

# CECRI *news*

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Phone: 91 4565 227550-559

Central Electrochemical Research Institute  
Karaikudi-630 006, Tamil Nadu, India  
[www.cecri.res.in](http://www.cecri.res.in)

# CSIR Programme on Youth for Leadership in Science [CPYLS]

CPYLS was organized at CECRI, Karaikudi during 3-5 December 2009. Twenty three students, who were state level toppers in the School final [10th Standard] examinations held in April 2009 and are currently studying in 11th Standard participated in the programme along with parent / guardian / teacher. Dr. A. Shenbagavalli, Registrar in-Charge, Alagappa University, Karaikudi inaugurated the programme on Thursday the 3<sup>rd</sup> December 2009.

In her inaugural address, she has asked parents and care takers to develop science culture in the minds of younger people in order to motivate them to become scientists. She said parents were always motivating their children by telling that they should aim for doctors or engineers. Though there was nothing wrong in the trend, they should know that scientists as a profession was not inferior to any other vocation. It was a step ahead in terms of earning or gaining name and fame. Several persons, including Professor Ramakrishnan Venktaraman [recently awarded Noble Prize for Chemistry] and others, achieved highest positions in their career simply by choosing science as their profession. She further added that contemporary generation could not imagine life without scientific inventions that manifested each and every functions of life. Whether it was electricity, television, information technology, health

and medicine was ruling the world. Many more inventions had to be waited for discovery. Hence, the students should develop the aim of becoming scientific leaders.



Dr. N. Palaniswamy, Scientist `G` and Head, Corrosion Protection Division in his Presidential Address, said it was an era of materials science. Opportunities were abundant for students to become leaders in science. Women could contribute much to the development of science. There were many instances where women have brought laurel to the country in science fields. Hence women should also come forward to engage in research activities.



Mr. S. Ramu, Scientist `F`, Head, Corrosion Testing and Evaluation Division and Chairman, CPYLS said the CECRI had been organizing CPYLS since 1999 for the 50 toppers in the 10<sup>th</sup> Standard of CBSE, ICSE, Matriculation and State Board Examinations annually and they were given exposure in CECRI laboratory and others. Dr. S. Syed Azim, Scientist `F` and Head, International Collaboration and Publicity Division introduced the participating students. The students participants were

presented educational kit consisting of science books and materials as a token of appreciation of their excellent academic achievements. .

On the first two days, the forenoon sessions were devoted to a series of popular science lectures, viz. "Growth of Science", "Scientific Awareness", "Corrosion Science & Engineering", "Solar Energy" and "Advances in Scientific Studies". In the afternoon on both days demonstration/ hand- holding experiments/ practical on `Principles of Galvanic Cells`, Optics & Electricity`, `Hydrogen Generation by Water Electrolysis`, `Electroplating`, `Corrosion Rate Measurement` etc. were conducted.

On the first day evening special lectures on "Quality Leadership in Science" and "Wonders of Living Beings" were arranged. On the second day evening after the practical session, a Science Quiz and a lecture- cum- demonstration on "Science/Truth behind Magic" were organized.

On the third day morning, the participants were taken to Arignar Anna Science Center, Trichy where a special show on planets, Science concepts etc., were shown. On return they were taken for a visit to a nearby Heritage Centre, Chettinad Palace in Kanadukathan. In the afternoon, lecture cum demonstration on Computer and internet was conducted. In all the events, students took active part and got cleared their doubts in science through discussion with our Scientists. Valedictory function was organized on Saturday the 5th December 2009 evening. In the Valedictory function, Dr. V. Yegnaraman, Acting Director distributed the certificates to them, responded to the views and queries as well as delivered the valedictory address. At the end, Mr. R. Rajasekar, Convener, CPYLS summed up the programme and expressed vote of thanks.

# National Conference on Corrosion Assessment and its Control (NCAC 09)

National Corrosion Council of India (NCCI) in collaboration with CECRI and Thiagarajar College of Engineering, Madurai has organized the National Conference on Corrosion Assessment and its Control at Thiagarajar College of Engineering, Madurai during 21 – 22 December, 2009.

National Corrosion Council of India (NCCI) in collaboration with CECRI and Thiagarajar College of Engineering, Madurai has organized the National Conference on Corrosion Assessment and its Control at Thiagarajar College of Engineering, Madurai during 21 – 22 December, 2009.

The conference was inaugurated on 21.12.09 by Professor K.I.Vasu, Former Director, CECRI. Dr.K.Arunachalam, Head, Civil Engineering Department, Thiagarajar College of Engineering welcomed the gathering. Dr.V.Abhaikumar, Principal, Thiagarajar College of Engineering presided over the function and released the proceedings. Dr.V.Yegnaraman, Acting Director, CECRI, Karaikudi released the Souvenir. Dr.N.Palaniswamy, Chairman, NCCI highlighted the significance of the conference. Dr.V.Saraswathy, Organising Secretary read out the messages and Dr.S.Maruthamuthu, Secretary, NCCI proposed the vote of thanks

80 papers have been presented under oral as well as poster in 7 sessions, viz. Concrete corrosion, Industrial corrosion problems, Bio-corrosion, Materials and composites, Corrosion inhibitors, Coatings and Scholar session. About 180 delegates from all over India participated in the deliberations. Awards were distributed for Best Oral and Poster presentations at the valedictory function held on 22.12.2009,

The following eminent Professors and Scientists have delivered Special Lectures:

- (1) Professor A.R.Santhakumar, Emeritus Professor, Chennai on Corrosion Protection of RCC structure
- (2) Dr.Madan Kamat, M/s. Krishna Conchem Products Private Limited, Navi Mumbai on Repair and Rehabilitation
- (3) Professor K A Natarajan, Indian Institute of Science, Bengaluru on Biocorrosion problems in marine environment
- (4) Dr.S.Sundarrajan, Defence Research & Development Laboratory, Hyderabad on the Effect of corrosion on defence equipments
- (5) Professor B.V.Appa Rao, Department of Chemistry, National Institute of Technology, Warangal on Application of electrochemical and surface techniques on corrosion protection of copper by self assembled monolayers of organic molecules
- (6) Professor A.Chitharanjan Hegde, Department of Chemistry, National Institute of Technology Karnataka, Surathkal on Corrosion protection by nano structure coating
- (7) Dr.P.Subramanian, Scientist, CECRI, Karaikudi on Corrosion of underground pipelines

## Technical services rendered

Sl.No.	Title	Organization	Value in Rs.
1.	Testing of 2V/300Ah, 2V/400Ah and 2V/600 Ah cells as per specification GR/BAT-01/03 Mar.2004	M/s Luminuous Teleinfra Limited, Haryana	10,83,750/-
2.	Testing of 2V/80Ah and 2V/200Ah Low maintenance secondary cells as per IRS S-88/04	M/s Microtex, Bangalore	4,82,121/-

## Consultancy services taken up

Sl.No.	Title	Organization	Value in Rs.
1.	Suitable anticorrosive coating for bridge structures	Highways Department, Chengelpattu	1,12,300/-

## Grant-in-aid/Sponsored Projects taken up

Sl No	Title	Organization	Value in Rs.
1	Charge-discharge mechanics of Li-ion batteries.	M/s General Motors Technical Centre India Private Ltd., Bangalore	17,74,341/-
2	Evaluation of corrosion control measure for rail fittings in DG-MDU and MDU-TDN stations	Southern Railway, Madurai	2,89,455/-

## Special Training Programmes organized at CECRI for M/s Bharat Electronics Ltd., (BEL), Bangalore

Two special training programmes each in two spells were organized at CECRI for M/s Bharat Electronics Limited, Bangalore on Advanced Electroplating Technology and Advanced Painting Technology for their 49 staff members from 9<sup>th</sup> to 13<sup>th</sup> and 16<sup>th</sup> to 20<sup>th</sup> November 2009. Fee of Rs. 8 lakh has been collected.

# Foreign Deputation



Dr. S. Gopukumar, Scientist was deputed to Taiwan for discussions on the joint collaborative project under the Indo-Taiwan joint research project and to deliver an invited talk at the 4<sup>th</sup> Asian Conference on Electrochemical Power Systems from 5<sup>th</sup> to 15<sup>th</sup> November 2009.

He was also deputed to Japan from 9<sup>th</sup> to 16<sup>th</sup> December 2009 under DST-JST Joint Collaborative project at Kyushu University, Japan.



Mr. M. Raju, Scientist was deputed to USA for training on battery testing systems at M/s.Bitrode Corporation from 16<sup>th</sup> to 21<sup>st</sup> November 2009. His visit was sponsored by M/s HP Instruments, Bangalore and M/s Bitrode Corporation.

Dr. P. Sridhar and Mr. A. Manokaran, Scientists of CECRI Madras Unit were deputed to Italy to present their paper at the 3<sup>rd</sup> European Fuel Cell Technology and Applications Conference in Rome from 12<sup>th</sup> to 18<sup>th</sup> December, 2009 under SIP 18.

# Visit of foreign scientists



Professor Ulrich Guth and Dr. Monika Berthold, Kurt Schwabe Institute for Sensor and Measuring Technology, Meinsberg, Germany visited from 16<sup>th</sup> to 29<sup>th</sup> November 2009 on the ongoing joint collaborative project on Electrochemical Sensors under CSIR-IB, BMBF Cooperative Science Programme. Professor Guth delivered a lecture on the recent development in sensor technique at the Schwabe Institute on 25<sup>th</sup> November 2009.



Professor Digby D Macdonald, Pennsylvania State University, USA visited on 10<sup>th</sup> December 2009 and delivered a lecture on Passivity and Passivity Breakdown.

Professor Jun-ichi Yamaki, Kyushu University, Japan along with his five research scholars viz. Mr.Mingjiong Zhou, Mr.Seung Hee Han, Mr.Sun Il Park, Mr.Yoh Tanaka and Mr.Hideki Mizutta visited from 23<sup>rd</sup> to 26<sup>th</sup> December 2009 under the DST – JST joint collaborative Project.

# Personnel News



Dr. A. Muthukrishnan, COA has been transferred to CLRI, Chennai. Mr. Manuel Thomas, COA has joined CECRI on transfer from CLRI, Chennai.



Shri K. Periandavar, FAO has been transferred to NAL, Bangalore and Shri A. Chidambaram, FAO has joined CECRI on promotion from NAL, Bangalore.

Shri K. Muraleedharan, A.O. has joined CECRI on promotion from CSIR Madras Complex.



## Industry Oriented Technology Courses

Sl.No.	Name of the course	Duration	No.of participants	Amount Rs.
1.	Lead Acid Batteries: Science & Technology	9.11.09 to 13.11.09	17	2,25,012/-
2.	Lead Acid Battery care & Maintenance	16.11.09 to 18.11.09	06	33,090/-
3.	Surface Coatings by Physical Vapour Deposition (PVD), Chemical Vapour Deposition (CVD) and Surface Analysis	30.11.09 to 04.12.09	12	69,489/-
4.	Industrial Practice of Electroplating and Metal Finishing	07.12.09 to 11.12.09	30	2,31,630/-
5.	Maintenance of Electroplating Baths	14.12.09 to 18.12.09	11	84,931/-

50<sup>th</sup> Management Council Meeting was held at CECRI on 18th December, 2009.



## Retirement on superannuation on 31.12. 2009

Shri H.V. Shanbhogue, Scientist Gr.IV(5)



## Voluntary retirement on 14.12.2009

Shri R. Vijayakumar, Gr. I. 3

