



INSIDE THIS ISSUE

1. CECRI - Page 4
2. CEERI - Page 5
3. CSIO - Page 7
4. NEERI - Page 10
5. NML - Page 12
6. Personnel News - Page 13



CSIR MADRAS COMPLEX
Council of Scientific & Industrial Research
Taramani, Chennai - 600113.

CSIR FOUNDATION DAY

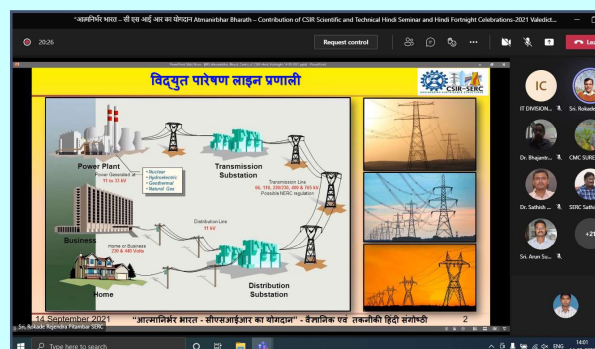
The CSIR foundation day 2021, was celebrated on 26th September 2021, at the CSIR Campus in Taramani, Chennai by CSIR Madras Complex (CMC) and CSIR-Structural Engineering Research Centre (CSIR-SERC). The foundation day function was held at 2:30 PM on MSTEAMS due to Covid pandemic and guidelines. Dr. N. Anandavalli, Director, CSIR-SERC and Coordinating Director, CMC presided over the function. Dr. R. Velraj, Vice Chancellor, Anna University was the Chief Guest and delivered the Foundation Day lecture on “Energy efficient buildings”. In view of the Covid guidelines, this year’s open day was conducted online. A virtual tour of the campus was hosted on the website covering all the R&D departments of both CSIR-SERC and CMC and the link was sent to all colleges, industries etc., along with Foundation Day poster.

HINDI FORTNIGHT CELEBRATION

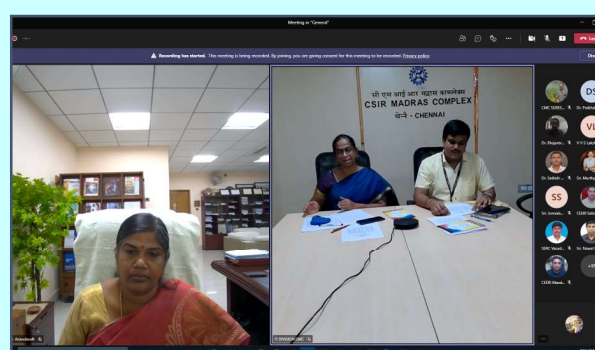
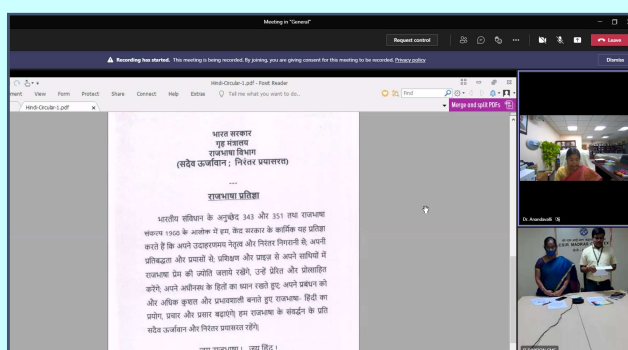
Hindi Fortnight was celebrated in the campus, jointly by CSIR Madras Complex and CSIR-SERC during 2.09.2021 to 14.09.2021. Various Competitions in Hindi was conducted during the week.



As part of the Hindi Fortnight Celebrations, a Scientific and Technical Seminar was organized on 14th Sep 2021 with the theme “Atmanirbhar Bharat- Contributions of CSIR”. Around 15 Scientists from CSIR-SERC, CSIR-CMC and CSIR-CLRI presented their R&D work related to the theme and the program was organized through MSTEAM.



The valedictory function was held on 14.9.2021 through MSTEAM. Dr. N. Anandavalli, Director, CSIR-SERC and Co-ordinating Director, CMC presided over the function. Smt. Vani Satyanarayana, Hindi Officer presented the report of Hindi Implementation, Shri. P. Suresh, Vice Chairman, OLIC gave a report on the Competitions.



VIGILANCE AWARENESS WEEK

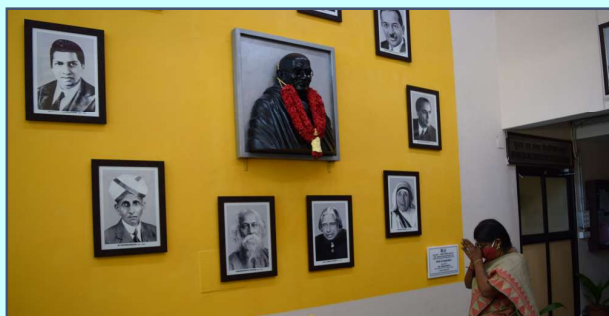
Vigilance Awareness Week was conducted in the campus during 26.10.2021 to 1.11.2021. The event began with the Pledge taking, workshop, lecture, invited talk, debate competitions among staff members. The valedictory function was organized on 1.11.2021. Dr. N. Anandavalli, Director, CSIR-SERC and Coordinating Director, CMC presided over the function and Dr. Michel Raj, DIG of Police, CBI Chennai was the Chief Guest and delivered the Valedictory address. The program was conducted through MSTEAM.



Vigilance Awareness Week Pledge

Gandhi Jayanthi as SHRAMDHAN DAY

Gandhi Jayanthi on 2nd Oct 2021 was observed as “SHRAMDHAN DAY” in the campus. Cleanliness drive and Swachhata Shapath (Pledge) was taken by all present and others through MS TEAM, administered by the Co-ordinating Director.



Floral Tribute to Mahatma Gandhi by the Coordinating Director



Floral Tribute to Mahatma Gandhi by the Coordinating Director



Swachhata pledge being administered Coordinating Director



Tree Planting



Cleanliness Drive



Cleanliness Drive

Technology Demonstrated

India's first indigenously developed and manufactured hydrogen fuel cell bus. CSIR Central Electrochemical Research Institute, Chennai Unit, developed the hydrogen fuel cell technology in collaboration with CSIR-NCL, CSIR-NPL and industry partner KPIT Technologies. Sentient Labs, an innovation lab incubated by KPIT Technologies, launched India's first indigenously developed and manufactured hydrogen fuel cell bus on 15 December 2021. This technology utilizes hydrogen and air to generate electricity, and has the potential to reduce dependence on petrol and diesel once introduced in markets.



Fuel cell and Battery Integrated Vehicle

Research and Development Efforts

- Numerical investigation was carried out to understand the improved reactant mass transport with depth-dependent flow fields in polymer electrolyte fuel cell under inhomogeneous gas diffusion layer compression.

Academic visits and talks

- Dr. Santosh D. Bhat delivered an invited talk on “polymer electrolyte fuel cells for stationary and automobile applications” in National Science teachers congress organized by Jigyasa as part of IISF 2020 on December 16th 2020.
- Dr. R. Madhan, Director of Indo-German Science and Technology Centre (IGSTC), visited CECRI-Chennai unit on 29 September 2021 to review the on-going Indo-German bilateral project entitled “Advanced Lithium Ion Transporting Solid Electrolytes for Solid-State Lithium Batteries (SELBA)”. The Director, IGSTC, discussed the progress and the future prospects with the project team.
- Dr. A. S. Prakash delivered a talk during the International Virtual Conference on Recent Advances in Lithium-ion Batteries (LIBs) and their Recycling Methods for Sustainable Development during December 1-3, 2021.
- Dr. A. S. Prakash represented as an Expert Member of the joint Scientific Committee to evaluate the IGSTC Industrial Fellowship applications on 9 December 2021 at the Indo-German Science & Technology Centre, Gurgaon.
- Dr. A. S. Prakash delivered an invited talk during the national e-workshop on “Carbon Materials for Energy Application” on 13th Dec. 2021.
- Dr. D. Kalpana as the Chief Guest inaugurated the Short Term Training Program (STTP) on Cognitive Learning Framework on IoT Devices held online on 3 August 2021. The program was organised by the Department of Electronics and communication, SRM Institute of Science and Technology, Kattankulathur.
- Dr. Alok Paul delivered an invited talk during an online refresher course in Environmental Studies, organised by the UGC Human Resource Development Centre, Mumbai, on 04 October 2021.

Ph. D. Awards

- Mr. R. N. Ramesha, AcSIR Research Scholar CSIR-CECRI successfully defended his Ph. D. thesis viva on 7 December, 2021. He carried out his Ph. D. thesis work under the guidance of Dr. K. Ramesha. Title of his thesis is: Lithium-rich layered oxides as high capacity cathode materials for lithium-ion batteries.
- Mr. Peddamasthanaiah Ette, AcSIR Research Scholar CSIR-CECRI successfully defended his Ph. D. thesis viva on 21 December, 2021. He carried out his Ph. D. thesis work under the guidance of Dr. K. Ramesha. Title of this thesis is: Development of high capacity nanoarchitecture anode materials for lithium-ion batteries.

Personnel news

- Dr. K. Ramesha is appointed as the Scientist-in-charge of CSIR-CECRI Chennai unit with effect from 1 December 2021.

R & D news

Title of Technology:

System for the detection of adulteration in ghee and edible oils.

Need:

Food adulteration is a major concern, not only for the end-users but also the concerned industry. The food we consume is considered adulterated if

A substance is added which depreciates or injuriously affects it,

- Cheaper or inferior substances are substituted wholly or in part.
- Any valuable or necessary constituent has been wholly or in part abstracted.
- It is an imitation.
- It is coloured or otherwise treated, to improve its appearance or if it contains any added substance injurious to health.
- For whatever reasons its quality is below the Standard

Adulterated food may pose serious health problems as it may be toxic and can affect health and it could deprive nutrients essential for proper growth and development.

Ghee and edible oils are being adulterated to gain profits. Ghee is usually adulterated with lard, Vanaspathi and oil. Edible oils are often adulterated with oils having similar properties. Existing methods of detecting adulterants in these food products are basically chemical methods or methods involving high-end analytical instruments. These methods are highly time consuming and required skill person to test these adulterants. Therefore, a quick, easy and low-cost solution for detecting the adulterants was needed.

The present system being developed which aims at detecting the adulterants in ghee and edible oils has been designed and developed to meet the unmet need of detecting adulterants on real time basis.

While blending of oils is widely seen and accepted in oil industry, it was needed to have a check on the blending of oils as prescribed and indicated. Therefore, the present system also targets in validating the blending of oils (whether the oils have been blended as indicted on the packets).

Specific features of Technology Envisaged/Developed (Benchmarking USP) (in bullets):

- On-the-spot adulteration check of edible oils and ghee
- On-the-spot blending check and validation (for edible oils)
- Green Technology (No chemical usage)
- Easy to operate: Place and check
- Battery Operated
- Composition Measurement (in case of blending)

Measurement Principle:

Optical (UV, Visible and NIR based) Scanning + chemometrics (Spectral fingerprinting)

Adulterants:

- Lard, Vanaspathi and oil in Ghee
- Very common adulterants like
 - Adulteration of Extra virgin Olive oil with Olive Pomace oil
 - Adulteration of Coconut Oil with Palm Kernel Oil
 - Adulteration of Mustard Oil with Rice Bran Oil
 - Adulteration of sunflower Oil with Cotton Seed Oil

Applications of Technology and Impact (in bullets):

The developed system finds application of quality check in

- In edible oil industry
- Food inspection agencies



Fig: A schematic of the developed system (both for adulteration and blending)

Important Events

- An NDA agreement was signed on 3rd September 2021 with M/s. Welt Recycling Private Limited, Karnataka, in respect of collaborative research work on “DESIGN AND DEVELOPMENT OF AI-ENABLED MECHATRONIC SORTING SYSTEMS FOR EFFICIENT RECOVERY AND RECYCLING OF MIXED PLASTIC WASTE”.
- Dr.K.J.Sreeram, Director, CSIR-CLRI visited the Centre along with Dr.N.Anandavalli, Director, CSIR-SERC & Co-ordinating Director, CSIR-CMC, on 7th September 2021, in connection with the project on “Automated Machine Vision System for Leather Surface Quality Discriminant Function Analysis”.
- Inspection of Leather Grade System for Leather Quality Inspection by Dr.K.J.Sreeram, Director, CSIR-CLRI, Dr.N.Anandavalli, Director, CSIR-SERC & Co-ordinating Director, CSIR-CMC, Dr.A.Gopal, Chief Scientist & SIC, CSIR-CEERI Centre, Chennai and the project team members of CSIR-CLRI and CSIR-CEERI.



- Mr.Nidhesh from ISRO, VSSC, Thiruvananthapuram, Kerala, visited the Centre for a proposed MoU.
- A Leather industry meet was organized by CSIR-CLRI and CSIR-CEERI on 25-11-2021



- Dr.P.C.Panchariya, Director, CSIR-CEERI, alongwith Senior Scientists, visited the Centre on 13th December 2021. Dr.K.J.Sreeram, Director, CSIR-CLRI and Dr.N.Anandavalli, Director, CSIR-SERC & Co-ordinating Director, CSIR-CMC too visited the Centre.

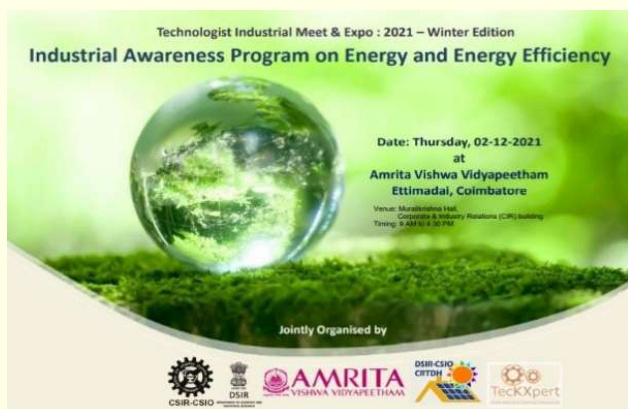


Major Highlights

- One day workshop/seminar on “Green Energy Technologies- Energy and Energy Efficiency” was organized by CSIR-CSIO, Chennai center jointly with CSIR-CSIO, DSIR, New Delhi and Amrita Vishwa Vidyapeetham at Coimbatore on 1st December 2021. The technical session followed by a demonstration of developed technologies of CSIO was well received by the participants. The technical comprising, awareness on energy conservation, role of nano-technology in energy sectors, energy efficiency on air-conditioning, energy efficiency - the smarter way to reduce global warming, energy data analytics - an overview, performance & condition monitoring system-pumps and motors, best practices: calibration, quality aspects in renewable energy and electric vehicle instrumentation were delivered. To strengthen the relationship between CSIR-CSIO and academia and to explore the collaborative research on cutting edge technology, laboratory visits were arranged



- The industrial meet features sessions on products developed by CSIO such as Energy management System, Motor and Pump Efficiency Monitoring Systems, Non-Intrusive Load Monitoring System and DSIR-CSIO-Common Research and Technological Development Hub in Renewable Energy/Electronics. Nevertheless, many challenges remain, and this meet paved the way to forefront a dialogue among diverse experts to discuss and formulate actions to meet these challenges.



- The awareness program on “ISO/IEC 17025:2017 Requirements and Implementation” at CSIR-CSIO, Chennai was held on 10th December 2021. The program provides technical sessions pertaining to NABL requirements, mainly focusing on the structural differences when the laboratory moves on to ISO/IEC 17025:2017.



- Signed an NDA with M/s. Ai-DEA Labs Pvt. Ltd., Bengaluru as an Industrial partner for an in-house project on IoT-enabled Air Quality Monitoring System (iAIQMS) on 04.08.2021.



- Signed an NDA with M/s. SUNON Technologies as an industrial partner for an in-house project on “Design and Development of Static Var Generators for Power Management” on 09.08.2021..

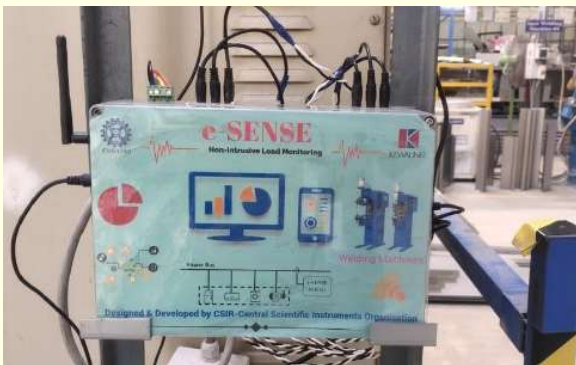


- A preliminary meeting and discussions to arrive at the training rollout plan for equipment maintenance on training to be given to Medical officers, Staff nurses, Lab technicians, Pharmacists of Tamil Nadu Govt. Medical Colleges and Hospitals by CSIR-CSIO was held on 27.07.2021 at Tamil Nadu Urban Health Care Project (TNUHP).
- Under the project on Design and Development of Portable & Universal - Pump Efficiency Monitoring System (PU-PEMS), the Centre has developed the first level prototype and it is ready for field testing at MTU-Vizag.

- Under CRTDH, a facility on a 30 kVA Solar Inverter was commissioned. The following tests can be carried out using the facility:
 - Testing of Power Efficiency of Solar Inverter (as per IEC 61683 :1999)
 - Testing of Static MPPT Efficiency of Solar Inverter (as per EN 50530 :2010)
 - Testing of Dynamic MPPT Efficiency of Solar Inverter (as per EN 50530 :2010)
 - Testing for Characteristic Interface of Solar Inverter (as per IEC 61727 :2004)



- Under FTT, a project titled “Energy Management using Non-Intrusive Load Monitoring Technique” was executed. Recently, CSIO has deployed the developed prototype to a commercial building with the help of M/s. Atsuya Technologies Pvt. Ltd and it has been deployed to M/s. Kewaunee Labway Pvt. Ltd for its field test.
- CSIR-CSIO, Chennai Centre has conducted energy audit at CSIO, Chandigarh for the period from 11th to 15th October 2021, headed by Dr. C. Sethuraman, Principal Scientist.
- CSIR-CSIO has executed a technical service project of Energy Audit and Analysis for CSIR-IGIB Campus. Recently, energy audit has been completed at Mall Road Campus



- Sh. A. Robert Sam, Scientist In-Charge and Sr. Principal Scientist has secured Ph.D. Degree in “Fabrication and Characterization of Composite Nanofiber-GMR Sensor for Low Magnetic Field Sensing” under the faculty of Information and Communication Engineering from Anna University, Chennai on 21.09.2021.

Patent published

- Mukesh Kumar, R. Gopinath, Prakash C Joshua, Srinivas Kota, G.S. Ayyappan, Anand V P “A system and method for energy management of identical appliances using Non-Intrusive Load Monitoring Technique” - WO/2021/171303.



On-going R&D Activities

Plant Tissue Culture

Algal-based wastewater treatment systems in accordance with the LOTUS sensor for its effective validation and quality monitoring were developed using microalgal strains and mixed consortia. Chromium wastewater was treated in a vertical reactor with *Desmodesmus* sps., *Scenedesmus* sps., and *Chlorella* sps. (Fig.1).

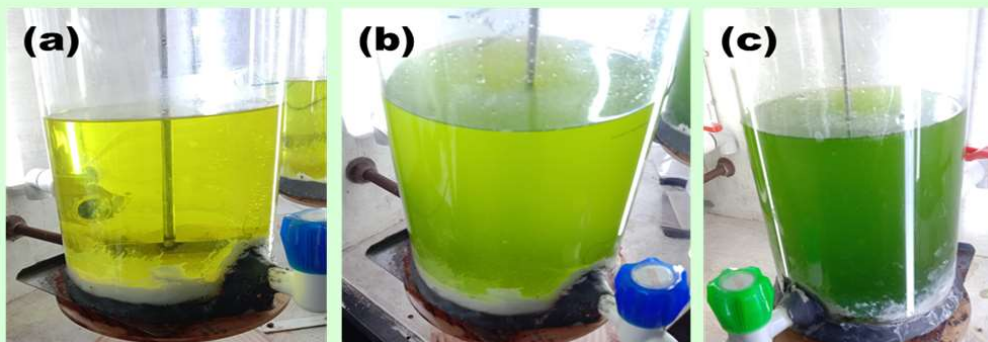


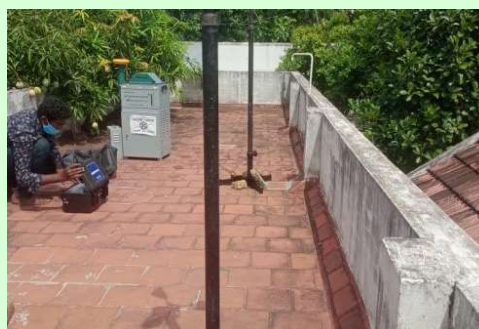
Fig.1. Vertical reactor waste water treatment studies, (a) Chromium wastewater, (b) wastewater treated with *Desmodesmus* sps. only, (c) wastewater treated with microalgal consortia (*Desmodesmus* sps., *Scenedesmus* sps., and *Chlorella* sps)

Environmental engineering

- CSIR-NEERI, Chennai presently carrying out the Project entitled “Assessment of Dust Emission from the Stone Crushing Industries and Distance Criteria in the State of Tamil Nadu” for establishing minimum distance from stone crushers to residential areas, highways and other sensitive areas with specific reference to dispersion of dust particles by comprehensive monitoring and modelling techniques/assessment at two locations one at coastal area (Tirusulam, Chennai District) and inland area (Kodangipalayam, Tiruppur District).



- Environmental Impact Assessment (EIA) study for the Proposed Petrochemical Complex along with Marine Jetty at Cuddalore, Tamil Nadu. CSIR-NEERI, Chennai completed Air and Noise quality monitoring in connection with the EIA Study for Haldia Petrochemicals Ltd (HPL), Thiruchopuram, Cuddalore.



Chemistry Department:

Area of Research: Development of environmental remediation materials for exhaust-, indoor air- and water- treatment, energy-related applications. This includes developments of (i) catalysts for automobile exhaust (diesel, gasoline, etc.), removal of organics via photocatalysis, chemical oxidation, etc., indoor air purification (volatile organic compounds oxidation) (ii) adsorbents for heavy metals and POPs removal (iii) Electrode catalysts for fuel cells (iv) Characterizations of river sediments, wastewater, etc. (v) Carbon dioxide capture and sequestration (vi) Characterization of emissions from various sources (vii) Expert member for NGT cases (viii) Characterization of raw materials for firecrackers

On-going projects

- Testing and Research & Development Facility of Firecrackers - Raw materials, Compositions and Emissions
- Restoration and rejuvenation of Vrushabhavathi River Valley, Bengaluru

Microbial Genomics and Environmental Biotechnology**Research Activities**

As a part of ongoing projects on “Restoration and rejuvenation of Vrushabhavathi River Valley, Bengaluru” and “Preparation of Compendium of Environmental Statistics for UT of Puducherry”, field trips were undertaken to Bengaluru and Mahe, Kerala to access the water quality in lakes and nallah's.

**Overall Activities****Projects Awarded**

- Dr. G. Saravanan as Component lead, received the project entitled “Demonstration and validation of Indigenously developed electrocatalyst for polymer electrolyte fuel cells” along with CSIR-CECRI.

Academic activities:

- Dr. T. Rajesh was nominated as External Expert – International Nominee for conducting Ph. D final Viva-Voce for candidate Ms. Jojy John, Sathyabama University on her thesis “Diversity, Genomic Studies and Resistance Mechanisms of Moderate Halophilic Bacteria: Insights from *Salinivibrio* Sp. Isolated from Salt Pan”.
- Dr. T. Rajesh has been nominated as a doctoral committee member for Ms. Subhasini, Department of Nanoscience and Technology, SRM University.
- Dr. T. Rajesh has been nominated as a doctoral committee member for Ms. Jagriti Sanjay Jha, Department of Biotechnology, School of Engineering, SRM University.
- Dr. T. Rajesh has been nominated as a doctoral committee member for Ms. Anusiya, Department of Genetic Engineering, School of Engineering, SRM University.

Conference/Workshops:

- Dr. G. Saravanan delivered Invited Lecture entitled “Environmental Remediation Materials for Sustainable Developments” in Faculty Development Programme on Green Technology & Sustainability Engineering in Chemistry at Adhiyamaan College of Eng. 2021.

Report:

- The detailed project report entitled “Restoration and rejuvenation of Vrushabhavathi River Valley” has been submitted along with Hyderabad Zonal Centre, CSIR-NEERI to Bruhat Bengaluru Mahanagara Palike (BBMP), Bengaluru

The following projects were secured during this period:

- Feasibility studies on beneficiation of low grade goan iron ore sponsored by M/s V. M. Salgaocar & Brother Pvt. Ltd., Goa
- Feasibility studies on flotation of limestone of high silica and magnesia sponsored by M/s RCCPL Private Limited, Maharashtra
- Feasibility studies on flotation of limestone of high silica from Rajasthan sponsored by M/s Birla Cement Works, Rajasthan
- Metallurgical failure investigation of boiler tubes of captive thermal power plant sponsored by M/s Hindustan Zinc Limited, Rajasthan

Award received: Dr. T. V. Vijaya Kumar and Ms. N. Vasumathi received V A Altekar Award for the best technology developed/transferred during the year 2020 for the commercialization of “Column flotation technology for the recovery of sillimanite from heavy mineral beach sand”.

Participation in conferences/seminars:

- Ms. Ajita Kumari presented a paper on “Flotation studies on optimization of carbon recovery from steel plant sludge” co-authored by N. Vasumathi, M. Sai Kumar, DSV Abhishek and T V Vijaya Kumar at the International Chemical Engineering conference (ICHEC) 2021 held at NIT-Jalandhar during September 16-19.
- Mr. M. Sai Kumar, Project Associate presented a paper on “Utilization of limestone mineral waste for developing self-compacting micro concrete” co-authored by M. Venkadesh, N. Vasumathi, T. Hemalatha and T. V. Vijaya Kumar at the International Chemical Engineering conference (ICHEC) 2021 held at NIT-Jalandhar during September 16-19.
- Ms. N. Vasumathi Presented a paper on “Extraction and flotation performance evaluation of bio-collector in high ash graphite ore flotation” co-authored by D. Sowmya, M. Sai Kumar, T. V. Vijaya Kumar and S. J. Gopalkrishna at the International Chemical Engineering conference (ICHEC) 2021 held at NIT-Jalandhar during September 16-19.
- Ms. Ajita Kumari presented a paper on “Exploratory studies on beneficiation of low grade banded iron ore formations (BIF) of Karnataka, India” co-authored by N. Vasumathi, P. Abhishek and T V Vijaya Kumar at Asia Steel 2021 held during December 5-9 in South Korea.
- Mr. M. Sai Kumar, Project Associate, presented a paper on “Flotation of low grade graphite ore using collector derived from low density polyethylene waste” co-authored by K. Rashid Sultan, N. Vasumathi, Ajita Kumari and T V Vijaya Kumar at CHEMCON 2021, Bhubaneswar held during December 26-30.
- Ms. Ajita Kumari presented a paper on “Flotation of sillimanite using plant-based collector” co-authored by N. Vasumathi, K. Chennakesavulu, I. Cassandra Austen, M. Sai Kumar and T V Vijaya Kumar at CHEMCON 2021, Bhubaneswar held during December 26-30.
- Ms. N. Vasumathi presented a paper on “A comparative study on flotation of coal using eco-friendly single reagent and conventional dual reagent system” co-authored by M. Sai Kumar, D.S.V. Abhishek, T.V. Vijaya Kumar and S.J. Gopalkrishna at CHEMCON 2021, Bhubaneswar held during December 26-30.

PROMOTION/FINANCIAL UPGRADATIONS

S.no	Name & Designation	Pay	Date of Promotion/ MAC	Unit
1.	Shri P. Subramanian, SO(G)	Pay Matrix Level – 8 Rs. 76500/-	28.12.2021	CMC
2.	Shri E. Suresh, Manager-Cum-Accountant	Pay Matrix Level – 6 Rs. 38700/-	02.09.2019	CMC
3.	Shri K. Balamurugan, Sr. Technician(2) Gr.II(4) Driver	Pay Matrix Level – 7 Rs. 56900/-	26.05.2018	CMC
4.	Shri C. Krishnan, Ex-Superintending Engineer(- Civil)	Pay Matrix Level – 12 Rs. Rs.81200/-	06.08.2018	CMC
5.	Shri S. Ashok Kumar, Technician(2) Gr.II(2)	Pay Matrix Level – 5 Rs. Rs. 31900/-	28.03.2019	CMC
6.	Smt I. Kavitha, Technician(2) Gr.II(2)	Pay Matrix Level – 5 Rs. Rs. 33900/-	22.03.2017	CMC
7.	Smt P. Sasirekha, ASO(G) MACP	Pay Matrix Level – 8 Rs. 62200/-	30.12.2021	CSIR-CEERI
8.	Shri S. Chandranmohan, Technician(2) Gr.II(2)	Pay Matrix Level – 5 Rs. 31000/-	20.04.2019	CSIR-CEERI
9.	Shri D. Ganesan, Ex-Sr. Technical Officer(3)	Pay Matrix Level – 12 Rs. 91400/-	03.05.2019	CSIR-CEERI
10.	Smt M. Latha, Private Secretary	Pay Matrix Level – 9 Rs. 82600/-	30.12.2021	CSIR-CECRI

RETIREMENT/SUPERANNUATION/VRS

S.no	Name & Designation	Date of Promotion/ MAC	Unit
1.	Shri A. Ramesh, ASO(F&A)	30.09.2021	CSIR-NML
2.	Shri S. Soundar Manova, SO(G), Ad-hoc	31.10.2021	CMC

TRANSFERS

S.no	Name & Designation	From	To	DOJ/Date of reliving
1.	Smt K. Mahalakshmi, SO(F&A)	CSIR Madras Complex, Chennai	CSIR-CCMB, Hyderabad	19.08.2021
2.	Shri E. Mahesh Kumar, S&PO	CSIR Madras Complex, Chennai	CSIR-CLRI, Chennai	19.08.2021
3.	Shri C. Shyam Sunder, AO	CSIR-CECRI, Karai- kudi	CSIR Madras Complex, Chennai	19.08.2021
4.	Smt M.P. Geetha, COFA	CSIR-IICT, Hyderabad	CSIR Madras Complex, Chennai	20.10.2021
5.	Shri D. Shanmuga Sundar, SO(G)	CSIR-CLRI, Chennai	CSIR Madras Complex, Chennai	31.12.2021
6.	Dr. P. Periasamy, Chief Scientist	CSIR-CECRI Chennai Unit, CMC	CSIR-CECRI, Karai- kudi	30.11.2021

RESIGNATION:

S.no	Name & Designation	Date of Resignation	From
1.	Shri A. Baskar, Junior Secretariat Assistant(F&A)	11.08.2021	CSIR Madras Complex, Chennai

Independence Day Celebrations



Dr. N. Anandavalli, Director CSIR-SERC and Coordinating Director, CMC, hoisting the National flag and addressing the gathering on the eve of Independence day-2021