

CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), as Stockholm Convention Regional Centre (SCRC) on Persistent Organic Pollutants (POPs) for Asia Region, organized an Inaugural meeting of Advisory Board constituted for "Dedicated Centre on Chemical and Wastes with special focus on POPs" at CSIR-NEERI on April 3, 2019. The meeting was organized to form a special directorate on POPs under the scheme of United Nation Environmental Program on chemical and waste. Dr. Sukumar Devotta, Former Director CSIR-NEERI, Dr. Rakesh Kumar, Director, CSIR-NEERI, Mr. Sudhir Deo, Chairman Technology & Energy Expert Committee, ICC & Managing Director, NOCIL, Dr. L. Ramakrishnan, Assessor of the NABET's (Quality Council of India), Dr. Nalini Bhat, Former Advisor, Ministry of Environment, Forest and Climate Change, Government of India, Prof. Dr. Indrani Chandrasekharan, Former Advisor (Environment and Forests), Planning Commission and Ministry of Environment, Forests & Climate Change, GOI & Prof. & Director, AIGWES are the advisory board members for development of dedicated facility on POPs. The meeting was coordinated by Dr. A. N. Vaidya, Chief Scientist, and Dr. (Mrs.) Kanchan Kumari, Sr. Scientist, CSIR-NEERI who are the Contact Persons of SCRC.



"Regular funds will be provided for center's activity"

At the outset, Dr. Rakesh Kumar formally welcomed the Board members and participants. In his welcome address Dr. Rakesh Kumar emphasized the importance of formation of special directorate and role of Stockholm Convention Regional Center (SCRC) for Asia Region. He also promised to ensure regular funding for the Center's activity and also suggested to prepare ten-year plan for

the different activities to be undertaken. Later, the agenda of meeting was



"Policy and politics will play main role in execution of the activities"

discussed by Dr. A. N. Vaidya, along with the different activities undertaken so far. The Chairman of Advisory Board, Dr. S. Devotta, who initiated this activity during his tenure as Director, CSIR-NEERI (2003-08), expressed his satisfaction over the progress of the center so far.

He stressed on the need to represent the country as the Asian Regional Center for Stockholm Convention. For this, he further added that we first need to find out loop holes in implementation and need to bring the people working in this area together in order to have uniformity and quality of the information leading

to increased sharing of ideas and knowledge. He also narrated various technical aspects such as collection of data including manufacturers and alternatives and preparation of inventories of certain chemicals which are ready to go under the convention. He also suggested to develop Standard Operating Protocol for the assessment of these chemicals to have prioritization of chemicals, manufacturing processes, disposal methods etc. leading to "Concept Paper".

He further emphasized on defining clear goals for the center, future work plan, and implementation. He mandated that the role of SCRC is not only assess the database for certain chemicals but also examining the socio-economic impact and risk assessment related to chemicals. In addition, he described the need for continual interaction with Industry to know HS code, MSDS, Export and Import data related to chemicals.



"Updation of NIP should be on priority"

Prof. Dr. Indrani Chandrasekharan, Former Advisor (Environment and Forests), Planning Commission and Ministry of Environment, Forests & Climate Change, GOI & Prof. & Director, AIGWES, highlighted the importance of National Implementation Plan (NIP) to ministries and need to modify the NIP. She also mentioned NIP should come out very clearly under MoU with MoEF&CC or UNEP

regarding the Convention on POPs. She insisted on listing of chemicals addressing each and every step of product processing and disposal including the proactive research for environmental fate and transport of chemicals. Further she emphasized that regional centers should do only Capacity building programs wherein the World Bank, UNEP and Indian Ministries can act as implementing bodies for the regional centers. In order to have a wider impact, she further suggested to organize consultative workshops, seminars and conferences. She also strongly emphasized over gender mainstreaming (with special focus on females) in different sectors of wastes and chemicals.



"Fund flow is very important to carry out the research"

Dr. Nalini Bhat, Former Advisor, Ministry of Environment, Forest and Climate Change, Government of India extended her view on the formation of advisory board and what authorities to be included in it. She also spoke about the need to update and address the shortcomings of National Implementation Plan. In this context, she opined that in order to list chemicals in NIP or international convention as toxic chemicals or POPs or even for already listed chemicals, frequent data collection is required till the accuracy or precision is achieved. She

further insisted that the goals we are planning to achieve should have time line so that we can achieve them with dedicated focus.



"Knowledge is the Priority"

Dr. L. Ramakrishnan, Assessor of the NABET's (Quality Council of India) stated that the knowledge about a particular thing is the foremost important task before we begin any kind of research. He mentioned we lack in data generation and relevant inventory preparation. He also raised the questions related to how NEERI as Stockholm regional Centre is looking forward to work; how the institute is going to fulfil the agenda of capacity building and what will be the outcomes. He suggested to make the website more informative and attractive and also suggested to write clear and concise objectives in form of statements and make newsletters to get it disseminated well. He also endorsed the suggestion from Dr. Indrani Chandrashekharan on updation of NIP addressing all the aspects of a chemical ranging from import/export to release in the environment. He further emphasized on better interaction of Industries with MoEF&CC with respect to chemicals, manufacturing processes, properties etc. to know how different industries operate in our country. Moreover, he also suggested to include the other activities of NEERI to the website so that are better informed. Most importantly, he pointed out the relevant significance of listing of chemicals in Stockholm Convention to our country and its climatic conditions. In this regard, he further added that we should be ready to trace out the technical issues and clauses related implementation of policies and its execution.



"India has been very rich in scientific knowledge, somebody has to coordinate it"

Mr. Sudhir Deo, Chairman Technology & Energy Expert Committee, ICC & Managing Director, NOCIL was Special Invitee for this meeting. He discussed the issues and challenges of the industries and manufacturers after the banning the chemicals under the convention. Meanwhile he also suggested that the chemicals being used for various industrial or commercial purposes should

have prior and prominent environmental clearance and for that we need to have a strong environment clearance repository. He suggested that stakeholders should also be involved in this activity. On the issue of complete LCA of a

product/chemical, he stated that raw materials used by industries were sometimes not specified clearly, and in this regard MoEF must have a data bank of manufacturer and their products. The data bank should also include the HS Code and CAS number given to all products by manufactures for imports/export operations from other country. He also pointed out clearly, a loop of missing information from the importer to Local Supplier.

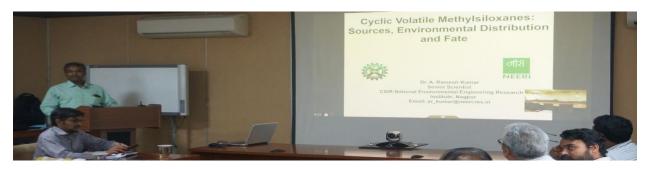
Presentations



Dr. A. N. Vaidya, Chief Scientist of CSIR-NEERI broadly highlighted the role of CSIR-NEERI as the "Stockholm Regional Centre on POPs for Asia Region" and goals to be achieved in his presentation. He also mentioned CSIR-NEERI as Stockholm Regional Center is representing 10 Asian countries including India at International level. He further described the objectives of the project to be undertaken by the institute that included the capacity building activities, activities for societal benefit and monitoring of POPs in different environmental matrices as also, undertaking major activities under NIP preparation. He also stated about the electronic interactive toolkit prepared by the institute for the environmentally sound management of industrial chemicals.



Dr. Kanchan Kumari in her presentation briefly described about the project entitled "Institutional Capacity Building for Sustainable management of Chemical and Waste with special focus on Persistent Organic Pollutants (POPs) and its aim and objectives to be achieved. She also mentioned about the current preparations of the institute for the work to be undertaken ahead. The presentation also included the various nominations received from different NGOs, CSIR laboratories, industries and other stake holders to contribute towards the successful achievement of the objectives. Notably she strongly emphasized in her presentation about the gap assessment and need for analysis for capacity building for identification and management of chemical waste.



Dr. Ramesh Kumar gave a presentation on risk assessment and environmental fate of cyclic volatile siloxanes. He traced back the manufacturing of siloxanes from 1940s covering their physico-chemical properties, industrial and household applications. He also mentioned that the cyclic volatile methyl siloxanes are emerging chemical of concern being regulated by different international agencies to identify its PBT potentials. The most prominently used cyclic volatile siloxanes are tetra, penta and hexa cyclosiloxanes having implications in environment based on weight of evidences available. These compounds are constantly under debate whether to be called as POPs or not due to their certain properties. He also described about the growing controversies between different international agencies such as EU's REACH, Health Canada and Stockholm convention on POPs to classify siloxanes as POPs.



Coincidently the date of standard Inaugural Meeting of advisory Board Members on 3rd April, 2019 was also marked as the Birthday of **Dr. S. Devotta.** The birthday celebration developed an overwhelming atmosphere in the conference room and created the beautiful memory which will be cherished ever after.





At the end of her presentation, **Dr. Kanchan Kumari** also informed the director and advisory board members about the initiative taken to develop new website by CSIR-NEERI for Stockholm Convention on POPs for Asia Region and also assured to modify the website enriching the site with information on regular basis and with various suggestions offered by the dignitaries for development of website will be

Interaction with Task Force

Dr. Atul Vaidya, Chief Scientist & Head, Solid and Hazardous Waste Management Division, Dr. Kanchan Kumari, Sr. Scientist, Environmental Impact And Sustainability Division, Er. Gajanan Kanade, Principal Scientist Analytical Inst. Division, Er. Sanjay Kashyap, Sr. Scientist, Analytical Inst. Division, Dr. A Ramesh Kumar, Sr. Scientist, Solid and Hazardous Waste Management Division, Dr. Kavita Gandhi, Scientist, Environmental Impact And Sustainability Division, Er. Karthik Raghunathan, Scientist, Environmental Biotechnology And Genomics Division, Dr. Tanvir Arfin, Scientist, Environmental Materials Division, Er. Piyush Kokate, Scientist, Energy and Resource Management Division, Er. Hemant Bherwani, Scientist, Centre of Strategic Urban Management, Dr. Lakshmikanthan P, Scientist, Water Technology and Management Division, Mr. Jowin Joseph MT, Scientist, Cleaner Technology and Modelling Division were the task force members participated in the discussion with the advisory board members.

The advisory board members later interacted with the task force about the activities related to SCRC. The task force members briefly described their area of expertise and assured to contribute maximally to the activity. The board members also advised that the team should have defined work plan and contribute in the form of proposal, Information reports/write up, public awareness campaigns etc.





The meeting was attended and enriched by the presence of students including Mr. Pradip Jadhao, Mr. Ankur Khare, Ms. Anshika Singh, Ms. Anuradha Awasthi and Mr. Deepak Marathe associated with CSIR-NEERI.

Key Suggestions in Nutshell

- Development of the expertise on long range transport, Air-water-soil transfer mechanism and past-future problems related to chemicals and waste sector
- Proactive research on material transport
- Organization of multiple events (seminars or workshops) to generate mass awareness.
- Updating NIP
- Maintenance and updation of Website as continual activity
- Awareness programs and public participation
- Creation of data base on people working in the same field (POPs)
- Developing infrastructure dedicated to the Centre



Glimpses of the Meeting





















