



CECRI News



September - October 2009

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**Central Electrochemical Research Institute
Karaikudi, Tamil Nadu, India**

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CSIR Foundation Day

CSIR Foundation Day was celebrated this year also in a grand manner at CECRI, Karaikudi. On the Foundation Day, i.e., on Saturday, September 26, 2009, CECRI observed **OPEN DAY** from 9.30 a.m. to 4.00 p.m. About 20,000 people consisting of general public, students, research scholars and faculty members of various academic institutions from the nearby cities, viz., Madurai, Trichy, Pudukkottai and Sivakasi visited the Institute to have a glimpse of the achievements and activities of CECRI. Besides the visitors had interesting interactions with our CECRI Scientists, who explained their research activities and achievements.

Earlier on September 24, 2009, the prestigious CSIR Foundation Day Lecture was organized. Dr. H. Sivaramakrishnan, President (Research), M/s Piramal Life Sciences Limited (PLSL), Mumbai was the Chief Guest, who delivered the Foundation Day Lecture on “Collaboration for Invention – A Perspective of an Industrial Scientist”.

Dr. Sivaramakrishnan began his lecture with a remark that the average life expectancy of the human beings in India has vastly improved from 38 years in 1953 to 62 years in 2009. He

highlighted the R&D contributions and the active role of Pharma Industries for this remarkable achievement. He explained in detail the various pathways for drug discovery and the difficulties in commercializing a drug molecule. The drug molecule has to pass through a number of screening stages, such as pre-clinical tests, field testing in different phases and then it has to



be cleared by regulatory control agencies. The process of launching a drug molecule into the market from its discovery and patenting is a long, arduous one often stretching more than about 15 years. Though many new drug molecules are reported, only a few of them pass through the rigorous screening and ultimately hit the market. He mentioned that for the

invention of new drug molecules, the R&D spending of various nations at the global level is very high. In this context, he has emphasized the need for teamwork among Industry, Academic and Research Institutions as well as Government Agencies to increase the success rate of drug molecule discovery and the motto should be “Collaborate, Innovate and Dominate”. He also appealed to State and Central Governments to increase the R&D expenditure in this regard.

Dr. Sivaramakrishnan underlined the importance of collaboration through invention, by making alliance between Industry and Government Institutions. He briefed the excellent laboratory facilities available at PLSL for carrying out drug discovery research and listed some of the collaborations, which PLSL holds with various government R&D / academic institutions and private agencies in India as well as overseas.

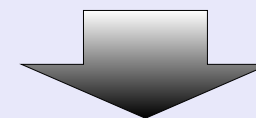
He cited the recent example of the collaboration between CECRI and Piramal Healthcare Ltd, a subsidiary of PLSL, for the development of a novel electrochemical HbA1c meter, which is now undergoing screening tests. He also briefly touched upon the PLSL's R&D efforts targeting the discovery of drug molecules for the treatment of cancer, inflammation and diabetes. He expressed the hope that our nation

with her abundant and multifaceted resources would strive to establish a leadership position and be established as “India – Next Knowledge Power” and “India – Future Factories”. He concluded his talk by playing a “Science Anthem”.

Presiding over the function, Dr.V.Yegnaraman, Acting Director, CECRI recalled the events of CSIR Foundation Day in 1942, and mentioned that, today, CSIR is one of the largest public funding R&D Institution in the world. He pointed out that CSIR over the years contributed ‘A to Z’ in Science starting from Aerospace to Earth Science covering biological sciences, chemical, engineering sciences, ocean studies, marine studies, environmental pollution etc. On this memorable occasion, Dr. Yegnaraman, on behalf of the entire CECRI community, paid homage and respects to the philanthropist, Dr. RM. Alagappa Chettiar, whose patriotic fervour and noble gesture led to the establishment of CECRI at Karaikudi. Earlier Dr.N.Palaniswamy, seniormost scientist of CECRI and Chairman, Organizing Committee welcomed the gathering and introduced the Chief Guest.

On this occasion, the CECRI employees who retired during September 2008 – August 2009 and also those employees who have completed 25 years of service in CECRI/CSIR were honoured. Cash Awards were given to the wards of CECRI staff for their excellence in science subjects in the 12th standard examination held in April 2009. As a part of the celebrations, Essay and Drawing competitions were conducted for the wards of our staff members and prizes were distributed to the winners. Dr.A.Muthukrishnan, Controller of Administration, CECRI proposed vote of thanks.

Management Council meeting was held at CECRI on September 4, 2009



48th Research
Council meeting was
held at IIT, Chennai
on August 27, 2009.



Grant-in-aid/ Sponsored Projects taken up

Title	Organization	Value in Rs.
Long-term corrosion protection scheme for aerospace articles immersed in sea	DRDL, Hyderabad	9,87,436
Gold plating on satellite components made of Aluminium alloy/ Copper alloy for ISRO	ISRO Inertial Systems Unit(IISU), Thiruvananthapuram	71,37,298
Feasibility study on the preparation of D-Ribose from D-Arabinose.	M/s. Chemapol Industries, Mumbai	1,54,034
Development of Electrolytic process for the production of Tetra Methyl Ammonium Hydroxide from Tetra Methyl Ammonium Chloride.	M/s. NOCIL Ltd., Mumbai	5,25,028
Studying the causes and suggesting the remedial measures to control internal corrosion in Chennai-Trichy-Madurai Petroleum product pipelines.	M/s. Indian Oil Corporation Ltd., Chennai	6,68,411

Technical Services Undertaken

Title	Organization	Value in Rs.
Delivery of 2 numbers of 40W self supporting DBFC units.	M/s. Genex Science & Technologies Private Ltd., Mumbai	1,50,921
Technical opinion on corrosion inhibitor.	M/s. Global, Mumbai	50,000
Sample testing for Epoxy paint	M/s. NLC Ltd., Neyveli	50,000

Awards



Dr. N. Palaniswamy, Scientist 'G' has been awarded Mascot National Award - 2009 by the Electrochemical Society of India, Bengaluru.



Dr. G. N. K. Ramesh Babu, Scientist has been selected for the N M Sampat Award by the Electrochemical Society of India, Bengaluru. Both awards were presented to them during the National Seminar on Electrochemical Science and Technology held at IISc, Bengaluru on 17th July 2009.

Consultancy projects taken up

Title	Organization	Value in Rs.
To suggest suitable protective coating scheme for chimney and wet scrapper.	M/s. MRF Ltd., Chennai	1,48,905
To inspect the painted conveyor structures at North Chennai Thermal Power Station (NCTPS) Chennai and give suggestion.	M/s. Prince High Tech Private Ltd., Chennai	1,65,450

Industry Oriented Technology Courses

Course	Duration	Number of participants	Amount collected Rs.
Corrosion control in thermal power plants	07.09.09 to 11.09.09	07	46,326/-
Cathodic protection systems and devices	14.09.09 to 18.09.09	04	26,472/-
Pipeline corrosion and its control	05.10.09 to 09.10.09	05	33,090/-
Corrosion diagnosis and durability enhancement of concrete infrastructures	19.10.09 to 23.10.09	09	59,562/-
Paints for corrosion protection	26.10.09 to 30.10.09	25	1,65,450/-

Awards

NACE International Gateway of India Section [NIGIS] has awarded Excellence in Corrosion Science Award for 2008-09 to Dr. M. Natesan, Scientist.



NIGIS has given the Best Ph.D. Award for 2008-09 to Dr. N. Muthukumar former Research Scholar for his thesis on "Investigations of internal corrosion and its inhibition in petroleum products transporting pipeline" under the guidance of Dr. N. Palaniswamy, Scientist 'G' and HOD, Corrosion Protection Division.

Both awards were sponsored by ONGC and presented at the World CORCON 2009 – International Conference and Expo on Corrosion held at Mumbai during 29 September – 1 October 2009.

Foreign Deputation



Dr. James Joseph, and Dr. S. Senthil Kumar, Scientists were deputed to Germany from 17th September to 12th November 2009 on the joint collaborative project work at Kurt-Schwabe Institute for Measuring and Sensor Technology, Meinsberg, Germany under the CSIR-IB, BMBF Co-operative Science Programme.



Ms. G. Selvarani, SRF, CECRI Madras unit was deputed to Brazil to present her paper at the 11th International Conference on Advanced Materials held at Rio de Janeiro from 20th to 25th September 2009. Her visit was sponsored under SIP 18.



Dr. Alok Kumar Ramakrishna Paul, Scientist was deputed to USA to participate in the US-India Workshop in Power and Energy from 29th September to 1st October 2009 at the Virginia, USA. His visit was sponsored by the organizers of the Workshop.



Dr. L. John Berchmans, Scientist was deputed to Germany for joint collaborative project work at the Institute of Physical Chemistry and Theoretical Chemistry, Braunschweig Technical University under DST-DAAD Project based Personal Exchange Programme from 1st to 30th October 2009.

Ph D Award

Alagappa University, Karaikudi has awarded Ph.D degree to Mr. M. Kanagasabapathy, Mohamed Sathak Engineering College, Kilakarai for his thesis on "Studies on electro deposition of zinc – iron alloy deposits from complex solutions", carried out as a part time Research Scholar under the guidance of Dr. Sobha Jayakrishnan, Scientist 'F' and HOD EMFT Division.

Patent Applied

Polyaniline based wash Primer paint coating for Galvanized iron.

Sathyanarayanan S., Syed Azim S., Venkatachari G.

Invited Lectures

Professor Junichi Kawamura, Tohoku University, Japan delivered lecture on "Thin film lithium batteries prepared by pulsed laser deposition" on September 2, 2009.

Professor K. A. Natarajan, Department of Materials Engineering, Indian Institute of Science, Bengaluru delivered lecture on "Bio-fouling on titanium and its consequences" on October 9, 2009.

Retirement on Superannuation on 30.09.2009



Dr. V. Sundaram, Scientist Gr. IV (5)



Mr. C. Solaiyan, TO Gr. III (5)

Retirement on Superannuation on 30.10.2009



Mr. A. A. Joseph, TO Gr. III (7)