

International Conference on Materials for Environment
24-15 Jan. 2020

Conservation and protection of our environment is of primary concern for sustainable development. With this objective in mind, an International conference on **Materials for Environment** was organised by the Chemistry department of Govt. V.Y.T. PG Autonomous College, Durg. The main focus of the conference was on designing new materials and their applications to minimise the environmental impact resulting from developmental activities.

On 24th Jan.2020, the conference was inaugurated by the chief guest, Dr. A.K.Singh, Director, Rashtriya Chemical and Fertilizers Ltd., Mumbai in presence of guest of honour, Dr. B.S.Tomar, Ex- Director, Radio Chemistry and Isotope Group, BARC, Mumbai and Dr. Aruna Palta, Vice-Chancellor, Hemchand Yadav University, Durg. The programme commenced with Saraswati vandana and Chhattisgarh state song. Patron, Dr. R. N. Singh welcomed the gathering. Convener of the programme, Dr. Alka Tiwari delivered the welcome address, chairperson, Dr. Anupama Asthana read out the programme schedule and organizing secretary, Dr. Ajaya Singh delivered the vote of thanks.

Twelve speakers from different parts of the country like Delhi, Mumbai, Jabalpur and Gujarat as well as from abroad including China, South Africa, Bangladesh and Nepal were invited to deliver lectures on the theme proposed. The conference was a grand success which could be gauged from the fact that more than two hundred participants including research scholars, post graduate students and faculty members of the local as well as other parts of the country and abroad took part in the proceedings.

The technical session commenced with key note address by Dr. B.S.Tomar who gave a talk on various methods like solvent extraction process for recovery of metals which includes precious metals U, Pu from the waste in nuclear fuel process. This was followed by another keynote address by Dr.A.K.Singh on the topic “Environmentally sustainable and Strategic new Imperatives for design and development of chemicals and chemical products”.

The afternoon session began with an address by Dr. N.B. Singh from Sharda university, Delhi on conservation of natural resources by utilization of alternative materials for construction like clay and metakaolin or industrial by-products such as fly ash and ground granulated blast furnace slag.

Next talk was delivered by Dr.Y.K.Bhardwaj from Radiation Technology Development Division, BARC; Mumbai who presented an overview of adsorbents developed from Teflon degraded by radiation based green processes which were low cost and highly efficient for removal of heavy metals and dyes from industrial effluents.

Dr. Rameshwar Adhikari from Tribhuvan University, Nepal, spoke on the applications of Nanomaterials which are prevalent in the current day society. Focus was on natural substances originating from biological and mineral world.

Synthesis, characterization and application of transition metal chalcogenides was discussed by Dr. Jai Singh from Guru Ghasidas University, Bilaspur.

Dr. Abu Bin Hasan Susan from University of Dhaka delivered a talk on modification of water structure by perturbations from temperature and concentration of additives which were correlated with water quality.

Dr. A.K.Bajpai from Govt. Autonomous Science College, Jabalpur delivered a talk on Engineered Nano structures from health care to Industry. The talk included various aspects of engineered nano materials including their designing routes, properties and application in biomedical field.

Dr. Sreekantha Jonnalagadda from Durban, South Africa, discussed his experience in developing heterogeneous materials and nano composites using mixed oxides and nano materials and their scope as catalyst, photo-catalyst in advanced oxidation process for degradation of non biodegradable chlorinated organics in water system and for value added conversions.

Other topics of lectures included waste water treatment by electro coagulation by Dr. M.Y. Ali Mollah from University of Dhaka, Bangladesh, methods to evaluate corrosion inhibitors for petroleum industries by Dr. Ambrish Singh from Southwest Petroleum University, China, development of photonic devices like Dye sensitized solar cells covering organic photovoltaics by Dr. Surya Prakash Singh of IICT, Hyderabad, which could serve as alternative to the use of fossil fuels.

An oral and poster presentation competition was organized for the research scholars in which about 34 and 86 students participated respectively, and they were suitably rewarded.

The two-day programme ended with the valedictory function having Prof. Rajat Moona, Director, IIT, Bhilai as chief guest who delivered his experiences in tackling the pollution problems created by leather industry and Mr. Dilip Wasnikar, Commissioner, Durg as guest of honour.

The concluding remarks of the two-day conference was summed up by Dr. A.K. Singh.

On the occasion the list of awardees for oral and poster presentations was announced by Dr. Sunitha B. Mathew, Joint secretary and the prizes were given by the dignitaries.

Dr. Ajai Pillai, Joint secretary, delivered the vote of thanks.