CENTRAL BOARD OF IRRIGATION & POWER OFFICE BEARERS

President Mr. Ravindra Kumar Verma, Chairperson, CEA

(i) Vice President Mr. S. Masood Husain, Chairman, CWC

(ii) Vice President Mr. K.S. Popli, CMD. IREDA

(iii) Vice President Mr. Ashok Sethi, COO & ED, Tata Power

Secretary Mr. V.K. Kanjlia

Director Mr. P.P. Wahi

Director (WR) Dr. G.P. Patel

The statements and opinions expressed in this Journal are not necessarily of Central Board of Irrigation & Power.

- Reproduction of articles from Water and Energy International is subject to approval of the Editor.
- Interested authors from India and abroad are requested to contribute their articles to this Journal and send the same to Secretary, Central Board of Irrigation & Power, well in advance.

All communications should be addressed to:

Secretary

Central Board of Irrigation & Power Malcha Marg, Chanakyapuri New Delhi 110 021

Ph.: 91-11-2611 5984

Fax: 91-11-2611 6347

E-mail: cbip@cbip.org

Website: www.cbip.org

FROM EDITOR'S DESK

V.K. Kanjlia, Secretary, CBIP

5

6

14

16

NEWS LETTER Energy Section

- CIGRE Asia-Oceania Regional Council (AORC) Technical Meeting 2018 and International Conference on Global Energy Transition - Issues & Challenges, 24-25 May 2018, Gangtok, Sikkim, India
- 12 Weeks Training Program for Fresh Recruited Engineers of RRVUNL on Supercritical Technology

W&E INTERNATIONAL

Energy Section

- Enhancement of Power Transmission Capacity of Existing AC Transmission Lines by Refurbishing to HVDC Transmission - Vinothkumar K. Gaurav-Kumar Kasal, Shanthakumar MS and Abhay Kumar
- Cyber Security Challenges to Smart Power Grid Infrastructures - Narendra Singh Sodha 20

INTERNATIONAL EDITORIAL ADVISORY BOARD

V.C. Patel - Distinguished Professor and Director, University of IOWA, U.S.A.

Donggi Zuo - Prof. & President's Advisor of Hohai University, Ministry of Water Resources, People's Rep. of China,

K.G. Ranga Raju - Former Professor of Civil Engineering University of Roorkee (Now HT Roorkee)

Secretary General, CIGRE, France, Jose M. Martin Mendiluce - Doctor Ingeniero de Carninos ASINC, S.L.. Spain,

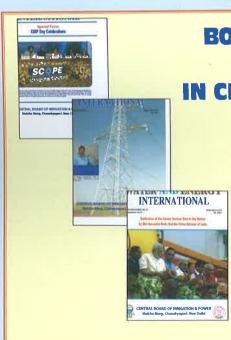
Alison Bartle - Editor, Aqua-Media International Ltd., United Kingdom.

Total Pages 84

Monthly Subscription ₹ 200/-Annual Subscription ₹ 2400/- Publisher, Printer and Editor Mr. V.K. Kanjlia 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

M

O	NTENTS	(contd.)
- :	Demand Response from Lift Irrigation loads to Harness Renewable Energy – T Srinivas, Jane Jose, Shamreena Verghese, A Subbanna, K B V Ramkumar and A. Janardhan	25
-	Synchrophasor: Key Insight into the Power System Dynamic Monitoring – Chandan Kumar, Raj Protim Kundu, Srinivas Chitturi, Rahul Shukla, Vivek Pandey	30
	Investigation of Diagnostic technique for Thermal Fault on Natural Ester Oil-immersed Transforme Dissolved Gas Analysis – R.Kuriyama, F.Kato, M.Miyashita, T.Minagawa, T.Amimoto, R.Nishiura and H.	r by <i>I.Ito</i> 38
-	Performance Analyses of Autonomous Hybrid Renewable Power Generation for Environmental Protection with Effective Energy Management Controller – Dr. K. Sekar and Dr. V. Duraisamy	44
W&	&E INTERNATIONAL	
• И	Water Resources Section	
	 Physicochemical Analysis and Economic Evaluation of Lake Ecosystem - A Case Study of Lake System in Walajah Taluk, Vellore (India) - Gokul Raghavendra Srinivasan and Shalini Palani 	52
	 Study of Solar Energy using as Water Pump Drive-Land for Agricultural Irrigation Maidi Saputra, Ahmad Syuhada and Dan Ratna Sary 	56
	 Rainfall Runoff Estimation using SCS Model and ARCGIS for Micro Watershed in Cuddalore District – Eshanthini P. and Samuel Simron J. 	59
	 An Experimental Study on Reducing the Carbon Footprint of Pervious Concrete Shubhendu Amit and Arabinda Sharma 	64
ST	TATISTICAL DATA	
•	Water Resources Section	69
•	Energy Section	71
WA	ATER & ENERGY ABSTRACTS`	
•	Energy Section	73
•	Water Resources Section	75
FA	AR & NEAR IN WATER AND ENERGY	
	News - Energy Section	77
	News - Water Resources Section	79



BOOK ADVERTISEMENT TODAY IN CBIP W&E INT. JOURNAL

(Monthly Issue)

Tariff

Back Cover Rs. 35,000/-*
2nd/3d Cover Rs. 25,000/-*
Inner Pages Rs. 15,000/-*
*GST 5% extra

For Advertisement Please Contact:

Secretary

Central Board of Irrigation and Power

Malcha Marg, Chanakyapuri, New Delhi 110 021 Phone: 91-11-26115984/1294/26116567 Fax: 91-11-2611 6347 E-mail: cbip@cbip.org