

**MONTHLY REPORT (April 2011)**  
**CSIR-NATIONAL ENVIRONMENTAL ENGINEERING RESEARCH INSTITUTE**

**1. MoUs / Agreements signed:**

➤ **National**

MoU with Essar Mineral Resources Ltd., Mumbai to supervise / audit EIA / Environmental Clearance and related studies, to implement Environmental Management Action Plans for ESSAR activities in India and Africa for complying with the National and International norms. (27 April, 2011)

**2. S & T Services:**

- Environmental Materials Division of CSIR-NEERI has been awarded a collaborative project under DST, India-RCUK Collaborative Research Initiative, under the ESPRC joint call for proposals for “Bridging the Urban and Rural Divide (BURD)”
- For Nagarjuna Oil Corporation Limited, Cuddalore, soil and water samples were collected for analysis of physico-chemical, bacteriological and biological parameters
- Reports on evaluation of water pollution and toxic gas emissions due to industries in SIPCOT Cuddalore were prepared
- The following (No.) environmental samples have been analyzed using the respective instruments at the Analytical Instruments Facility of the Institute
  1. Atomic Absorption Spectrometer - 118
  2. Fluorescence Spectrophotometer – 50
  3. TOC Analyzer - 38
  4. CHNS Analyzer - 39
  5. ICP-AES/OES - 507, Analytes – 5145
  6. GC - 488
  7. UV-Vis-NIR - 85
  8. Particle size Analyzer - 9
  9. Direct Mercury Analyzer - 31

**3. Important Workshops / Seminars / Meetings / Conferences / Symposia Organized (brief details)**

The 54<sup>th</sup> CSIR-NEERI Foundation Day was celebrated at the National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur on 8<sup>th</sup> April 2011. Prof. Asis Datta, Professor of Eminence, National Institute of Plant Genome Research (NIPGR), New Delhi and Former Vice Chancellor, Jawaharlal Nehru University (JNU), New Delhi was the Chief Guest on this occasion. Prof. Kasturi Datta, DBT Distinguished Biotechnology Professor, School of Environmental Science, JNU & Chairperson, CSIR-NEERI Research Council was also present to grace this occasion. The Chief Guest Prof. Asis Datta delivered a lecture on “Dream to Bring Science to Society”.

#### **4. New Facilities Added:**

Gel documentation machine has been installed at Chennai Zonal Laboratory having R & D applications

#### **5 Papers published**

- Waman N Paunikar, Swapnil G Sanmukh and Tarun K Ghosh, Exploring the hypothetical proteins in Rizhophages and their role in influencing Rhizobium species in soil, *CiiT International Journal of Artificial Intelligent Systems and Machine Learning*, (published online, IF 0.763)
- W.N. Paunikar, S.G. Sanmukh and T K Ghosh, Non-specificity of phage enzymes, *International Journal of Pharma and Biosceinces*, Vol. 2(2), pp B546-B552, April – June 2011 (published online)
- Swapnil G Sanmukh, Waman N Paunikar, Tarun K Ghosh and Tapan Chakrabarti, Structural and functional prediction of hypothetical proteins in Bacteriophages against Halophilic bacteria, *An Insilico Approach*, Vol. 2(2), pp B61-B70, April-june 2011 (published online)

#### **6. Lecture delivered**

Dr. (Mrs.) L.N. Sangolkar, Scientist presented Research Paper on “Occurrence of Microcystin – RR Producing Microcystin Blooms in Water Resources of Vidarbha Region” in International Symposium on *Microcystis* studies from Asia at Wuhan, China, 5-7 April 2011

#### **7. Educational visits**

244 students from various Institutes / Universities visited the Institute and were briefed about the ongoing / significant R&D activities of the Institute in Marathi / Hindi / English