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BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING
(Approved By AICTE, New Delhi & Affiliated to Guru Gobind Singh Indraprastha University, Delhi)
(An ISO 9001:2015 Certified Institution)
A-4, Paschim Vihar, Main Rohtak Road, New Delhi – 110 063

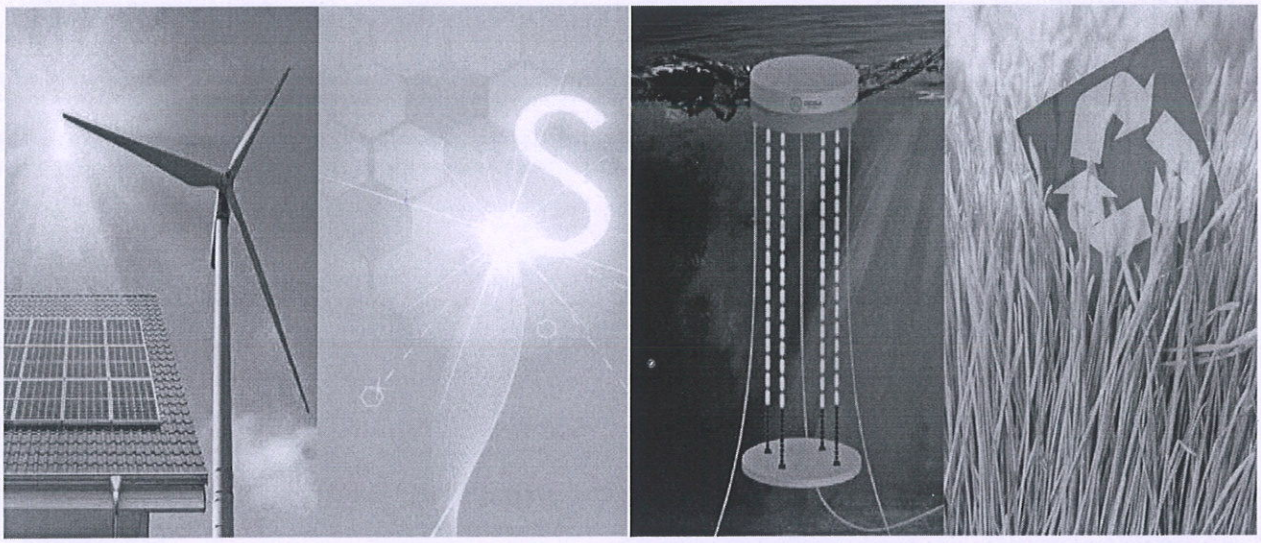
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

4th International Conference on

Renewable Energy Potential for Sustainable Initiatives

REPSI-2024

08th - 09th February 2024



REPSI – 2024 REPORT

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CONFERENCE CHAIR

Prof.Dr.Kusum Tharani
Department of EEE, BVCOE

Prof.Dr.Abhishek Gandhar
Department of EEE, BVCOE

CONVENER

Dr.Shashi Gandhar
Assistant Professor,
Department of EEE, BVCOE

Dr.Sudha.K
Assistant Professor,
Department of EEE, BVCOE

The 4th International Conference on Renewable Energy Potential for Sustainable Initiatives-REPSI 2024 was organized successfully by the Department of Electrical and Electronics Engineering on 8-9 Feb 2024, in collaboration with the Institution's Innovation Council, IET India as technical partner and Tata Power as our Industry partner.

Esteemed guests from various academic institutes and organizations related to the renewable energy sector were invited as guests of honor.

The event started with the Inaugural address by the Principal, Dr. Dharmender Saini at 11am in the auditorium.

Mr.Pankaj Dhingra, Director BVG Group was the first keynote speaker, who clearly emphasized on the need and importance of setting up PV manufacturing units in the country. He shared with the audience that a 500MW Module Manufacturing Assembly Unit with latest machines imported from Europe is being commissioned by the BVG Group in Noida, UP.

Mr.Nikhil Pathak **Head (Collaborations, Sustainability, Technical Services & Quality Assurance)** from TPDDL was the second keynote speaker. His talk mainly focused on the small initiatives that all of us can take in our homes and workplaces to improve our environment and work towards a sustainable future.

The last keynote address was given by Prof.Anil Pahwa who has worked for 40 years in Electrical and Computer Engineering Department at Kansas State University, where he is presently University Distinguished Professor and holds the Logan-Fetterhoof Chair. He had a fair knowledge about the distribution sector of the USA and played a major role in the integration of Solar PV System in the existing grid over there.

More than 100 papers were received under various tracks like-Photo voltaic systems, Hybrid system technologies, Alternate energy conversion systems, Soft computing techniques in Renewable Energy Systems (RES) and Climate change mitigation in Renewable Energy Systems (RES).Around 86 papers were accepted for presentation and publication in ESCI and Web of Science journals.

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There were total five paper presentation sessions that were organised over a span of two days. On Day 1 that is 8th Feb 2024, three parallel sessions were scheduled in offline mode.

Session - 1 on Optimization/ Adaptive/ ML/ IOT/Computational Techniques was scheduled in Room No-401, with Dr. Vanita Jain , Associate Professor, D.U as Session Chair and Dr. Sandeep Banerjee as Session Co-Chair.

Session - 2 again on Optimization/ Adaptive/ ML/ IOT/Computational Techniques was scheduled in Room No-402, with Dr. Tejinder Singh Arora, AMU Aligar as Session Chair and Dr. Shashi Gandhar as Session Co-Chair.

Session - 3 on Electrical Engineering / Renewable Energy Systems was scheduled in Room No-403, with Sh. Pramod Kumar, Chief Manager (PGCIL) as Session Chair and Dr. Sudha K.as Session Co-Chair.

On Day 2, that is 9th Feb 2024, two parallel sessions were scheduled in the online mode.

Session - 4 on Electrical Engineering / Renewable Energy Systems was scheduled in Room No-401, with Sh. Arun Chaudhary, Scientist MNRE as Session Chair and Dr. Dr. Bharat Singh as Session Co-Chair.

Session - 5 on Engineering /Miscellaneous was scheduled in Room No-402, with Dr. Dinesh kr Javalkar Associate Dean (Academics), Lingaya's Vidyapeeth as Session Chair and Dr. Shalabh Kr Mishra as Session Co-Chair.

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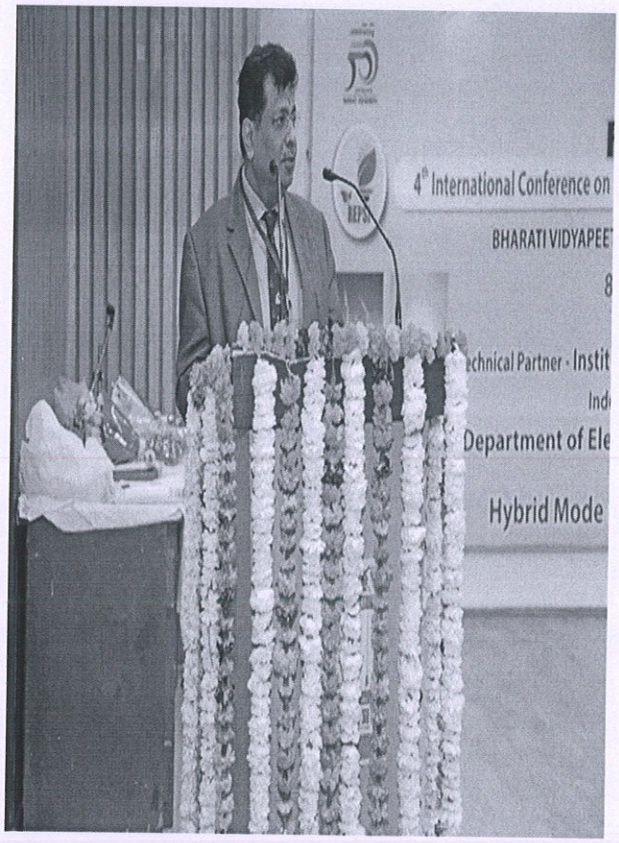
REPSI – 2024 SNAPSHOTS



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Special Issue on

Integrative Technology Advances for Viable Solutions

Guest Editors

Abhishek Gandhar

Kusum Tharani

Published by:

Taru Publications

Guest Editors

Abhishek Gandhar
Department of Electrical and Electronics Engineering
Bharati Vidyapeeth College of Engineering
Paschim Vihar
New Delhi 110063
India
E-mail: abhishek.gandhar@bharatividyapeeth.edu

Kusum Tharani
Department of Electrical and Electronics Engineering
Bharati Vidyapeeth College of Engineering
Paschim Vihar
New Delhi 110063
India
E-mail: kusum.tharani@bharatividyapeeth.edu

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FOREWORD

The 4th International Conference on Renewable Energy Potential for Sustainable Initiatives-REPSI 2024 was organized successfully by the Department of Electrical and Electronics Engineering, BVCOE, New Delhi on 8-9 Feb 2024, in collaboration with the Institution's Innovation Council, IET India as technical partner, and Tata Power as our Industry partner.

Esteemed guests from various academic institutes and organizations related to the renewable energy sector were invited as guests of honor. This conference helped many research scholars to present their ideas related to the health sector after Covid 19, advancement of technology in energy sector and issues related to IT sector.

Mr.Pankaj Dhingra, Director BVG Group was the first keynote speaker, who clearly emphasized on the need and importance of setting up PV manufacturing units in the country. He apprised the audience that a 500MW Module Manufacturing Assembly Unit with latest machines imported from Europe is being commissioned by the BVG Group in Noida, UP.

Mr.Nikhil Pathak Head (Collaborations, Sustainability, Technical Services & Quality Assurance) from TPDDL was the second keynote speaker. His talk mainly focused on the small initiatives that all of us can take in our homes and workplaces to improve our environment and work towards a sustainable future.

The last keynote address was given by Prof. Anil Pahwa who has worked for 40 years in Electrical and Computer Engineering Department at Kansas State University, USA where he is presently University Distinguished Professor and holds the Logan-Fetterhoof Chair. He had

a fair knowledge about the distribution sector of the USA and played a major role in the integration of Solar PV System in the existing grid over there.

In all, over 96 research papers were received from different parts of the country and abroad. Each submission was double-blind reviewed by at least two anonymous reviewers and a total of 38 papers were finally accepted for publication. Hence, this special issue on "Integrative Technology Advances for Viable Solutions" in the *Journal of Information & Optimization Sciences*".

Guest Editors:

Abhishek Gandhar

Kusum Tharani

Journal of Information & Optimization Sciences

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Special Issue on

Integrative Technology Advances for Viable Solutions

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