

India needs to limit carbon emissions: Dr Atul Vaidya

■ Dr Vaidya was speaking at the webinar on 'Integrated Approach for Sustainable Environment' organised by CSIR-National Environmental Engineering Research Institute (NEERI)

■ Staff Reporter

CSIR-National Environmental Engineering Research Institute (NEERI) organised a webinar on 'Integrated Approach for Sustainable Environment' on Monday as part of National Science Day celebration.

P S Narayan, Global Head (Sustainability and Social Initiatives), Wipro Limited; Dr Sreenivasan Ramaswami, Assistant Professor, Centre for

Sustainable Technologies, Indian Institute of Science (IISc), Bangalore; and Dr Swarup Dutta, Assistant Professor, Department of Policy and Management Studies, TERI School of Advanced Studies, New Delhi, joined this webinar as guest speakers. Dr Atul Vaidya, Director, CSIR-NEERI, delivered the welcome address.

Narayan said that climate change was a multi-dimensional challenge that affected every aspect of life with respect to economic, social and environmental conditions. It requires good scientific understanding and coordinated action at national and global level, he added. "We need to control global average temperature, which is projected to reach or exceed 1.5 degrees Celsius of warming over next 20 years under all scenarios," he cautioned.

Recalling India's commitment



Dr Atul Vaidya addressing the gathering.

at Glasgow Climate Summit, Narayan said that India needed to take several effective steps to limit carbon emissions by using technologies such as grid-scale battery, electric vehicles, sustainable aviation fuel, etc. Land use policy is key to reining in global warming. The green tech-

nology revolution, at the heart of which sits lithium, holds massive promise for world's miners, but to reap the rewards the entire metals supply chain will have to 'green' itself, he stressed.

Dr Ramaswami said that 'Fixed-bed Biofilm Reactor' was a robust, reliable and compact technology for nitrification of waste waters. Microbes are used in this technology for disintegration and detoxification of industrial contaminants along with removal of organic waste, he added. He presented salient features and applications of the reactor for waste-water treatment through a case study.

Delivering lecture on 'Understanding Anthropocene in the Era of Sustainable Development', Dr Dutta said that human activity had significantly altered the Earth. These changes include global warming, habitat loss, changes in

chemical composition of atmosphere, oceans, soil, and animal extinctions. According to him, foundation of sustainable development is in sustainable human-nature systems. "There is rising scientific evidence that humanity has now entered a new era defined as Anthropocene, in which humanity is shaping the entire biosphere in a globalised phase of environmental change," he said.

Dr Vaidya said that science and technology should be used for welfare of society without any limit. Science, technology and policy together play an important role in national development, he added. Students and teachers from Navodaya Vidyalaya, Kendriya Vidyalaya, and other schools, health workers from State Department of Health and Family Welfare, CSIR-NEERI staff and general public participated in the webinar.