CSIR-NEERI bags two Prestigious International Awards

National Environmental Engineering Research Institute (CSIR-NEERI) bags twoPrestigious International Project Innovation Awards (PIA) – Development instituted by International Water Association (IWA).Dr. PawanLabhasetwar, Scientist and Head and Er. Subhash Andey Senior Principal Scientist from Water Technology and Management Division, CSIR-NEERI received the awards presented in the ceremony held during the 2nd IWA Development Congress and Exhibition in Kuala Lumpur, Malaysia on 23rd November, 2011. The International Water Association (IWA) is the global network of 10,000 water professionals in about 80 countries spanning the continuum between research and practice and covering all facets of the water cycle.

Project Innovation Awards (PIA) - Development is one of the very prestigious awards of IWA to recognize and celebrate excellence and innovation in water, sanitation and hygiene projects in developing countries, to support processes of fostering innovation in

service delivery in developing countries, and placing effort in embedding innovative practices amongst practitioners.PIA entries were from various countries such as Sri Lanka, Vietnam, Lebanon, Brazil, Republic of Korea (South Korea), China, Tanzania, South Africa, Kenya, Philippines, Jordan besides India. The judging criteria are originality or innovativeness of the project; complexity of the problem or situation that the project addresses; social and economic benefits and overall sustainability and potential for replication/up-scaling.

CSIR-NEERI's two potable water treatment technologies viz. NEERI-ZAR Multi Pollutant Water Treatment Unit and Solar Energy Based Electrolytic Defluoridation Plant were selected for PIA as a **Winner** and **Honour Winner**respectivelyin the Drinking Water - Applied Research Category.

NEERI-ZAR is the water purification system for rapid treatment of safe potable water supply under emergency situation like floods, heavy rain fall or cyclone and treatment of excess amount of fluoride and iron in groundwater for potable water supply at household level.

Electrolytic defluoridation process is based on the principle of electrolysis, using aluminium plate electrodes placed in the raw water containing excess fluoride. During the electrolysis, anode gets ionized and fluoride is removed by complex formation, adsorption, precipitation, coagulation and settling. Based on the technology, solar power based electrolytic defluoridation demonstration units were installed at village Usarvara, Balod Block, Durg Dist. (C.G.) and at Sargapur village in SeoniDistrict (M.P.) in collaboration with State PHEDs. The plants operated on batch mode have two reactors of 1000 L capacity each. To treat 2000 L of raw water, it takes about 4 hours to complete the process of electro-coagulation and settling. Thus 4000 L of water can be treated in 8 hours which is sufficient for the population of 700-800 persons for drinking and cooking purposes.