI& the British High Commission New Delhi in 2022
- Significant contribution for clean environment by development of eco-friendly immersion of POP idols and helped Pune Municipal Corporation and Civic bodies of several other cities for implementation of the same in 2016
- National Award (gold medal) for technology "Titanium based wonder gel for environmental applications" in "India Innovation programme 2010" organized by DST, FICCI & IC2 Institute of Texas in 2010
- Awarded DAAD (German Academic Exchange Service) fellowship -1998
- Guided several research students, ungraduated and post graduate students
- Contributed to more than 75 research papers and several patents
- Research presently focused on agricultural waste to wealth

National Chemical Laboratory

Dr. Shylaja M. Dharmesh

Senior Principal Scientist

CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

shylaakshum@yahoo.co.uk

Broad Area of Research Work

Food Science, Technology and Nutraceuticals

Major Achievements & Contributions

- Bestowed with Fellow of National Academy of Biological Sciences, 2018
- Received life time achievement Award from Vinus International, 2016
- Award for Best Scientific Contributions from CSIR-CFTRI, 2016
- Elected Fellow of National Academy of Agricultural Sciences, January 2014
- LaljeeGudhoo Smarak Nidhi Award during December 2012 from Association of Food Scientists and Technologists
- Best Technology Transfer Award for the transfer of technology of debittered sweet orange juice, 2011
- Elected Member of National Academy of Sciences, NASI, Allahabad, INDIA, 2009
- Silver medal as one of the 2000 outstanding scientists in the world by International Biographic Centre, Cambridge, U.K. 2009
- Awarded with Best Scientist CFTRI Award in 2008
- Led several grant-in projects from DBT, DST, CSIR and DAE
- Contributed to numerous publications and patents

Dr. Siksha Swaroopa Kar

Principal Scientist

CSIR – Central Road Research Institute (CSIR-CRRI),
New Delhi
siksha.crri@nic.in

Broad Area of Research Work

Pavement Engineering, Highway Construction Materials, Green Construction Technologies

Major Achievements & Contributions

- Vishwakarma Awards 2022 (Medal with Certificate) for outstanding contribution in development of Construction Industry by Construction Industry Development Council
- Fellowship by Earthwatch Institute Collaboration with Green Highways, NHAI (July 2019 –December2020)
- SKOCH Award 2019 (Silver Category) for Execution of Project on "Rehabilitation of National Highway by Recycling Asphalt Pavement"
- CSIR-Technology Award 2017 for the topic "Sustainable Cold Mix Technology for Construction and Maintenance of Roads"
- SKOCH Order-of-Merit Award 2015 for the project "Development of Application of Technology for Sustainable Transport SUSTRANS"
- Development and dissemination of sustainable technologies such as environmental friendly construction practices and use of locally available and waste materials
- Significant contribution in the indigenous development of "Pothole Repair Machine" and "Mobile Cold Mixer cum Paver' for construction and maintenance of highways using green technology as well as "Cold bituminous mix technology and reclamation of old distressed road pavements by recycling"

Dr. Smitha Gopinath

Principal Scientist

CSIR – Structural Engineering Research Centre (CSIR-SERC), Chennai

smithag@serc.res.in

Broad Area of Research Work

Building Materials and Technologies

Major Achievements & Contributions

- Recipient of ICI Young Scientist Award, 2016
- Recipient of L&T Dr. A. Ramakrishna Young Engineer Award, 2012
- "India's Most Inspiring Women Scientist/Engineer" in 2014 by the Institution of Engineers
- Path Finder 2014 by Project Monitor Economic Research India Pvt. Ltd
- Textile Reinforced Concrete Prototyping (TRCPT) among Top 100 Indian Innovations recognized by Indian Innovators Association, 2022
- Significant contribution in research and development of innovative technological solutions and cost-effective practices with Textile Reinforced Concrete (TRC)
- Significant contributions also include work on "form finding TRC" for structural and durability demands, methodologies to improve the TRC textile efficiency, a unified TRC design framework, non-iterative mathematical models and a "remolding-free" fabrication technology

Dr. Sourja Ghosh

Senior Principal Scientist

CSIR-Central Glass and Ceramic Research Institute (CSIR-CGCRI), Kolkata

sourja@cgcri.res.in

Broad Area of Research Work

Membrane and Separation Technology

Major Achievements & Contributions

- Best Patent filed for the year 2022 at CSIR-CGCRI
- Malaviya Award –2022 by the Indian Ceramic Society
- Contributed significantly in development of novel separation processes for treatment and recycling of various types of industrial wastewater with toxic contaminants, emerging compounds remediation by green processes, waste to wealth objectives, assessment of environmental impact and toxic sludge management
- Research contribution involves ceramic membranes development of various pore sizes and surface characteristics and application in separation processes, membrane bioreactor and membrane integrated photobioreactor process for algal biomass and biofuel generation using waste resources, membrane contactor for CO^2 sequestration
- Guided several research students and published many papers

Dr. Srabanti Ghosh

Senior Scientist

CSIR-Central Glass and Ceramic Research Institute (CSIR-CGCRI), Kolkata

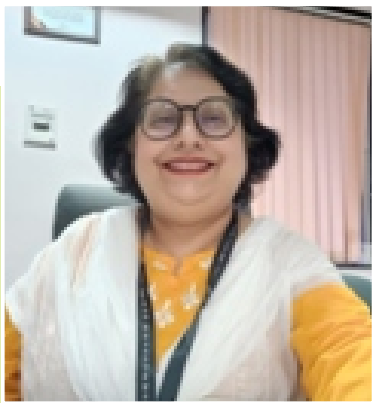
srabanti@cgcri.res.in

Broad Area of Research Work

Energy Materials & Devices

Major Achievements & Contributions

- Received MRSI Young Scientists Award in Young Scientists Colloquium 2012 organized by Material Research Society of India
- Recipient of Young Investigator Award (2014) in Gordon Radiation Chemistry, USA
- Energy Talent Cofund Marie Curie Fellowship, 2019 Universidad De Alcala, Spain.
- Significant contributions includethe application of conjugated polymer nanostructures against drug resistant bacteria
- Fabrication of hybrid materials based on conducting polymer and graphene for water purification, fuel cells and solar light harvesting applications
- Research contributions in sensor and nanoformulated polymer conjugated anti-cancer drug and antibacterial therapeutics, cancer biomarker
- Guided several research students and published many papers
- Investigating the low temperature fuel cells as well as conducting polymers



Dr. Subarna Maiti

Senior Principal Scientist

CSIR – Central Salt & Marine Chemicals Research Institute
(CSIR-CSMCRI), Bhavnagar
smaiti@csmcri.res.in

Broad Area of Research Work

Renewable Energy

Major Achievements & Contributions

- CSIR Technology Award for Innovation 2019
- NRDC National Innovation Award 2019
- Young Scientist Award, Engineering Sciences, 91st ISCA Chandigarh 2004
- Major research focus on developing solar thermal gadgets directly utilized in rural or unorganized sectors
- R & D work on various thermochemical pathways like air/steam gasification and slow pyrolysis to produce value added materials from carbonaceous wastes through a bio-refinery approach
- Guided several M.Sc. and Ph.D students

Dr. Sudha Mahadevan

Chief Scientist

CSIR – National Aerospace Laboratories (CSIR-NAL), Bengaluru

cuscuta@gmail.com

Broad Area of Research Work

Chemistry, Chalcogenide Glasses

Major Achievements & Contributions

- Significant contribution in the area of materials chemistry, specifically in chalcogenide glasses
- Investigated about 12 chalcogenide glass systems with different for material characterization viz., Physical, Electrical, Mechanical and Thermal properties
- Designed and developed a novel and unique sample holder for the Thermal Dilatometer, technology transferred to HAROPP Laboratory, USA
- Developed an analysis method named 'Mahadevan Plot' for DSC thermograms being used in Polymer Science
- Published 72 papers in international &national Journals and technical documents

CSIR-NAL

Dr. Sumana Ghosh (Das)

Senior Principal Scientist

CSIR-Central Glass and Ceramic Research Institute (CSIR-CGCRI), Kolkata

sumana@cgcri.res.in

Broad Area of Research Work

Coating, Joining and Microwave Processing of Materials (Bio-ceramics & Coatings)

Major Achievements & Contributions

- Recipient of 'Distinguished Researcher in Materials' award in Engineering field by Venus International Foundation, Chennai, India in 2022
- Received Lifetime Achievement Award by Marquis Who's Who in Science and Engineering in 2019
- Receipient of 'Best Researchers Award' by NESIN (Science father) in 2020 in the field of Materials Science (sub field- glass and ceramics)
- Contributions towards development and utilization of glass, ceramic and glass-ceramic coatingsto suit specific end-use requirement and provide protection against oxidation, abrasion, corrosion and hot corrosion
- Contributed to the preparation of suitable glass frits for application in MIG series aero-engine parts
- Guided several research students and contributed to many patents and publications

Dr T. R. Shamala

Chief Scientist

CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru

shamala_trs@yahoo.co.uk

Broad Area of Research Work

Food Microbiology and Fermentation

Major Achievements & Contributions

- Carl Duisberg Gesellschaft Fellow, West Germany, 1976
- Extensive work on microbial conversions with reference to isolation, characterization and maintenance of microorganisms, microbial polysaccharides, alcoholic beverages, fungal metabolites
- Significant work on commercially important microbial enzymes production by solid/liquid state fermentation; downstream processing and applications
- Led translational research in the area of biopolymer, bioplastic and bioenergy molecules
- Published several papers, more than 17 patents and led many grant-in projects

Dr. Tanvi Arora

Senior Scientist

CSIR – National Geophysical Research Institute (CSIR-NGRI), Hyderabad

tanvi@ngri.res.in

Broad Area of Research Work

Hydro-Geophysics

Major Achievements & Contributions

- Craig J. Beasley Award for Social Contribution by the Society of Exploration Geophysicist (SEG) 2021
- Nominated to UNESCO-IGCP Scientific Board (2020 -2024)
- AMITY Young Researcher Award in the field of Geophysics for social contribution 2019
- Significant contribution in the area of development of geoelectrical methods and application of these methods to a variety of problems including the contamination of aquifers, time lapse measurements for effective recharge, critical zone science, vadose zone properties, lithological characterization
- Contributing to several grant-in aid projects of societal relevance

Dr. V. Saraswathy

Chief Scientist

CSIR – Central Electrochemical Research Institute (CSIR-CECRI), Karaikudi

vsaracorr@cecri.res.in

Broad Area of Research Work

Corrosion Science and Engineering, Materials Protection

Major Achievements & Contributions

- Distinguished Women Researcher in Corrosion Materials, Venus International Foundation, Chennai in 2023
- NACE Corrosion Excellence Award in 2018
- CIDC Vishwakarma Award (Outstanding Scientist) in 2016 & 2010
- VIRA International Award for outstanding contribution in science in 2017
- Raman Research Fellowship – University of California, Irvine, USA in 2011
- NACE corrosion Excellence Award in 2011
- IIFS Bharat Jyoti Award in 2010
- CECRI Young Scientist Award (in 2002, 2004 & 2005)
- Completed many prestigious and challenging projects for various private/public/strategic sectors.
- Guided several research students and published many papers

Dr. Vetrivel V. Anguselvi

Senior Principal Scientist

CSIR – Central Institute of Mining & Fuel Research (CSIR-CIMFR), Dhanbad

vaselvi@yahoo.com

Broad Area of Research Work

Renewable Energy

Major Achievements & Contributions

- Women Pride Award DainikBhaskar 2022
- Best Women Researcher in Biotechnology Award GISR 2022
- Dr. M G Krishna Award; Highest number of copyright 2019 and 2020
- BK Mazumdar Award; Highest strategic sector project 2019
- Aparajitha Award PrabhatKhabar 2016
- BPA Merit Award by Academy of Environmental Biology, Lucknow 2003
- World Food Day Award 99 IIT, Kharagpur 1999
- Led more than 15 R & D projects funded from DBT, DST, CPRI, GAIL etc
- Developed 19 process and technology in renewable energy & biotechnoology and translated at GAIL (India) Ltd and for societal upliftment
- Significant contribution in novel invention such as Sustainable tree model, art craft and jewellary from coal helped upliftment of rural women
- Published several research papers and guided several students

Dr. Vidhu A. Sane

Chief Scientist

CSIR – National Botanical Research Institute (CSIR-NBRI), Lucknow

va.sane@nbri.res.in

Broad Area of Research Work

Plant Molecular Biology

Major Achievements & Contributions

- First women chief scientist in the history of CSIR-NBRI (2020)
- Successfully convened International Plant Physiology conference in India (IPPC-2018)
- Developed the first Dashehari and Banganpalli mango transcriptomes (2016)
-
- Developed First insect-resistant transgenic tobacco in India (1997) expressing plant-based cowpea trypsin inhibitor
- Developed the first insect-resistant transgenic tobacco in India (1997) expressing plant-based cowpea trypsin inhibitor and the first transgenic tomato in India showing delayed ripening/fruit deterioration using the banana MaACO gene
- Isolation of key root-specific transcription factors/regulatory genes controlling root development in tomato
- Successfully developed and field-tested CRISPR lines of tomato for improved root and aerial growth.
- Demonstrated cotton GhNAC2 as a gene providing drought tolerance as well as better growth and yield under unstressed conditions in transgenic cotton
- Guided several research students and published many papers

Dr. Vidya Shrikant Gupta

Chief Scientist

CSIR – National Chemical Laboratory (CSIR-NCL), Pune

vidyagene@gmail.com

Broad Area of Research Work

Plant Biochemistry and Molecular Biology

Major Achievements & Contributions

- Mai Sawarkar Puraskar for outstanding research work 2015 by Rani Laxmibai Mandal, Pune
- Late Smt. Pushpalata Ranade National Woman Award for Research in 2015
- NCL Best Scientist of the Year Award 2012
- Distinguished Women Scientist Award of International Society of Science and Technology, Mumbai 2012
- CSIR Award for S & T Innovations in Rural Development CAIRD
- Elected Fellow of National Academy of Agricultural Sciences, New Delhi (NAAS, India) since January 1, 2008
- Elected Fellow of Maharashtra Academy of Sciences since 2008
- Raman Research Fellow of CSIR, India
- Significant contribution in the area of plant biochemistry, molecular biology and biotechnology

Dr. Vijayalakshmi Asthana

Principal Scientist

CSIR – Traditional Knowledge Digital Library (CSIR-TKDL),
New Delhi
viji@csir.res.in

Broad Area of Research Work

Protection of Traditional Knowledge from Misappropriation, Intellectual Property Rights

Major Achievements & Contributions

- Experience, expertise and interest in traditional knowledge (TK), especially from the points of preservation, protection and promotion, and IPR associated with TK and genetic resources
- Major contribution in the digitization and protection of Indian traditional knowledge related to Indian Systems of Medicine (ISM) on Ayurveda, Siddha, Unani, and Sowa rigpa, and Yoga
- Coordinating and managing project activities at 7 locations including Delhi
- Creation and maintenance of TKDL website
- Coordinating with patent offices for access agreements, trainings etc
- Represent CSIR-TKDL at international forums like WIPO negotiations in PCT Min-Doc Task Force, Intergovernmental Committee for IP and GRTKF, etc

Annexure: Women at CSIR-NPL

Women presently serving at CSIR-NPL in various cadres

S. No.	Name	Designation
1	Abha Shukla	Technical Assistant
2	Anamika	Technician II
3	Anita Sharma	Senior Technical Officer II
4	Anjali Sharma	Senior Principal Scientist
5	Anjana Dogra	Senior Principal Scientist
6	Anju Manral	Senior Technical Officer I
7	Anuradha Sengar	Senior Principal Scientist
8	Archana Puri	Senior Technician II
9	Archana Sahu	Senior Technical Officer II
10	Ashmeet Kaur Uppal	Senior Technician II
11	Avni Khatkar	Scientist
12	Chitra Gautam	Principal Scientist
13	Daya Soni	Principal Scientist
14	Dibya Dolridge Toppo	Senior Technical Officer I
15	Divya Singh Yadav	Scientist
16	Ezhilselvi Varathan	Principal Scientist
17	Gajjala Sumana	Senior Principal Scientist
18	Ganga Saxena	Assistant Section Officer
19	Geeta	Multi Tasking Staff
20	Geeta	Senior Secretariat Assistant
21	Geetanjali Calley	Technical Officer
22	Girija Moona	Principal Scientist
23	Gurmeet Kaur	Finance and Accounts Officer
24	Harjinder Kaur	Assistant Section Officer
25	Hemavathi A	Scientist
26	Janki Bisht	Multi Tasking Staff
27	Jaya Devi	Multi Tasking Staff
28	Jyoti Chauhan	Technical Officer
29	Jyoti Pokhariyal	Senior Technical Officer I
30	Jyotsana Mandal	Senior Technical Officer I
31	Kalpana Lodhi	Technical Officer
32	Kiran Saroha	Assistant Section Officer
33	Komal Bapna	Scientist
34	Kriti Tyagi	Senior Scientist
35	Kusum Rani	Personal Secretary
36	Lalita Sethi	Personal Secretary
37	Madhvi Sharma	Senior Secretariat Assistant
38	Malti Devi	Multi Tasking Staff

39	Mamta	Multi Tasking Staff
40	Mandeep Kaur	Senior Technical Officer I
41	Manno Devi	Multi Tasking Staff
42	Megha Singh	Scientist
43	Monika Jain Kulshreshtha	Senior Principal Scientist
44	Neema Nayal	Assistant Section Officer
45	Neetu Chandra	Senior Technical Officer II
46	Nidhi Singh	Senior Principal Scientist
47	Nita Dilawar Sharma	Chief Scientist
48	Pallavi Kushwaha	Senior Scientist
49	Paramita Guha	Senior Scientist
50	Pinki	Senior Secretariat Assistant
51	Pooja Singh	Senior Secretariat Assistant
52	Poonam	Assistant Section Officer
53	Poonam Arora	Senior Principal Scientist
54	Poonam Sethi Bisht	Senior Technical Officer II
55	Poonam Wati	Multi Tasking Staff
56	Prabha Sharma	Assistant Section Officer
57	Pranalee Premdas Thorat	Principal Scientist
58	Preeti Kandpal Joshi	Technical Officer
59	Preeti Shrivastava	Technical Officer
60	Priyanka Heda Maheshwari	Principal Scientist
61	Priyanka Jain	Senior Principal Scientist
62	Priyansha Bhomia	Assistant Section Officer
63	Radha Devi	Multi Tasking Staff
64	Raj Kali	Multi Tasking Staff
65	Ramrati	Multi Tasking Staff
66	Reena Kumari	Technical Officer
67	Rina Sharma	Chief Scientist
68	Ritu Srivastava	Senior Principal Scientist
69	Sadhna Negi	Multi Tasking Staff
70	Sandhya Malikar Patel	Principal Scientist
71	Sangeeta Sahoo	Senior Principal Scientist
72	Sangeeta Sharma	Section Officer
73	Sanju Tyagi	Senior Technician I
74	Santosh Singh	Senior Principal Scientist
75	Santwana Pati	Scientist
76	Sarita Bhardwaj	Senior Secretariat Assistant
77	Saroj Kumari	Principal Scientist
78	Shakuntala Devi	Multi Tasking Staff
79	Shalini Daniel	Senior Technician I
80	Shama Parveen	Multi Tasking Staff

81	Shaveta Sharma Sharda	Senior Technical Officer I
82	Smriti Tiwari Singh	Senior Technical Officer I
83	Sonia Rathor	Senior Secretariat Assistant
84	Subha Laxmi	Senior Technical Officer I
85	Suchi Yadav	Technical Officer
86	Sudesh Arora	Assistant Section Officer
87	Sudesh Yadav	Scientist
88	Sunidhi Luthra	Technical Officer
89	Sunita Kureel	Principal Private Secretary
90	Sushree Swarupa Tripathy	Principal Scientist
91	Swati Kumari	Technical Officer
92	T. M. Parimalam	Assistant Section Officer
93	Usha Kiran	Senior Technical Officer II
94	Veena Jain	Senior Controller of Administration
95	Veena Khanna	Personal Secretary
96	Vidhyawati	Multi Tasking Staff
97	Vishesh	Senior Technical Officer II

Index

Index

Compilation Team

- Prof. Venugopal Achanta, Director, CSIR-National Physical Laboratory
- Dr. Ritu Srivastava, Senior Principal Scientist
- Dr. N. Vijayan, Senior Principal Scientist
- Dr. Poonam Arora, Senior Principal Scientist
- Dr. Daya Soni, Principal Scientist
- Dr. Abhishek Sharma, Principal Scientist
- Dr. Megha Singh, Scientist

The compilation team at CSIR-NPL acknowledges the contributions of all the women at CSIR laboratories who have worked/are working towards the advancement of science and technology in their respective rolesat CSIR. During the compilation of this compendium, inputs were sought from all the CSIR labs. All the received inputs have been compiled with utmost care. For the sake of uniformity, all individual profiles have been limited to one-page format. The compilation committee apologizes if any award/contribution is missed and for any other incidental mistake during this compilation effort.

Thanks to printing sponsor: ATOS India

To all the girls and women in STEM

"Nothing in life is to be feared. It is only to be understood. Now is the time to understand more, so that we may fear less." - **Marie Curie**

“Don't let anyone rob you of your imagination, your creativity, or your curiosity. It's your place in the world; it's your life. Go on and do all you can with it, and make it the life you want to live.” - **Mae Jemison**, first African American woman astronaut in space

"If you know you are on the right track, if you have this inner knowledge, then nobody can turn you off... no matter what they say." - **Barbara McClintock**, cytogeneticist and winner of the 1983 Nobel Prize in Physiology or Medicine

“What you do makes a difference, and you have to decide what kind of difference you want to make.” - **Jane Goodall**, Primatologist and Anthropologist

“All sorts of things can happen when you’re open to new ideas and playing around with things.” - **Stephanie Kwolek**, Chemist

"We especially need imagination in science. It is not all mathematics, nor all logic, but it is somewhat beauty and poetry." - **Maria Mitchell**, Astronomer

"Science is not a boy's game, it's not a girl's game. It's everyone's game. It's about where we are and where we're going." - **Nichelle Nichols**, former NASA Ambassador

“Life is not easy for any of us. But what of that? We must have perseverance and above all confidence in ourselves. We must believe that we are gifted for something, and that this thing, at whatever cost, must be attained.” - **Marie Curie**

CSIR-National Physical Laboratory

Dr. K. S. Krishnan Marg, New Delhi-110012, India
Website : www.nplindia.org