

WATER AND ENERGY INTERNATIONAL

VOLUME 64/RNI, NO. 1

April 2021

ISSN: 0974-4711

Pages : 84 Rs. 200/-



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NEW DELHI**



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Publisher, Printer and Editor Mr. A.K. Dinkar on behalf of Central Board of Irrigation and Power, Printed at M/s Chandu Press, D-97, Shakarpur, Delhi, published from Central Board of Irrigation and Power, Malcha Marg, Chanakyapuri, New Delhi 110 021

Monthly Subscription ₹ 200/-
Annual Subscription ₹ 2400/-

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Water is among the most precious gift of the nature to the mankind and is one of the five elements of the nature necessary for survival of all living beings. Water occupies an eminent place in Indian ethos. Though the total water availability may look to be unlimited, which is a wrong notion, the amount of fresh water actually available to mankind is very limited. In India, ground water resources are getting increasingly polluted due to unplanned disposal of untreated wastes of industry and urban areas in haphazard manner, and excessive use of fertilizers in agricultural sector. Generation of new and complex wastes by industries complicate water pollution. Both the surface water and ground water are affected by such pollution. Recycling and reuse of wastewater has, therefore, to be increasingly resorted to, as fresh water supplies are inadequate. Currently ground water is an open access resource and individual

groups have no standing to comment or alter others use pattern. Though, there are legal provisions against waste, which could be used by communities to encourage individuals to adopt efficient use practices. This is a gigantic task and possibility to do this efficiently in our vast country with over billion population & comprising of high percentage of low income group which could ill afford to take necessary measures on account of lack of basic knowledge, education and financial involvement. With ever increasing use of water for various purposes like drinking, irrigation, industrial use, to meet the abnormally high pollution growth in the country we have to think fast, decide and implement harsh decision, which may not be palatable to some of the interest groups. In this context, the paper titled "Water Quality Appraisal of a Mountainous River: A Case Study of Rispana River, Dehradun", published in the present issue of the Journal, will be of interest.

Accidents happen in the field due to some damage to the equipment, which could be attributed to the deficiencies, such as, the faulty design, poor quality, the Manufacturing process, the Transportation, the Erection and Commissioning, negligence, overconfidence, the lack of maintenance, and Supervision, ignoring the safety instructions, the lack of training to staff, etc.

The Electric and fire safety & Disaster Management are the key areas where more attention is required to be given;

We are sure that all the organizations are giving special focus on the Safety and wellbeing of human and animal life and taking several measures to improve safety culture and also providing a safe work environment to all the stakeholders and society as a whole.

CBIP, while appreciating the concern, has included these important areas in the ambit & scope of its training activities, and has already conducted many training programs for various organizations on the subject of Electrical and fire safety.

This is a very important national Issue, and keeping in view its gravity and importance, CBIP plan to start basic level training programs on 'Electrical Safety & Earthing Design' and 'Basics of Power System Protection'. These training programs are specially designed for the Supervisor level & other low level staff. The complexities of electrical earthing design & Basics of protection are going to explain in these courses through the application of theoretical and practical sessions. We are sure that your Supervisors staff specially ITI/Diploma holders will be immensely benefitted from such Programs. We are also sure that the training on the above topics will help in reducing break downs & major failures thus resulting in large savings of revenue through improved efficiency.

We have included three important articles written by eminent engineers, for inclusion in this journal, which will be very interesting to the professionals. The article on 'Apparent Energy Calculations under non-sinusoidal Conditions' will focus on the computation of apparent power and another article on 'Universal LT LOTO - A breakthrough achievement' speaks about the concept of applying Lock-out / Tag-out (abbreviated as "LOTO") in Tata Power Delhi Distribution Ltd. The concept of LOTO is a proven system for ensuring assess of electrical switchgear to the authorized persons only. Besides this third article is on 'Lifetime Management of Transmission & Distribution' which is a very important case study from Power Grid Corporation of India Ltd.

We would like to compliment the authors of various papers who have come forward to contribute articles for this issue of the journal. Through this journal, it has been our endeavor to share the experiences of Engineers in the field of Water Resources, Power, and Renewable Energy Sectors. We, therefore, request the readers to send their contributions in the shape of technical papers, etc. for publications in this journal.

We hope the readers will be highly benefited from the information given in this issue.

A.K. Dinkar
Secretary, CBIP