

Report on International Workshop- Cum- Exhibition on “Automation & Emerging Skill Requirement for Efficient water Resource Management”

To tackle the issue of *water management*, which keeps conspiring against the sustenance of the world population, the **Instrumentation Automation, Surveillance & Communication Sector Skill Council (IASC-SSC)** in partnership with the **World Bank, Central Water & Power Research Station, National Hydrology Project, BIPS Systems Ltd., and Phoenix Pvt. Ltd.** had organized an International Workshop-cum-Exhibition on “Automation and Emerging Skills Requirement for Efficient Water Resource Management” on the 29th of August, 2019, at SCOPE Convention Center in New Delhi.

The event was inaugurated by Dr. Mahendra Nath Pandey, Hon’ble **Union Minister of Skill Development and Entrepreneurship , Govt. Of India**. On this occasion, an exhibition was also organized which was inaugurated by Mr. Faggan Singh Kulaste, Hon’ble Minister of State for **Ministry of Steel, Govt. Of India**. The event was chaired by Mr. Nagendra Goel, Founder Chairman IASC-SSC & Managing Director, BIPS Group and Shri Anupam Jaiswal, Chairman **IASC- SSC**

A number of experienced and widely recognized personalities associated in the field of water treatment and management spoke enthusiastically at the event. The presentations included topics ranging from affordable, nature-based solutions for decentralized waste water treatment. The role of automation that can be used for the treatment of wastewater and for the management of water resources across the world and the application of the Rubber Dam technology in India were highlighted.

Hon’ble Union Minister Dr. Mahendra Nath Pandey expressed his belief in the potential of mankind to fight this dreadful issue with absolute devotion and showed his faith in the members of the conference to discuss extensively and come up devoutly with reasonable and immediate solutions for the most inevitable issue at hand. He also showed his keen interest in all the technologies that were exhibited and expressed his immense appreciation towards the usage of new technology in water management.

Mr. Faggan Singh Kulaste, Minister of State for the Ministry of Steel openly expressed the excitement that the workshop-cum-exhibition had urged in his heart when he thought about how beneficial the result of this event will be for people all over the country. He also admired the exhibition that was organized and asked many questions regarding the workings of different technologies presented at the exhibition.

Mr. Nagendra Goel , Promoter & Founder Chairman **IASC-SSC** in his address express that the present water scarcity situation can be handled well if every individual is inspired and given the means to manage water efficiently both on micro and macro levels. Mr. Goel quoted that the world still has enough source of water for over 7 billion people. He emphasized that the existing workforce will need to align its skills to keep pace, adopt and to succeed. Skills are the key challenges in adopting the latest technology. He emphasized that we can very well convert this challenges to opportunities.

Mr. Anupam Jaiswal, Chairman, **IASC Sector Skill Council** applauded the Indian Government’s efforts in recognizing the dire effects of water scarcity in time. An issue that is of utmost importance for the world today. He also showed concern about the mis-uses of water and its mismanagement.

Dr. VC Goyal, Head of the Research Management and Outreach Division, **National Institute of Hydrology**, stated that even though the conditions have so worsened that 40% of the Indian population will be deprived of access to drinking water by 2030. There is still time and a favouring possibility that the whole situation around the world can be handled with the emerging technology if implemented seriously.

Mr. Edward Hua from **Yantai Sunny Rubber Dam Co. Ltd.**, China, addressed the various applications of Rubber Dams and how superbly effective they can be especially suiting the Indian conditions.

Mr. Sudhir D. Panadare, Director (Technical), **Rashtriya Chemicals & Fertilizers**, called the workshop 'apt', as it was on a topic which is related to our day to day lives and encircles a problem which assuming dynamic proportions and is affecting the entire world. Recognizing how water is as much a giver-of-life, as it is a taker, Mr. Panadare said that we have to tame this resource and bend it for our constructive use while still trying to understand it better.

While comparing the technological advancements in the dams used in India in 1950 and in 2019, Mr. Naresh Kumar Mathur from the **Central Water Commission**, brought to the notice that the sewage treatment plants in general and water resource management systems in particular, have got a very low technological infusion. He stated how imperative it is that our focus on the technological infusion in all water resource management programs is increased heavily and immediately.

Mr. Valmik Suryavanshi from **Phoenix Pvt. Ltd.**, emphasized the role that Phoenix is playing with its latest technology in the fields of Instrumentation & Automation and also displayed various products in the exhibition.

While Mr. Norbet Kessels from **Floecksmuhle**, Germany gave an elaborate description of the available technologies in the world market and stressed upon the futuristic approach for the conservation of water & it's application in the process. He also express their relationship with BIPS Systems to manufacture components of Rubber Dam in India for the first time.

Mr. Rakesh Chopra, from **BIPS Systems Ltd.**, talked about how efficiently and prolifically the BIPS Group has been bringing solutions for the better management of various social and environmental issues that our society faces from time to time.

Mr. N.K. Manglik, Sr. Joint Commissioner, **National Hydrology Project**, explained how NHP has been working enthusiastically to achieve the rapidly evolving objective of continuously improving and extending the reliability and accessibility of water resource management systems across the country through its various agencies and numerous sub-projects.

Mr. N.D. Atkekar, Chief Research Officer, **CWPRS**, explain how the surface water level sensor technology is used for different purposes and how beneficial it is for determining the actual availability of water at any given time.

Mr. S.K. Bardhan, **IASC Sector Skill Council**, extensively explained the procedure that the Council follows for the initiation and development process of QP-NOSs. He requested feedback on skill need for water resource management from the industry. Mr. Bardhan presented Six QP-NOSs for industry validation and sought for effective response from the industry on the same.

Mrs. R.S. Erande, Scientist 'B', **CWPRS**, emphasized the importance of data and technology, explained what improvements in technology have helped to cater to various

design problems, among others. Mrs. Erande also talked about how the data acquisition system helps in the validation of simulated systems.

Mr. Dherminder Mohan, from **Forbes Marshall**, propagated the different solutions that have been developed after heavy research and hard work to successfully combat the issue of water and to restrain the situation of overly stressed water resources from even occurring.

Mr. Hanumant Kadam retired AGM, **Rashtriya Chemicals and Fertilizers Ltd.** argued over the role that the efficient and effective Automation technologies already available at hand are playing in cutting costs of an average wastewater treatment plant. He also explain on the numerous benefits that the wireless technologies brought for everyone involved.

Mr. Ranjit Jha from **Unique Technology** gave his views on solutions for water and wastewater based project, that are mainly powered by the World Bank and the National Hydrology Project. Mr. Ravindra Borse, Product Manager, **Vega**, talked about a reliable level measurement for efficient water resource management.

The programme was ended with Vote of Thank by Shri Ajay Bhushan, OCEO. IASC-SSC.

Total 250 participants attended the workshop. Various media channels both print & electronics covered the sessions.

The workshop concluded with the determination to use automation and new techniques in water resource management. It was general consensus for the requirement to develop skilled manpower, upgrade the skill sets of existing human resource and standardize the job role. All stake holders to compile and forward their skill requirements, so that standards can be framed for the Instrumentation & Automation job roles required for successful implementation of Automation of water resource management. Team IASC-SSC alongwith National Hydrology Project team will work out on skill requirements, development of National Occupation Standards, Training and Certification of the human resource in this sector.