







#### A

# Report on 4<sup>th</sup> International Conference on "New and Renewable Energy Resources for Sustainable Future"

# ICONRER-2023

(Nov 02-04, 2023)

#### **Organized By:**

Department of Mechanical Engineering,

Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Jaipur (India)

in collaboration with

Department of Mechanical Engineering, Assiut University, Egypt

#### **Submitted By:**

Dr. Ashish Nayyar, Professor Principal Coordinator, ICONRER-2023

#### Contents

1.	About the Conference
2.	About SKIT3
3.	About Department of Mechanical Engineering
4.	Budget Approval For Conference
5.	Committees for Conference
6.	Themes of Conference:
7.	Speakers of ICONRER-20239
8.	Conference Programme
9.	Conference Brochure
10.	Inaugural Invitation12
11.	Minute to Minute Programme of Inaugural Ceremony
12.	Glimpses of Conference
13.	Detailed Day to Day Report of Conference
14.	Media Coverage of Conference
15.	Publications of ICONRER-202329
16.	Conference Proceeding30
17.	List of Papers Presented:
18.	List of Participants39
19.	Sample Certificates44
20.	Words of Acknowledgement

#### 1. About the Conference

The 4th International Conference on "New and Renewable Energy Resources for Sustainable Future" (ICONRER-2023) is being organized by Department of Mechanical Engineering of Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Jaipur (India) in collaboration with Department of Mechanical Engineering, Assiut University, Egypt during Nov 02-04, 2023. This scientific dialogue aims to provide a platform where scientists, researchers, academicians, industry experts, new aspirants, as well as students of science and technology can come together and engage in fruitful exchange of views and ideas to pave way for "New and Renewable Energy Resources".

The scope of this conference encompasses latest research outcomes pertaining to the "Energy" domain in the form of theoretical models, environmental impact, security and defense technology, innovative designs, enhancements and improvements in existing frameworks, sustainable technological advancement, societal welfare etc. Thus the conference intends to bring together the best minds from around the world to cover literally all aspects of energy technology from a multi-disciplinary perspective.

#### 2. About SKIT

Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT) inspired from the learnings of Swami Keshvanand, was established in the year 2000 by Technocrats and Managers Society for Advanced Learning. Today the institute is recognized as one of the centers of academic excellence in Northern India. SKIT is the only affiliated technical institute in Rajasthan to have earned an A++ grade by NAAC. The Institute is affiliated to Rajasthan Technical University, Kota for offering Postgraduate and Graduate Courses in Engineering and Management. SKIT has been ranked No.1 in Engineering Program in Rajasthan consecutively for the last six years by RTU, Kota.

SKIT is putting in efforts for making industry ready engineers and managers through effective Industry –Institute Interface. Apart from the University curriculum SKIT also pursues activities for research and development in various fields. The green landscaping, aesthetic elegance of arches and the vibrant pursuit of knowledge by the young aspirants make the environment serene, pleasant, and dynamic. Students joining the institute share the box full of opportunities for professional and personal development through an environment of practical orientation, industrial interaction and student led activities which help the students to develop good communication skills, integrated personality, and greater competitive spirit.

#### 3. About Department of Mechanical Engineering

The department started academic activities in the year 2003-04 with the admission of its first batch of under-graduates. The department offers B.Tech (Mechanical Engg.) and M.Tech (Renewable Energy) Technology courses. Also the department is also identified as research center of affiliating university for Ph.D. courses in Renewable energy, Production Engineering and Mechanical Engineering. The department has modern laboratories developed and designed from the perspective of the latest requirements of academia. Consistent pursuit of excellence by the department is clearly reflected in the fact that the department has already been accredited and re-accredited by National Board of Accreditation (NBA) (India). The department has developed its facilities in such a way that students can practice self-study and undertake other curricular activities. Special attention is paid for developing positive attitudes, leadership, group working and safety consciousness in the students.

#### 4. Budget Approval For Conference



#### Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur



#### DEPARTMENT OF MECHANICAL ENGINEERING

#### Proposed Plan of Events to be organized in Session: 2023-24

Sent Title of Event	Mode of Conduction	Proposed Date	Name of Coordinator	Any Collaboration	Budget Required	
IC Engine Testing and Simulation	Online	10-14 October, 2023	Prof. Ashish Nayyar, Dr. Chandan Kumar	2	30,000	
1CONRER-2023	Physical	2-4 Nov. 2023	Prof. Ashish Nayyar	To be applied	340,000	
Research Methodology and Data Analytics	Physical	28 Nov. + 2 Dec., 2023	Dr. Deepak Kumar, Dr. Achin Srivastav	=	45,000	
Drone Technology: Assembly & Programming	Physical	15-19 January, 2024	Mr Praveen Saraswat	15	50,000	
impact of industry 4 ii on Supply Chains	Physical	6-10 Feb. 2024	Mr. Sudesh Garg. Dr. Prem Singh	-	40,000	
eaching) Mechanical Engineering Laborators Practices	Physical	12-16 Mar. 2024	Mr. Vinay Singh Marwal Mr. Sudesh Garg Mr. Vishnii Janzid	-	20.000	Agas
Renewable Energy	Online	19-23 March, 2024	Mr. Dinesh Sharma. Mr. Ankit Aganval	-	30,000	JA.
	1		1 2 3 AMAZ 2017 TOTAL CONT.	-		
1	IC Engine Testing and Simulation  ICONRER-2023  Research Methodology and Data Analytics  Drone Technology Assembly & Programming  Impact of Industry 4 II on Supply Chains  exching) Mechanical Engineering Laboratory Practices  Renew able Energy	Conduction   Conduction   Conduction	It content   Conduction   Proposed Date	Conduction   Proposed Date   Name of Coordinator	IC Engine Testing and Simulation   Online   III-14 October 2023   Prof. Ashish Nayyar   Dr. Chandan Kumar	IC Engine Testing and Simulation   Online   10-14 October 2023   Prof. Ashish Nayyar   To be applied   340,000

Head, Deptt of Mechanical Engineering

Prof. Dhecraj Joshi

Prof. Dhecraj Joshi

Head Dept of Mechanical Engineering

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Page **4** of **48** 

#### 5. Committees for Conference

#### **Patrons:**

- Shri Raja Ram Meel
- Shri Surja Ram Meel

#### **Advisory Board of Conference:**

- Shri A. K. Narang, Ex. Scientist, Department of Atomic Energy, BARC, Mumbai
- Prof. Ahmad Hamza, Assiut University, Egypt
- Mr. Amit Nayyar, Duke Energy, USA
- Prof. Anand Pandey, Manipal University, Jaipur, India
- Dr. Anish Modi, Indian Institute of Technology, Bombay, India
- Prof. Avinash K Agarwal, Indian Institute of Technology Kanpur, India
- Prof. B.K. Sharma, Poornima University, Jaipur, India
- Prof. B.L. Salvi, College of Technology and Engineering, Udaipur, India
- Prof. Brijesh Tripathi, Rajasthan Technical University, Kota, India
- Prof. Dharam Buddhi, Lovely Professional University, Punjab, India
- Prof. Deepak Sharma, College of Technology and Engineering, Udaipur, India
- Prof. Debabrata Das, Indian Institute of Technology, Kharagpur, India
- Prof. Dilip Sharma, Malaviya National Institute of Technology, Jaipur, India
- Prof. G.D. Agarwal, Malaviya National Institute of Technology, Jaipur, India
- Prof. Jyotirmay Mathur, Malaviya National Institute of Technology, Jaipur, India
- Prof. K Mohanty, Indian Institute of Technology, Guwahati, India
- Prof. K Sudhakaran, Universiti Malaysia Pahang, Pahang, Malaysia
- Dr. K.B. Rana, Rajasthan Technical University, Kota, India
- Prof. K.K. Khatri, LNM Institute of Information Technology, Jaipur, India
- Prof. L.M. Das, Indian Institute of Technology Delhi, India
- Dr. M.L. Meena, Malaviya National Institute of Technology, Jaipur, India
- Prof. Motilal Rinwa, Government Engineering College, Jhalawara, India
- Prof. M.V. Reddy, Institute of Research Hydro-Quebec, Montreal, Canada
- Prof. PMV Subbarao, Indian Institute of Technology, Delhi, India
- Dr. Prodyut Ranjan Chakraborty, IIT Jodhpur, India
- Prof. Puneet Sharma, Rajdhani Institute of Technology and Management, Jaipur, India
- Dr. Rahul Goyal, Maipal University, Jaipur, India
- Prof. Soteris Kalogirou, Cyprus Institute of Technology, Cyprus, Greece
- Mr. Suneet Mathur, Rajasthan Renewable Energy Corporation Limited, Jaipur, India

#### **Local Advisory Committee (SKIT)**

- Shri Jaipal Meel, Director
- Prof. S.L. Surana, Director (Academics)
- Ms. Rachna Meel, Registrar
- Prof. Ramesh Pachar, Principal
- Prof. R. K. Jain, Dean
- Ms. Hemlata Dullar, Principal, Pharmacy
- Dr. Dheeraj Joshi, Head, ME Department

- Prof. Anil Chaudhary, Head, IT Department
- Dr. Mukesh Gupta, Head, CSE Department
- Dr. Mukesh Arora, Head, ECE Department
- Dr. D. K. Sharma, Head, CE Department
- Dr. Sarfaraz Nawaz, Head, EE Dept.
- Prof. Rohit Mukherjee, Head, Ist year Incharge
- Prof. Amber Srivastava, Head, TPO & Mathematics Department
- Dr. Sharda Soni, Head, Chemistry Department
- Dr. Neha Purohit, Head, English Department
- Dr. Braj Raj Sharma, Head, Physics Department
- Prof.Ona Ladiwal, Head, Department of Management Studies

#### **Conveners**

- Dr. Ashish Nayyar
- Mr. Dinesh Kumar Sharma
- Mr. Ankit Agarwal
- Dr. Chandan Kumar

#### **Core Committee**

- Mr. Naveen Kumar Sain (Secretary)
- Dr. Manoj Kumar Sain
- Dr. Rishi Vyas
- Dr. Manu Augustine
- Mr. Praveen Saraswat
- Mr. Brij Mohan Sharma
- Mr. Arun Beniwal
- Mr. Sandeep Kumar Bhaskar
- Dr. Amit Jhalani
- Mr. Yogesh Sharma
- Mr. Nitin Goyal
- Ms. Namita Soni
- Ms. Monika Khurana
- Mr. Amit Bansal
- Mr. Sudesh Garg
- Mr. Saurabh Gupta

#### **Student Coordinators and Volunteers**

S. No.	Name of student	University Roll No.	Semester	Volunteer Team
1	Aayushman Mishra	20ESKME001	VII	Inauguration and Valedictory
			Semester	Committee
2	Ankit Chaudhary	20ESKME011	VII	Core Committee
	Seme	Semester	Core Committee	
3	Doomals Vyman Cai	20ESKME029	VII	Inauguration and Valedictory
3	Deepak Kumar Sai	ZUESKIVIEUZ9	Semester	Committee

4	Gautam Kumar Kamat	20ESKEC044	VII Semester	Photography
5	Harsh Tanwar	20ESKME038	VII Semester	Inauguration and Valedictory Committee
6	Mayank Mittal	20ESKME058	VII Semester	Registration Committee
7	Naveen Kumar	20ESKME060	VII Semester	Registration Committee
8	Pawan Bora	20ESKME067	VII Semester	Registration Committee
9	Priyadarshini Singh Shekhawat	20ESKME068	VII Semester	Inauguration and Valedictory Committee
10	Preeti Gupta	21ESKEE051	V Semester	Registration Committee
11	Abhinav Sharma	22ESKCY004	III Semester	Inauguration and Valedictory Committee
12	Anshu Kumari Sarsunia	L230018	III Semester	Inauguration and Valedictory Committee
13	Arbaz Mohammad	22ESKME007	III Semester	Conference Venues Team
14	Dipesh Dour	22ESKEE025	III Semester	Photography
15	Hana Kazi	22ESKME017	III Semester	Inauguration and Valedictory Committee
16	Khush Dhaka	22ESKME400	III Semester	Inauguration and Valedictory Committee
17	Krishna Chaturvedi	22ESKME025	III Semester	Inauguration and Valedictory Committee
18	Kshitiz Joshi	22ESKME026	III Semester	Inauguration and Valedictory Committee
19	Manthan Akar	22ESME031	III Semester	Inauguration and Valedictory Committee
20	Nitish Gupta	22ESKME034	III Semester	Inauguration and Valedictory Committee
21	Piyush Saini	22ESKME035	III Semester	Inauguration and Valedictory Committee
22	Priyankar Kumawat	22ESKME037	III Semester	Inauguration and Valedictory Committee
23	Ravi Kumar	L230003	III Semester	Conference Venues Team
24	Shashank Sharma	22ESKME041	III Semester	Inauguration and Valedictory Committee
25	Shubh Chugh	22ESKME043	III Semester	Conference Venues Team
26	Snehal Gajraj	22ESKEE068	III Semester	Photography
27	Tushar Bhola	22ESKME045	III Semester	Inauguration and Valedictory Committee
28	Aditya Garg	I01	I Semester	Registration Committee
29	Aniket Raj	B230350	I Semester	Photography
30	Nehal Swami	I32	I Semester	Inauguration and Valedictory Committee
31	Sarthak Dhameja	N23	I Semester	Food
32	Tanmay Khatri	N47	I Semester	Food

#### 6. Themes of Conference:

The International Conference on New and Renewable Energy Resources for Sustainable Future (ICONRER-2023) invited quality research papers that present innovative ideas, novel approaches, developments, technologies, best practices, tools and techniques and metrics in order to provide future directions to young researchers and practitioners aspiring to contribute in any aspect related to the "Energy" domain. The themes are as follows:

- Sustainable urban systems and infrastructure
- Low Energy architecture and buildings
- Gasification and pyrolysis
- Alternative fuels and fuel cell technologies
- Strategies for energy demand and use optimization
- Sustainable consumption and production
- CO<sub>2</sub> capture, storage, and utilization
- Heating and cooling systems
- Smart-grid
- Energy metrology
- Non conventional energy
- Solar energy technologies
- Energy modeling and analysis
- Socio economic and policy
- Gasification and pyrolysis
- Nano technology
- Energy storage technologies
- Environmental pollution control
- Green technologies and green buildings

#### 7. Speakers of ICONRER-2023

#### Speakers of ICONRER-2023



PROF. AHMED HAMZA H. ALI



DR. AKHILENDRA PRATAP SINGH



MR. GOLO J. PILZ



PROF. DHARAM BUDDHI



PROF. DILIP SHARMA



PROF. SUDHAKAR KUMARA SAMY



DR. NEELKANTH MARATHE



DR. P.M.V SUBBARAO



DR. RAJESH KUMAR PRASAD

#### 8. Conference Programme

# Conference Program

	A IIsH	A IIsH	A IIsH
Time (IST-GMT+5:30) 02:00-3:40 PM	Technical Session (A.2)  Keynote 3: Prof. Ahmed Hamza H Ali  (Online)  Assuit University, Egypt Online: 9, 11, 49, 72  Offline: 12, 13, 16, 17, 20, 22, 43, 44, 45, 46, 48, 57, 56, 59, 65, 67, 70, 103, 108,	<u>Biogas Plant,</u>	Technical Session (A.6)  Prof. Dharam Buddhi (Online)  Uttranchal University, Dehradun 33, 47, Offline: 10, 28, 29, 31, 33, 47, Offline: 10, 23, 27, 32, 35, 37, 38, 41, 50, 54, 60, 69, 71, 73, 74, 102, 104,
	A IIsH	Asia's Biggest Biog Hingonia Gaushala	A IIsH
Time (IST-GMT+5:30) 11:30 – 01:00 PM	Technical Session (A.1) Keynote 1: Dr. Akhilendra Pratap Singh IIT-BHU, Varanasi Keynote 2: Shri Subir Karmakar, NTPC, Jaipur	<u>Visit to Asia's Biggest Biogas Plant,</u> <u>Hingonia Gaushala</u>	Technical Session (A.5)  Keynote: Prof. G D Agarwal  Professor, Malaviya National Institute  of Technology, Jaipur
	A IIsH	A IIsH	A IIsH
Time (IST-GMT+5:30) 09:00 AM - 11:00 AM	Plenary Talk-1 (11:00 AM-12:00 PM) Dr. Golo J Pilz Brahmkumaris Ashram Mount Abu	Plenary Talk-2 Prof. Dilip Sharma Professor Malaviya National Institute of Technology, Jaipur Plenary Talk 3 Dr. Ravindar Kumar Sharma BARC, Trombay, Mumbai	Plenary Talk-4 Prof. PMV Subbarao Professor and Head, Centre for Rural Development and Technology, IIT Delhi
	Inaugural Session 10:00- 11:00 AM	Mal: Dr.	Centre
Date and Day	Day 1 November 02, 2023 Thursday	Day 2 November 03, 2023 Friday	Day 3 November 04, 2023 Saturday

#### 9. Conference Brochure

#### Advisory Board of Conference:

Shri A. K. Narang, Ex. Scientist, Department of Atomic Energy, BARC, Mumbai

Atomic Energy, BARC, Mumbai Prof. Ahmad Hamza H. Ali, Assiut University, Egypt Shri. Amit Nayyar, Duke Energy, USA Prof. Anand Pandey, Manipal University, Jaipur,

Dr. Anish Modi, Indian Institute of Technology,

Dr. Anish Modi, Indian Institute of Technology, Bombay, India Prof. Avinash K Agarwal, Indian Institute of Technology Kanpur, India Prof. 8 KSharma, Poornima University, Jaipur, India Prof. 8 L Salvi, College of Technology and Engineering, Udaipur, India Prof. Brijesh Tripathh, Rajasthan Technical University, Kote, India Prof. Dharam Buddh, Uttaranchal University, Debradun, India Prof. Debarah Buddh, University, Dentandun, India Prof. Debarah Salvina, College of Technology and Engineering, Udaipur, India Prof. Debaraha Das, Indian Institute of Technology, Kharagpur, India

Kharagpur, India Prof. Dilip Sharma, Malaviya National Institute of echnology, Jaipur, India rof. GD Agarwal, Malaviya National Institute of

Technology, Jaipur, India Prof. Jyotirmay Mathur, Malaviya National Institute

of Technology, Jaipur, India Prof. K Mohanty, Indian Institute of Technology,

Guwahati, India Prof. K. Sudhakaran, Universiti Malaysia Pahang,

Pahang, Malaysia Dr. K.B. Rana, Rajasthan Technical University, Kota,

Prof. K. K. Khatri, LNM Institute of Information

ndia 7r. ML Meena, Malaviya National Institute of rechnology, Jaipur, India 7ort. Motilal Rinwa, Government Engineering College, Inalawara, India 1000 (Golge, Institute of Research Hydro-Luebec Montreal, Canada 7ord. PM Subbarao, Indian Institute of Technology, 1000 (Golge).

Prof. PMV Subbarao, Indian Institute of Technology, Delhi, India Prof. Prodyut Ranjan Chakraborty, ITI Jodhpur, India Prof. Puneet Sharma, Rajdhani Institute of Technology and Management, Jaipur, India Prof. Rahui Goyal, Manipal University, Jaipur, India Prof. Sotris Ralgieruo, Cyprus, Institute of Technology, Cyprus, Greece Shri Suneet Mathur, Rajasthan Renewable Energy Corporation Limited, Jaipur, India

#### Contact Us:

Mr. Dinesh Kumar Sharma (+91 9785449998)

Mr. Ankit Agarwal (+91 9887222265)

Shri Surja Ram Mee

#### Local Advisory Committee (SKIT):

Shri Jaipal Meel, Directo Prof. S.L. Surana, Director (Academics) Ms. Rachna Meel, Registrar Prof. Ramesh Pachar, Principal Prof. R. K. Jain, Dean

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Dept. Dr. Sarfaraz Nawaz, Head, EE Dept.

Prof. Amber Srivastava, Head,

Prof. Sangeeta Vyas, Head, OSA Dr. Sharda Soni, Head, Chemistry Dept. Prof. Braj Raj Sharma, Head, Physics Dept Prof. Ona Ladiwal, Head, DMS, SKIT

#### Principal Coordinator:

#### Conveners:

Dr. Ashish Nayyar (Programme)
Mr. Dinesh Kumar Sharma (Technical)
Mr. Ankit Agarwal (Registration)
Dr. Rishi Vyas (Website)
Dr. Chandan Kumar (Publication)

#### Core Committee:

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Dr. Manu Augustine Mr. Praveen Saraswat Mr. Brij Mohan Sharma

Mr. Brij Mohan Sharma Mr. Arun Beniwal Mr. Sandeep Kumar Bhaskar Dr. Amit Jhalani Mr. Yogesh Sharma Mr. Nitin Goyal Ms. Namita Soni Ms. Monika Khurana

For more Information www.iconrer.skit.ac.in

Feel free to write at: iconrer@skit.ac.in

#### 4th INTERNATIONAL CONFERENCE

**"NEW AND RENEWABLE ENERGY RESOURCES FOR SUSTAINABLE FUTURE**"

#### **ICONRER-2023**

(November 02 - 04, 2023) **Organized By** 



#### **Department of Mechanical Engineering**

Swami Keshvanand Institute of Technology, Management & Gramothan, Jagatpura, Jaipur-302017 (INDIA)

#### Supported by:







# FOR MORE INFORMATION VISIT www.iconrer.skit.ac.

#### **Publication**

All Selected papers will be published in form a Book Series from reputed Publishers Springer/ Cambridge Scholars/ Elsevier. All selected papers will be assigned DOI

Some selected papers will be processed for consideration into Special Issues of Journal of Mobility Technology Published by ARAI.



"Driving Towards a Greener Tomorrow: Smart Use of Renewable Energy Resources for Sustainable Mobility"

#### **Important Dates**

· Deadline of receipt of Manuscript:

Oct. 05, 2023

• Notification for Manuscript acceptance:

Oct. 11, 2023

• Deadline for receipt for camera ready manuscript and author registration:

• Publication of tentative conference Oct. 25, 2023 programme:

• Conference Date: Nov. 02 to 04, 2023

#### **Registration Charges**

Category	Indian	Foreigner	
PhD Scholar/PG/UG Students	₹ 3,000	\$ 40 USD	
Academicians	₹ 4,000	\$ 50 USD	
Industry Persons	₹ 5,000	\$ 60 USD	

\*Get early bird discount of 30% if done before

Kindly visit conference website for registration

#### **About Conference**

Sustainable Future" (ICONRER-2023) is being organized by Department of Mechanical Engineering of Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Jaipur (India) during Nov 02-04, 2023. This scientific dialogue aims to provide a platform where scientists, researchers, academicians, industry experts, new aspirants, as well as students of science and technology can come together and engage in fruitful exchange of views and ideas to pave way for "New and Renewable Energy Resources" The scope of this conference encompasses latest research outcomes pertaining to the "Energy" domain in the form of theoretical models, environmental impact, security and defense technology, innovative designs, enhancements and improvements in existing frameworks, sustainable technological advancement, societal welfare etc. Thus the conference intends to bring together the best minds from around the world to cover literally all aspects of energy technology from a multi-disciplinary perspective.

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#### **Call for Papers**

The International Conference on New and Renewable Energy Resources for Sustainable Future (ICONRER-2023) invites quality research papers that present innovative ideas, novel approaches, developments, technologies, best practices, tools and techniques and metrics in order to provide future directions to young researchers and practitioners aspiring to contribute in any aspect related to the "Energy" domain.

#### **Conference Themes**

- Sustainable urban systems and infrastructure
- · Low Energy architecture and buildings
- · Gasification and pyrolysis
- · Alternative fuels and fuel cell technologies
- Strategies for energy demand and use optimization
- · Sustainable consumption and production · CO<sub>2</sub> capture, storage, and utilization
- · Heating and cooling systems
- · Smart-grid
- · Energy metrology
- · Non conventional energy · Solar energy technologies
- · Energy modeling and analysis
- · Socio economic and policy · Gasification and pyrolysis
- Nano technology
- · Energy storage technologies · Environmental pollution control
- Green technologies and green buildings



#### 10.Inaugural Invitation



#### 4th INTERNATIONAL CONFERENCE

on





# ICONRER-2023



# 



Department of Mechanical Engineering,
Swami Keshvanand Institute of Technology,
Management & Gramothan, Jaipur

Cordially invites you to the

### **Inaugural Ceremony**

(November 02, 2023 from 9.00 AM onwards)

**Venue: Gyan Mandir Auditorium** 



Please grace the event by your benign presence.



With Regards,
Team ICONRER-2023

#### 11. Minute to Minute Programme of Inaugural Ceremony

	ICONRER-2023			
	Minute to Minute - Inaugural Ceremony			
	Date: 02 Nov. 2023 (9.00 AM Onwards), Venue: Gyan Mandir Auditorium			
Time-Duration	Activity			
09:00 -09:06	Welcome of participants and guests alongwith introduction to the Insitute, conference and sponsors			
	Call for lighting of the lamp by dignitaries (with Saraswati Vandana):			
	1 Chief Guest-Sh. Ajitabh Sharma, Chairman, JCTSL			
	Guest of Honor- Dr. Golo J. Pilz (Adviser Renewable Energy, Brahma Kumaris & World Renewal Spiritual Trust, Mount Abu President, IndiaCare Trust, Berlin-Germany)			
	Presiding Guest- Sh. A. K. Narang (Head- Safety, Health, Env. & Public Awareness, Heavy Water Board, Department of Atomic Energy, Govt. of India)			
	4 Sh. Surja Ram Ji Meel, Chairman, SKIT Jaipur			
09:06-09:11 (5 min)	5 Prof. (Dr.) S.L. Surana, Director (Acad.), SKIT Jaipur			
(5 mm)	6 Sh. Jaipal Meel, Director SKIT Jaipur			
	7 Prof. (Dr.) Ramesh Kumar Pachar, Principal, SKIT Jaipur			
	8 Prof. Dheeraj Joshi , HOD Mechanical			
	9 Prof. Ashish Nayyar, Principal Coordinator			
	Call for taking seat at the dias- Sh. Ajitabh Sharma, Sh. A. K. Narang, Dr. Golo J. Pilz, Sh. Surja Ram			
	Meel, Prof. S.L. Surana, Sh. Jaipal Meel, Prof. Ramesh Kumar Pachar, Prof. Dheeraj Joshi, Prof. Ashish Nayyar			
	Felicitation of Guest			
09:12-09:17	Chief Guest (Sh. Ajitabh Sharma) (Shawl & Sapling by Sh. Surja Ram Ji Meel)			
(5 min)	2 Guest of honor (Dr. Golo J Pilz) (Shawl & Sapling by Prof. S. L. Surana)			
	Presiding Guest (Sh. A. K. Narang) (Shawl & Sapling by Sh. Jaipal Meel/ Prof. Ramesh Kumar Pachar)			
09:18-09:23 (5 min)	Welcome note by Sh. Surja Ram ji Meel			
09:24-09:29 (5 min)	About Conference by Principal Coordinator (Prof. Ashish Nayyar)			
09:30-09:44 (15 min)	Introductory speech by the Prof. S.L. Surana-about present energy scenario			
09:45-09:46	Profile of Chief Guest and welcome on mic			
09:47-09:56	Speech by Chief Guest (Sh. Ajitabh Sharma)			
(10 min)	Special by Chief Guest (Sh. Fijilash Shaima)			
09:57-10:06	Speech by Presiding Guest (Sh. A. K. Narang)			
(10 min) 10:07-10:12				
(5 min)	Speech by Director Sir (Sh. Jaipal Meel)			
10:13-10:14	Unveiling of the Proceeding			
10:15-10:17	Re-arrangment of dias			
10:18-10:20	Address by Prof. Ahmed Hamza H. Ali, Assiut University (Online)			
10:21-11:00	Plenary Talk-1 by Dr. Golo J. Pilz			
(40 min)	55 (A. 1866) (A.			
11:01-11:05	Vote of thanks by Prof. Dheeraj Joshi  High Tea			

#### 12.Glimpses of Conference











































#### 13. Detailed Day to Day Report of Conference

In the wake of the 4th International Conference on New and Renewable Energy Resources (ICONRER), orchestrated by the esteemed Department of Mechanical Engineering at the Swami Keshvanand Institute of Technology, Management and Gramothan in conjunction with the Institution of Engineers India (IEI) and the Department of Mechanical Engineering at Assuit University, Egypt, the grandeur of this landmark event shone brightly during November 2nd to 4th, 2023. This significant conference marks the fourth installment in the ICONRER Series, an epitome of scholarly discussions, technological advancements, and visionary insights in the realm of renewable energy. Prof. Ashish Nayyar acted as Principal Coordinator for the conference along with Dinesh Kumar Sharma, Ankit Agarwal and Dr. Chandan Kumar as convenors and Mr. Naveen Kumar Sain as organizing secretary.

#### **Day -1**

The inaugural ceremony of this distinguished conference was graced by the eminent presence of luminaries. Chief Guest Shri Ajitabh Sharma Ji, the Chairman and Managing Director of Jaipur City Transport Services Limited, Jaipur, along with the Presiding Guest Shri Anil K Narang Ji from the Department of Atomic Energy, Bhabha Atomic Research Centre, and the Guest of Honor Dr. Golo J. Pilz, President of IndiaCare Trust, Berlin, Germany, and Adviser on Renewable Energy at the Brahmkumaris Ashram, Abu Road, Rajasthan, added an aura of distinction to the event. Notable personalities such as Shri Surja Ram Ji Meel, Shri Jaipal Meel, Prof. S. L. Surana, Prof. Ramesh Kumar Pachar, Prof. R. K. Jain, Dr. Akhilendra Pratap Singh, and Shri Subir Karmakar Ji also graced the occasion with their presence.

The inaugural ceremony commenced with the auspicious Goddess Saraswati Vandana through the lighting of the lamp. Shri Surja Ram Ji Meel extended a warm welcome to all esteemed guests, participants, and students. His commendations applauded the organizers for the successful continuance of these conferences and their dedicated efforts to bring together exceptional minds from across the globe. He particularly praised the proactive step towards embracing sustainable practices within the conference itself, emphasizing the use of eco-friendly materials and the avoidance of single-use plastics.

Prof. Ashish Nayyar elucidated the significance of the ICONRER series, advocating the utilization of renewable energy resources for a sustainable future while introducing the conference.

Shri Ajitabh Ji, Chief Guest delivered enlightening insights, emphasizing the imperative need for sustainable solutions and motivating students to engage in the realms of renewable and sustainable energy, positioning India as a global leader. He very beautifully added comparison between the risks and uncertainty.

Thereafter Shri Anil K Narang Ji, Presiding Guest provided historical insights into the development of nuclear programs in India, highlighting the technological advancements in the field of nuclear energy. Dr. Golo J Pilz described the sustainable practices being followed at the brahmkumaris ashram Mount Abu in form of Solar cooking system to meet the cooking need and solar pv system to meet other energy needs in a sustainable way since past 25 years. He also mentioned about the installation of 1MW solar CSP based Thermal power plant to meet the electricity needs. He particularly emphasized on the power of positivity to make the things better and highlighted the need to opt sustainable practices to make Indian global guru.

Prof. Dheeraj Joshi (HOD ME, SKIT) proposed a formal vote of thanks for the inaugural session. In another sessions of the Day 1, Dr. Akhilendra Pratap Singh, Indian Institute of Technology, BHU Varanasi presented his research on the development of Homogenious Charged Compression Ignition (HCCI) engines. He mentioned the challenges and opportunities with HCCI engines. Shri Subir Karmakar Ji, Deputy General Manager, NTPC Limited delivered his keynote during conference.

#### **Day - 2**

On the Day 2 of the conference, Prof. Dilip Sharma, Professor-HAG, Department of Mechanical Engineering, Malaviya National Institute of Technology, Jaipur delivered his plenary talk on the Journey from IC engines to electric vehicles. He further added that technology of electric vehicle will be more mature in future and hybrid engines is the need of hour. He showed that transition of energy is towards improvement in H/C ration which will be infinite with hydrogen as a fuel. Hence Hydrogen is the ultimate future fuel. In another session of day 2, Dr. Ravindra Kumar Sharma, Bhabha Atomic Research Centre, Trombay presented his research on the development of energy storage technology with emphasis of capacitor energy storage technologies. He described the various challenges in the developments of different capacitors. He beautifully explained how capacitors hold the energy for high amount of energy even at small space. Afterwards, An industrial visit to IOCL operated Compressed Biogas Plant at Hingonia Gaushala Jaipur. The participants experienced the minute on the anaerobic digestion-based digesters biogas plant of nearly 3000 m3 gas production using the cow dung available at gaushala. In addition to this, participants also visited the milking process and its cooling, pasteurization and packaging followed by a delightful conference lunch.

#### <u>Day - 3</u>

On day 3 of the conference, Prof. PMV Subbaro enlightened the gathering with his knowledgeful talk on the development of sustainability indices. He explained the theory of emergy to energy and explained the sustainable way to operationize the nature's blessings in form of Anna. In the same session, Dr. Narayan Lal Jain delivered his plenary talk on biofuels and its classifications. The discourse and

exchange of knowledge during these sessions undoubtedly set an impressive trajectory for the future of renewable energy, igniting a spirit of innovation and collaboration among the participants. The ICONRER conference series continues to be a beacon of knowledge, ushering in a sustainable and greener future for generations to come.

#### 14. Media Coverage of Conference



### न्यू एंड रिन्यूएबल एनर्जी रिसोर्सेज' विषय पर एसकेआईटी में शुरु हुई अंतरराष्ट्रीय संगोष्ठी

#### P3 Police Public Politics

जयपुर। बढते पर्यावरण संकट और जलवाय परिवर्तन के संदर्भ में शिक्षाविद, शोधकर्ता, उद्योगकर्मी और नीति निर्माताओं के बीच संवाद स्थापित कर कुछ सार्थक समाधान प्राप्त करने की दिशा में जयपुर के स्वामी केशवानंद इंस्टीट्यूट ऑफ टेक्नोलॉजी, मैनेजमेंट एंड ग्रामोत्थान में ÷न्यू एंड रिन्यूएबल एनर्जी रिसोर्सेज÷ विषय पर तीन दिवसीय अंतरराष्ट्रीय संगोष्ठी का शुभारंभ हुआ। संगोष्ठी के उद्घाटन समारोह में जेसीटीएसएल के चेयरमैन अजिताभ शर्मा मुख्य अतिथि के रूप में उपस्थित थे। उन्होंने कहा ÷िकसी भी समाधान को प्राप्त करने के लिए पर्सपेक्टिव बदलने की आवश्यकता है। हम कई बार एक

समस्या का समाधान करने के लिए अनेक अन्य समस्या खडी कर लेते हैं. इसलिए ऊर्जा सहित किसी भी समस्या का समाधान एकांगी रुप से नहीं देखकर समग्रता में खोजा जाना चाहिए, तभी उसका पुरा लाभ मिल सकता है÷। एसकेआईटी के चेयरमैन सुरजाराम मील और शैक्षणिक निदेशक प्रोफेसर एस एल सुराणा ने अपने उद्बोधन में ऐसे आयोजन की आवश्यकता पर बल देते हुए सबका उत्साहवर्धन किया। कार्यक्रम में भाभा एटॉमिक रिसर्च सेंटर से आए डॉ. ए.के. नारंग विशिष्ट अतिथि थे। उन्होंने कहा कि ऊर्जा न सिर्फ आंतरिक बल्कि अंतर्राष्ट्रीय संबंधों को भी प्रभावित करती है और इसलिए हमें विकसित राष्ट्र बनने की दिशा में ऊर्जा के क्षेत्र में आत्मनिर्भर होने की तीव्र आवश्यकता है। इससे पूर्व संगोष्ठी के मुख्य समन्वयक प्रोफेसर आशीष नैयर ने संगोष्ठी की विस्तृत जानकारी देकर सबका स्वागत किया। कार्यक्रम का आयोजन मेकेनिकल इंजीनियरिंग विभाग ने किया। इस अवसर पर संस्थान निदेशक जयपाल मील, प्रोफेसर रमेश कुमार पचार. प्रोफेसर आर.के. जैन, ब्रह्मकुमारी के नवीकरणीय ऊर्जा सलाहकार डॉ. गोलो पिल्ज, आईआईटी वाराणसी के डॉ. अखिलेंद्र प्रताप सिंह सहित अनेक प्रोफेसर और विधार्थी उपस्थित रहे। उद्घाटन कार्यक्रम के अंत में विभागाध्यक्ष प्रोफेसर धीरज जोशी ने सभी गणमान्य अतिथियों एवं प्रतिभागियों के प्रति आभार प्रकट किया।

श्रीगंगानगर, शक्रवार, 03 नवम्बर 2023

# एसकेआईटी में अंतरराष्ट्रीय संगोष्ठी



जयपुर(सीमा सन्देश)। बढ़ते पर्यावरण संकट और जलवाय परिवर्तन के संदर्भ में शिक्षाविद, शोधकर्ता, उद्योगकर्मी और नीति निमार्ताओं के बीच संवाद स्थापित कर कुछ सार्थक समाधान की दिशा में जयपुर के एसकेआईटी (स्वामी केशवानंद इंस्टीट्युट ऑफ मैनेजमेंट टेक्नोलॉजी, एंड ग्रामोत्थान) में 'न्यू एंड रिन्यूएबल एनर्जी रिसोर्सेज' विषय पर तीन दिवसीय अंतरराष्टीय संगोष्ठी का शुभारंभ हुआ। संगोष्ठी के उद्घाटन समारोह में जेसीटीएसएल के चेयरमैन अजिताभ शर्मा मुख्य अतिथि थे। उन्होंने कहा कि किसी भी समाधान को प्राप्त करने के लिए

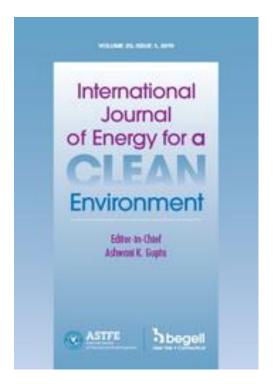
पर्सपेक्टिव बदलने की आवश्यकता है। हम कई बार एक समस्या का समाधान करने के लिए अनेक अन्य समस्या खडी कर लेते हैं. इसलिए ऊर्जा सहित किसी भी समस्या का समाधान एकांगी रूप से नहीं देखकर समग्रता में खोजा जाना चाहिए. तभी उसका पुरा लाभ मिल सकता है। एसकेआईटी चेयरमैन सुरजाराम मील और शैक्षणिक निदेशक प्रो. एसएल सुराणा ने ऐसे आयोजन की आवश्यकता पर बल देते हुए सबका उत्साहवर्धन किया। भाभा एटॉमिक रिसर्च सेंटर से आए डॉ. एके नारंग विशिष्ट अतिथि थे। ऊर्जा न सिर्फ आंतरिक बल्कि अंतर्राष्ट्रीय संबंधों को भी प्रभावित करती है और

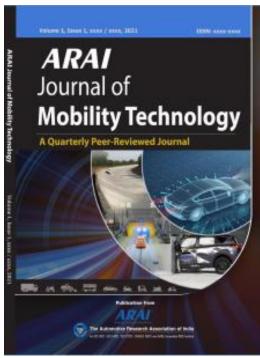
इसलिए हमें विकसित राष्ट्र बनने की दिशा में ऊर्जा के क्षेत्र में आत्मनिर्भर होने की तीव्र आवश्यकता है। संगोष्ठी के मुख्य समन्वयक प्रो. आशीष नैयर ने सबका स्वागत किया। आयोजन मेकेनिकल इंजीनियरिंग विभाग ने किया। संस्थान निदेशक जयपाल मील, प्रो. रमेश कुमार पचार, प्रो. आरके जैन, ब्रह्मकुमारी नवीकरणीय ऊर्जा सलाहकार डॉ. गोलो पिल्ज. आईआईटी वाराणसी के डॉ. अखिलेंद्र प्रताप सिंह सहित अनेक प्रोफेसर और विद्यार्थी उपस्थित रहे। उद्घाटन कार्यक्रम के अंत में विभागाध्यक्ष प्रो. धीरज जोशी ने सभी अतिथियों एवं प्रतिभागियों का आभार प्रकट किया।

#### 15. Publications of ICONRER-2023

All Selected papers will be published in form a Book Series from reputed Publishers Springer/Cambridge Scholars/ Elsevier (in communication). Some selected papers will be processed for consideration into following Special Issues of reputed journals.

- 1. International Journal of Energy for aClean Environment (Scopus): Special Issue for ICONRER-2023
- 2. Journal of Mobility Technology by ARAI: Special Issue on "Driving Towards a Greener Tomorrow: Smart Use of Renewable Energy Resources for Sustainable Mobility





#### 16. Conference Proceeding



## **Energy and Sustainability**

(Proceedings of 4<sup>th</sup> International Conference on **New and Renewable Energy Resources** for Sustainable Future)

# ICONRER-2023

(November 02-04, 2023)

#### **Editors**

Prof. Ashish Nayyar Dr. Manoj Kumar Sain

#### **Associate Editors**

Dr. Chandan Kumar

Mr. Ankit Kumar Agarwal

Mr. Dinesh Kumar Sharma

Mr. Naveen Kumar Sain

Mr. Praveen Saraswat

**Department of Mechanical Engineering** Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

#### Swami Keshvanand Institute of Technology, Management & Gramothan

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#### ICONRER-2023

The 4th International Conference on "New and Renewable Energy Resources for Sustainable Future" (ICONRER-2023) organized by Department of Mechanical Engineering of Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Jaipur (India) in collaboration with Department of Mechanical Engineering, Assiut University, Egypt and Institution of Engineers (India) during Nov 02-04, 2023. This scientific dialogue aims to provide a platform where scientists, researchers, academicians, industry experts, new aspirants, as well as students of science and technology can come together and engage in fruitful exchange of views and ideas to pave way for "New and Renewable Energy Resources".

The scope of this conference encompasses latest research outcomes pertaining to the "Energy" domain in the form of theoretical models, environmental impact, security and defense technology, innovative designs, enhancements and improvements in existing frameworks, sustainable technological advancement, societal welfare etc. Thus the conference intends to bring together the best minds from around the world to cover literally all aspects of energy technology from a multi-disciplinary perspective.







#### Swami Keshvanand Institute of Technology, Management & Gramothan

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#### 17.List of Papers Presented:

Paper ID	Authors	Title	Email ID
2	Monika Gupta	IoT Based Health Monitoring System With Disease Prediction Using ML	er.monikakatta@gmail.com
3	Monika Gupta	DUAL AXIS SOLAR TRACKING OF SOLAR RADIATION FOR AGRICULTURE USAGE	er.monikakatta@gmail.com
5	Maanat Bhadani and Arshi Banu P S	Feasibility studies and wind turbine selection for residential applications of the city Surat, India	arshi.banu@gmail.com
6	Rajiv Kumar and Mamraj Singh	Investigation of the supercapacitor uses of ZnFe2O4/Co3O4/G composite	rkjiit@gmail.com
7	Neha Rajas, Om Kudal, Gaurav Magar, Mohammad Bilal, Amol Marewar and Shivraj Pardeshi	Handmade Paper Formation from Onion Peels	kudalom04@gmail.com
8	Dr Poonam Ojha and Dr. Swati Joshi	Emerging waste-to-energy technologies for sustainable municipal solid waste management: A review	poonam.ojha@skit.ac.in
9	Arpit Yadav and Ranjay Das	Two Area Interconnected Automatic Generation Control System Design Using PSO with PID	ph20ee1003@cit.ac.in
10	Abha Jain, Dr. Megha Gupta and Dr.Mithlesh Arya	Different Techniques to Model Smart Village using IoT	abha.jain@skit.ac.in
11	Nilesh B.Totla and Sandip Langade	Thermal Analysis of Permanent Magnet Synchronous Motors (PMSM) Used In Electric Vehicles	nbtotala@mitaoe.ac.in
12	Pawan Kumar Kuldeep, Sandeep Kumar, Sunita Mahavar, Ekta Kumari and Nikita Choudhary	Investigation of a Vegetable Oil as Heat Transfer Fluid	phy.jitu.jpr@gmail.com

		Comparative Analysis of SRC	
13	Amit Kumar Bansal and Madhukar Kumar	and ORC Systems for Waste Heat Recovery in Internal Combustion Engines	amit.bansal@skit.ac.in
14	Amit Kumar Bansal, Chandra Mohan Kumar and Sudesh Garg	Comparative Study on Waste Heat Recovery Devices: Efficiency, Applications, and Sustainability	amit.bansal@skit.ac.in
15	Swati Joshi and Poonam Ojha	Use of Nanotechnology for Pollution Treatment: A Review	swtojha@gmail.com
16	Nidhi Kumari Meena and Dr. Mamraj Singh	Narrow Blue Emission from Layered Lead (II) Bromide Perovskite Microdisks	nidhi.meena.2986@gmail.com
17	Himanshu Pandya	Earth Air Tunnel Heat Exchanger: A Review	erhimanshupandya@gmail.com
18	Raj Kumar, Kedar Bairwa and Amit Jhalani	Development and Improvement in Heat Transfer Behaviour and Friction Behaviour of Solar Air Heater	raj.kumar@skit.ac.in
	Adarsh Maurya, Anay Mall, Akriti Na, Avneesh Tiwari and Abhay Srivastava	A Non-Toxic Substitute of Formaldehyde (Formalin) in Paints	avneeshtiwari100@gmail.com
	Chandra Mohan Kumar, Prem Singh, Amit Kumar Bansal, Madhukar Kumar, Sudesh Garg and Vinay Singh Marwal	A Survey of Recent Studies on PCM-to-Air Heat Exchangers for Building Free Cooling Applications	singhmohan85@gmail.com
	Rajiv Kumar, Renu Sharma and Mamraj Singh	Synthesis and Characterization of Zinc Ferrite/Graphene Nanosheets Composite for supercapacitor applications	rkjiit@gmail.com
	Sandeep Patil, Dr. Nitish Kumar Gautam and Dr. Rupesh Patil	Investigations on Load Capacities at the Nozzle Junctions with Pressure Vessels	platinumsp26@gmail.com
1 / 3	Pratham Nagarhalli, Prathmesh Deshmukh, Ansh Mittal and Amol Kolhe	Design And Development Of Vertical Axis Wind Turbine	prathmesh.deshmukh@mitaoe.a c.in
24	Chandan Kumar	Design Optimization of an Outdoor Air Purifier Using	chandan21.dstte@bihar.gov.in

		Computational Fluid Dynamics Analysis	
25	Vignesh Manivannan	EXPERIMENTAL STUDY ON FRESH CONCRETE PROPERTIES OF PCC WITH PARTIAL REPLACEMENT OF M-SAND BY ECOSAND	vigneshmanivannan01@gmail.co m
26	Vignesh Manivannan	Investigation of voltage storage capacity for the variation of electrode materials in microbial fuel cells with experimentation and mathematical modelling	vigneshmanivannan01@gmail.co m
27	Sumit Taneja	Ethanol as an Optimal Alternative Engine Fuel - An experimental study on alcohol- gasoline blends in SI engine	sumit4088@gmail.com
28	Arpit Yadav and Lal Bahadur Prasad	A Review On Two Area Interconnected Automatic Generation Control System Design Using PSO With PID	yadavarpit45632@gmail.com
29	Arpit Yadav and Lal Bahadur Prasad	A Performance Analysis of PSO-PID Control Scheme for Two-Area Interconnected Power System	yadavarpit45632@gmail.com
30	Hayoon Kim	Establishing a Computational Screening Framework to Identify Environmental Exposures Using Untargeted GC-HRMS	hayoonk481@gmail.com
31	Buddesab Tonnur, Rajani K C, Syed Hyath and Geetha R	A SURVEY ON FREE SPACE OPTICAL COMMUNICATION WITH VARIOUS MODULATION METHODS	tonnur21@gmail.com
32	Amit Mandal and Ajay Pagare	An innovative solution for reducing disobedience of zebra crossing rules on crossroads	shriamitmandal@gmail.com
33	Dr. Sandip Nehe, Dr. B M Praveen and Prof. Tukaram Sargar	A Review on Advancement Approach of waste Process by Recycling	sandipnehe34@gmail.com
34	Dheeraj Joshi and Praveen Saraswat	A comprehensive framework for sustainability assessment in a shielded metal arc welding (SMAW) process	dheeraj.joshi@skit.ac.in

35	Tukaram Sargar, Aniket Jadhav and Nitish Kumar Gautam	Surface Roughness Analysis of SS316L Material in Fiber and CO2 Laser Beam Machining	sargartukaram@gmail.com
36	Pramod Kumar, Jaiprakash Bhamu, Jagdish Bhadu and Praveen Saraswat	Exploring Industry 4.0 Technologies for Sustainable Development: A Systematic Literature Review	praveenmeskit@gmail.com
37	Sandeep Yadav and Surendra Kumar Singh	Thermal management of solar photovoltaic panels using Phase Change Materials (PCMs): A Review	ydv.sndp3004@gmail.com
38	Sandeep Kumar Bhaskar, Manoj Kumar Sain and Praveen Saraswat	Sustainable Machining Practices during Milling Process: A Review	praveenmeskit@gmail.com
39	Arun Beniwal and Chandan Kumar	To review and analyze the latest advancements in solar tunnel dryer technology, including improvements in solar collectors and energy capture systems	beniarun1987@gmail.com
40	Arun Beniwal and Brij Mohan Sharma	Enhancing Heat Transfer Efficiency in Shell-and-Tube Heat Exchangers: A Review of Baffle and Tube Orientation Strategies	beniarun1987@gmail.com
41	Arun Beniwal and Manu Augustine	Enhancing Photovoltaic Panel Performance through Thermal Management: A Comprehensive Literature Review	beniarun1987@gmail.com
42	Abhay Raj and Arun Beniwal	Overall Heat Transfer Analysis of Shell and Tube Heat Exchanger Using CFD	beniarun1987@gmail.com
43	Achin Srivastav, Deepak Kumar, Prem Singh, Chandan Kumar and Nidhi Srivastav	Forecasting of Carbon Emissions and Development of Renewable Energy in India	achin.srivastav@skit.ac.in
44	Jaiprakash Bhamniya Bhamniya, Dr. Manoj Sain and Dr. Shiv Lal	3D Printing's Environmental Impact and Sustainability Contributions	jaibhamniya@gmail.com
45	Brij Mohan Sharma, Manu Augustine and Naveen Kumar Sain	Energy Efficiency Analysis of Welding Technologies: A Comparative Review	bsharma1984@gmail.com

46	Brij Mohan Sharma, Vinay Singh Marwal and Deepak Kumar Sai	Recent Advances and Trends in Carbon Dioxide Capture Technologies: A Review	bsharma1984@gmail.com
47	Aniket Deshmukh, Nitish Kumar Gautam and Anoop Shirbhate	VALIDATION OF EXPERIMENTAL DATA USING MATHEMATICAL MODEL FOR REFRIGERATOR INTEGRATED WITH ATMOSPHERIC WATER GENERATOR.	aniket.deshmukh11292@gmail.c om
48	Brij Mohan Sharma, Arun Beniwal and Avinash Mittal	A Review of Nuclear Energy: Sustainability and Environmental Friendliness for the Future	bsharma1984@gmail.com
49	Fransisco Konan	Emerging i-ZnO/ZnO:Al spin-coated materials deposition for renewable energy and sustainable environment	kfransisco@gmail.com
50	Dinesh Kumar Sharma, Dilip Sharma, Ahmed Hamza H Ali, Vishnu Agarwal and Hemant Raj Singh	Operational issues and challenges for a solar powered vapor absorption cooling system integrated with Hybrid thermal energy storage for dual applications of milk chilling and space cooling	dinesh.sharma@skit.ac.in
51	Naveen Kumar Sain, Praveen Saraswat, Chandan Kumar, Manu Augustine and Ashish Nayyar	Challenges in Battery Thermal Management for Electric Vehicles: A state of the art review	naveen.sain@skit.ac.in
52	Ankit Kumar Agarwal, Dr. K. B. Rana, Brajesh Tripathi and Chandan Kumar	Drying Kinetics and Quality Assessment of Curry Leaves in an Indirect Solar Dryer with Thermal Energy Storage	akagarwal.87@gmail.com
53	Ankit Kumar Agarwal, Dr. K. B. Rana and Brajesh Tripathi	A Comparative Analysis of Solar Tunnel Dryer and Indirect Solar Dryer for Drying Applications	akagarwal.87@gmail.com
54	Naveen Kumar Sain, Chandan Kumar and Ashish Nayyar	Studies on Solid Biomass as a Sustainable Energy Source	naveen.sain@skit.ac.in
55	Naveen Kumar Sain, Chandan Kumar and Ashish Nayyar	Evaluating the Performance of a Biomass Log Production	naveen.sain@skit.ac.in

		Machine Utilizing Cow Dung and Agricultural Residues	
56	Nitin Goyal, Dr. Chandan Kumar, Dr. Ashish Nayyar and Kunj Bihari Rana	Performance and Emission of Diesel Engine Fuelled by Blend of Additives, Biodiesel and Nanoparticles: A Review	nitingoyal089@gmail.com
57	Sumita Hemrom, Namita Soni and Sanjay Bairwa	Review of life cycle parameters of a PV installation	sumita281@gmail.com
58	Siddhartha Mitra, Dr.Ashish Nayyar, Rakesh Kumar, Sohail Akhtar, R Subramanian and Dr. Janampelli Sagar	Structural correlation of molecular properties of hydro finished base oils for application-oriented assessment	siddhartha.mitra@ymail.com
59	Sanjay Choudhary, Dinesh Kumar Sharma, Dilip Sharma and Digambar Singh	Experimental Insights into Charging and Discharging Behavior of a Triplex Tube Heat Exchanger-Based Latent Thermal Energy Storage System	dinesh.sharma@skit.ac.in
60	Namita Soni and Sumita Hemrom	Creep behaviour analysis of brass rod at variable temperatures: A review	soninimmi28@gmail.com
61	Sanjay Bairwa, Sumita Hemrom and Sanjay Choudhary	Microstructural Analysis and Mechanical Properties of Al5083 Metal Matrix Composites Reinforced with Nickel/Copper Particulates	sanjay.bairwa@skit.ac.in
62	Chandan Kumar, Mukesh Kumar, Umesh Kumar Das, K. B. Rana, Sumit Sharma and Achin Srivastav	Exploration of diesel-oxygenated fuel blends: An experimental investigation and numerical simulation	chandanpink1988@gmail.com
	Nitin Gaikwad, Rahul Budania and Sujay Deshpand	MULTILAYER LICENSE PLATE RECOGNITION USING FRAME GRABBING SYSTEM AND FUZZY NEURAL TECHNIQUE	nitingaikwad2811@gmail.com
64	Ashish Nayyar, Chandan Kumar, Ankit Agarwal and Naveen Kumar Sain	Experimental investigation and simulation of fuel blends and exhaust gas recirculation (EGR) in CI engine	chandanpink1988@gmail.com
65	Yogesh Kumar Sharma, Sanjay	Risk factors of Ergonomics in the domain of Hairdressers	yogesh.sharma@skit.ac.in

	Bairwa and Monu Gupta	Working in India: A Case Study	
66	Dalla Ram Bhincher	Green Library Buildings: Design, Implementation, and Best Practices	skitdigitallib@gmail.com
67	Trivendra Kumar Sharma	Vibration behavior analysis of functionally graded annular piezoelectric plate for free-free boundary conditions	trivendra.tara@gmail.com
68	Saravanakumar R, Rahul R, Harin Jayapathy B V and Millerjothi N K	VARIOUS TECHNIQUES IMPLEMENTED FOR ELECTRICITY GENERATION IN INDIA -A REVIEW	saravanakumar.r2020mech@sec e.ac.in
69	Amit Jhalani, Ankit Agarwal, Raj Kumar, Chandan Kumar, Arun Beniwal and Trivendra Kumar Sharma	A critical review on the impact of slaughterhouses and meat production industries on climate change and global warming	jhalaniamit.energy@gmail.com
70	Dr.Amit Dadheech, Dr.Jyoti Arora and Surbhi Sharma	Entropy Generation for MHD Casson Fluid flow over a melting surface with Slip Effect and Chemical reaction	surbhi@skit.ac.in
71	Jyoti Arora, Amit Dadheech and Surbhi Sharma	Enhancing Renewable Energy Deployment and Energy Efficiency: Alternative Technologies for a Sustainable Future	jyoti.arora@skit.ac.in
72	Hetal Purohit and Jayesh Dange	Natural Fiber Reinforced Polymer Matrix Composites for Fused Deposition Modelling Application	hetalswadia@gmail.com
73	Deepak Kumar, Achin Srivastav and Vikash Gautam	Application of Python software in Improvement of Plastic Injected Mould Thin Shell Components with Taguchi Method and GA	deepak.kumar@skit.ac.in
74	Sandeep Shukla, Dr. G.D. Agrawal and Dr. Rohit Misra	Exploring the Feasibility of Using Coal Dust as a Desiccant to Improve the Effectiveness of Evaporative Cooling System	2020rme9599@mnit.ac.in

# 18.List of Participants

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### 18.2 FACULTY and STAFF Participation from SKIT

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### 19. Sample Certificates





### 4<sup>th</sup> INTERNATIONAL CONFERENCE ON New and Renewable Energy Resources for Sustainable Future"





(November 02-04, 2023)

Organized by

Department of Mechanical Engineering,

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur In Collaboration with

Department of Mechanical Engineering, Assiut University, Egypt & Institution of Engineers, India (IEI)

# Certificate of Appreciation

This certificate of appreciation is presented to

Dr. Golo J. Pilz

Adviser Renewable Energy, Brahma Kumaris & World Renewal Spiritual Trust, Mount Abu, President, India Care Trust, Berlin-Germany

for his outstanding contribution as Keynote Speaker at the International Conference on "New and Renewable Energy Resources for Sustainable Future (ICONRER-23)"



Mr. Jaipal Meel (Director)



Dr. S. L. Surana (Director Academics)



Dr. Ramesh Kumar Pachar (Principal)

Dr. Ashish Nayyar





4<sup>th</sup> INTERNATIONAL CONFERENCE ON "New and Renewable Energy Resources for Sustainable Future"





November 02-04, 2023)

Organized by

Department of Mechanical Engineering,

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur In Collaboration with

Department of Mechanical Engineering, Assiut University, Egypt & Institution of Engineers, India (IEI)

### Certificate of Appreciation

This certificate of appreciation is presented to

Prof. Ahmed Hamza H. Ali

Faculty of Engineering, Assiut University, Assiut (Egypt)

for his outstanding contribution as Keynote Speaker at the International Conference on "New and Renewable Energy Resources for Sustainable Future (ICONRER-23)"

Mr. Jaipal Meel

& K. Sweams

Dr. S. L. Surana (Director Academics)

Dr. Ramesh Kumar Pachar (Principal)

Dr. Ashish Navvar (Convener)





### 4<sup>th</sup> INTERNATIONAL CONFERENCE ON "New and Renewable Energy Resources for Sustainable Future"





(November 02-04, 2023)

Organized by

Department of Mechanical Engineering, Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur In Collaboration with

Department of Mechanical Engineering, Assiut University, Egypt & Institution of Engineers, India (IEI)

### Certificate of Participation

This is to	certify that Prof. / Dr. / Mr. / Ms	lr. Sandeep Shul	kla	
of	Malaviya National Institute of Technology (MNIT,	Jaipur)	presented a paper	
with title Exploring the Feasibility of Using Coal Dust as a Desiccant to Improve the				
	<b>Effectiveness of Evaporative Cooling System</b>	in the Internation	onal Conference on	
			mai comprehec on	

"New and Renewable Energy Resources for Sustainable Future (ICONRER-23)"



Mr. Jaipal Meel (Director)



Prof. S. L. Surana (Director Academics)

Prof. Ramesh Kumar Pachar (Principal)

Prof. Ashish Nayyar (Convener)





4<sup>th</sup> INTERNATIONAL CONFERENCE ON "New and Renewable Energy Resources





for Sustainable Future"

ONRER-202

(November 02-04, 2023)

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Department of Mechanical Engineering,

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur In Collaboration with

Department of Mechanical Engineering, Assiut University, Egypt & Institution of Engineers, India (IEI)

### Certificate of Participation

This is to certify that Prof. / Dr. / Mr. / Ms	Hetal Purohit			
ofLokmanya Tilak College of Engineering,Kopar	khairane, Navi Mumbai presented a paper			
with title .Natural Fiber Reinforced Polymer Matrix Composites for Fused Deposition				
Modelling Application	in the International Conference on			

"New and Renewable Energy Resources for Sustainable Future (ICONRER-23)"

Mr. Jaipal Meel (Director)

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Prof. Ramesh Kumar Pachar (Principal)

Prof. Ashish Nayyar





### 4<sup>th</sup> INTERNATIONAL CONFERENCE ON "New and Renewable Energy Resources for Sustainable Future"





(November 02-04, 2023)

### Organized by

Department of Mechanical Engineering, Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur In Collaboration with

Department of Mechanical Engineering, Assiut University, Egypt & Institution of Engineers, India (IEI)

### Certificate of Participation

This is to	certify that Prof. / Dr. / Mr. / Ms	SINGH		
of	Malaviya National Institute of Technology (MNIT, Jaipur)	presented a paper		
with title .Advancements in Greenhouse Drying Technology: A Comprehensive Review				
	in the Inter	national Conference on		

"New and Renewable Energy Resources for Sustainable Future (ICONRER-23)"



Mr. Jaipal Meel (Director)

S. K. Sweama

Prof. S. L. Surana (Director Academics)

Prof. Ramesh Kumar Pachar (Principal)

Prof. Ashish Nayyar (Convener)





4<sup>th</sup> INTERNATIONAL CONFERENCE ON "New and Renewable Energy Resources





Department of Mechanical Engineering,

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur In Collaboration with

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# Certificate of Participation

This	s to certify that Prof. / Dr. / Mr. / Ms
of	Shri Ramswaroop Memorial College of Engineering and Management, Lucknow presented a paper
with	title A Non-Toxic Substitute of Formaldehyde (Formalin) in Paints
	in the International Conference on

"New and Renewable Energy Resources for Sustainable Future (ICONRER-23)"

Mr. Jaipal Meel (Director)

S. K. Sweana

Prof. S. L. Surana (Director Academics)

Prof. Ramesh Kumar Pachar (Principal)

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# Certificate of Appreciation

This certificate of appreciation is proudly presented to

### Dr. Chandan Kumar

Associate Professor, Department of Mechanical Engineering

for his valuable contribution and dedication as Convener at the International Conference on

"New and Renewable Energy Resources for Sustainable Future (ICONRER-23)"



Mr. Jaipal Meel (Director)



Dr. S. L. Surana (Director Academics)



Dr. Ramesh Kumar Pachar (Principal)

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### Certificate of Appreciation

This certificate of appreciation is proudly presented to

### Mr. Ankit Agarwal

Associate Professor, Department of Mechanical Engineering

for his valuable contribution and dedication as Convener at the International Conference on

"New and Renewable Energy Resources for Sustainable Future (ICONRER-23)"

Mr. Jaipal Meel

(Director)

S. K. Swana

Dr. S. L. Surana (Director Academics)

Dr. Ramesh Kumar Pachar (Principal)

Dr. Ashish Nayyar (Convener)

### 20. Words of Acknowledgement

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