27/05

21-05-2024

From,

Dr. Richard Pinto Dean Research AIET, Moodbidri

To,

The Principal, Alva's Institute of Engineering & Technology Shobhavana Campus, Mijar, Moodbidri-574225, Dakshina Kannada District, Karnataka

Respected Sir,

Subject: Request for the Payment for CPRI Workshop Registration Fees

. As you are aware a workshop on "Clean Energy Innovations: Hydrogen Fuel Cells for a Sustainable Future" will be organized by the Central Power Research Institute (CPRI), Bengaluru in association with Alva's Institute of Engineering & Technology Moodbidri.

In this regard our managing trustee has approved a contribution of Rs. 25,000 towards the registration fees of faculty and students from AIET for the workshop as a management contribution. Enclosed with this letter is the brochure of the workshop and approval for Rs. 25000 from the managing trustee. Necessary payment details are mentioned below:

Payment Mode: online; Payable to: Central Power Research Institute; Bank Account Number: 10356553310; Bank: State Bank of India; Branch: Indian Institute of Science (IISc), Bengaluru; IFS Code: SBIN0002215; MICR Code: 560002020; PAN Number: AAAAC0268P; GST Number: 29AAAAC0268P1ZF.

We kindly request you to process the payment

Thank you,

Date : 21-05-2024

yours sincerely

Place : Moodbidri

(Dr. Richard Pinto)

Alva's Institute of Engg. & Technoty: "
Mijar, MOODBIDRI - 574 225, D.K





Workshop on

Clean Energy Innovations: Hydrogen Fuel Cells for a Sustainable Future

Organised by

Central Power Research Institute, Bengaluru

in association with

Alva's Institute of Engineering and Technology, Mijar, Moodbidri

GITAM (Deemed to be University), Bengaluru

Venue: CPRI Bangalore Date: May 30-31, 2024

Workshop Theme: "Harnessing Hydrogen Energy: Hydrogen Generation, Storage and Hydrogen Fuel Cells for Renewable Green Energy for the Future"

Central Power Research Institute (CPRI) was established by the Government of India in 1960. As an autonomous society under the Ministry of Power, CPRI has numerous research and testing laboratories across India, with its headquarters in Bengaluru and units in Bhopal, Hyderabad, Nagpur, Noida and Kolkata. The activities of CPRI encompass applied research in electrical power engineering, testing & certification of power equipment, consultancy and field-testing services to power utilities and industry, and third-party inspection and vendor analysis. Accredited by prestigious organizations like NABCB, QCI, INDIA, and NABL, its credentials include associations with global bodies like INMETRO Brazil and Underwriter's Laboratories (UL), ensuring the highest standards in product certification and testing. Its research & development initiatives focus on fostering technological advancements in the power sector in collaboration with academia and industry through centres like the Centre for Collaborative & Advanced Research (CCAR). From testing and evaluation of EHV/UHV equipment to consultancy services ranging from power system studies to energy efficiency, CPRI is at the forefront of ensuring reliable, safe, and quality power supply.

About AIET:

Alva's Institute of Engineering & Technology (AIET) is a premier engineering institute of Alva's Education Foundation (AEF) established in the year 2008. It has a lush green campus spread over 30 acres, a part of Alva's - Shobhavana, 144 acres spread on a famous herbal garden with more than two thousand varieties of herbal plants. The vision of the institute is to impart quality technical education, moral values, social concern and patriotism to the students and mould them into excellent professionals and good citizens. Its mission is to set up a centre of excellence by offering world-class technical education and research opportunities of high standard and making the students ethically strong and technologically among the best. AIET is accredited by NAAC with A+ grade.

About GITAM (Deemed to be University):

The Gandhi Institute of Technology and Management (GITAM) was established in 1980 by a group of eminent intellectuals and industrialists, led by Dr. M. V. V. S. Murthi, former Member of Parliament and popular philanthropist. Its goal is to bring to life Mahatma Gandhi's vision of an institution for higher education that transcends all barriers. GITAM (Deemed to be University) has four campuses located in Visakhapatnam, Hyderabad, and Bengaluru. It strives to create an environment that values diversity, promotes an inclusive culture, and creates a deep sense of

About the Workshop:

Join us for an enlightening two-day workshop on "Clean Energy Innovations: Hydrogen Fuel Cells for a Sustainable Future." This dynamic event brings together some of the leading experts in the field, each with a wealth of knowledge and practical insights into the transformative power of hydrogen fuel cells. Throughout the day, our distinguished resource persons will delve into the fundamentals of hydrogen fuel cell technology, its applications, production, challenges, and the pivotal role it plays in driving clean energy innovations. There will also be session on photocatalytic clean energy generation. This workshop offers a unique opportunity to learn from these experts and explore how hydrogen energy is shaping a greener and more sustainable future. The participants will gain valuable knowledge and contribute to the global effort for a cleaner, more environmentally friendly energy landscape.

Invited Speakers

- Dr. Siddartha P. Duttagupta, Department of Electrical Engineering, IIT Bombay
- **Dr. Arnab Dutta**, Department of Chemistry, IIT Bombay
- **Dr. Arun Isloor**, Department of Chemistry, National Institute of Technology, Surathkal, Karnataka
- Dr. Sanjog Nagarkar, Department of Chemistry, IIT Bombay
- **Dr. Prashanth Kulkarni**, School of Energy and Environment, Defence Institute of Advanced Technology (DIAT), Pune
- **Dr. Satyanarayan**, Department of Mechanical Engineering, Alva's Institute of Engineering and Technology
- **Dr. Jayarama A.**, Department of Physics, Alva's Institute of Engineering and Technology
- **Dr. Shashi Kumar K.**, Department of Physics, Alva's Institute of Engineering and Technology
- Dr. Arjun S. Rao, Department of Electronics and Communication Engineering, MIT Manipal
- Dr. Yuvaraj Y. R., Department of Chemistry, Alva's College, Moodbidri
- Dr. Subhash Pai, CEO, M/s Excel Instruments, Mumbai

Conveners

- ❖ Dr. M. G. Ananda Kumar, Joint director/Business Development and Capacity Building division, Central Power Research Institute, Bangalore
- ❖ Dr. Richard Pinto, Dean Research, Alva's Institute of Engineering and Technology, Moodbidri
- ❖ **Dr. V. Ravindra**, Assistant Professor, Department of Mechanical Engineering, GITAM (Deemed to be University), Bengaluru Campus

PROGRAMME SCHEDULE

Day - 1

9:30 AM - 10:00 AM: Inauguration

Welcome Address, lighting the lamp and Inauguration speech.

10:00 AM - 10:40 AM: Keynote Address

Speaker: Dr. Ananda Kumar, Joint Director, Business Development and Capacity Building Division, Central Power Research Institute, Bangalore

Topic: "Advancements in Clean Energy and Hydrogen Fuel Cells".

10:40 AM to 11:00 AM: Tea Break

11:00 AM - 11:40 AM: Plenary Talk - 1

Speaker: Dr. Richard Pinto, Dean of Research, Alva's Institute of Engineering and Technology, Moodbidri

Topic: "Green Energy Solutions with Hydrogen Fuel Cells: A Research Perspective".

11:40 AM - 12:20 PM: Plenary Talk - 2

Speaker: Dr. Prashanth Kulkarni, School of Energy and Environment, Defence Institute of Advanced Technology (DIAT), Pune

Topic: "Advances in Green Energy: Photocatalytic Hydrogen Generation"

12:20 PM - 12:50 PM: Invited Talk - 1

Speaker: Dr. Arnab Dutta, Department of Chemistry, IIT Bombay

Topic: "Catalysts and Innovations in Photocatalytic Hydrogen Generation"

12:50 PM - 1:50 PM: Lunch Break

01:50 PM - 02:20 PM: Invited Talk - 2

Speaker: Dr. Arun Isloor, Department of Chemistry, National Institute of Technology, Surathkal, Karnataka

Topic: "Advances in Hydrogen Fuel Cell Membrane Technology"

2:20 PM - 2:50 PM: Invited Talk - 3

Speaker: Dr. Sanjog Nagarkar, Department of Chemistry, IIT Bombay

Topic: "Challenges and Solutions for Hydrogen Storage"

2:50 PM - 3:20 PM Invited Talk - 4

Speaker: Dr. Shashi Kumar K., Department of Physics, Alva's Institute of Engineering and Technology. Moodbidri

Topic: "Progress in the World of Solid-state NMR Experiments and DFT Calculations of Catalysts and PEMs"

3:20 PM to 3:40 PM: Tea break

3:40 PM - 4:10 PM: Invited Talk - 5

Speaker: Dr. Satyanarayan, Department of Mechanical Engineering, Alva's Institute of Engineering and Technology, Moodbidri

Topic: "Recent Developments in Hydrogen Fuel Cell Research in Automotive Applications"

4:10 PM - 5:00 PM: Panel discussion

Moderator 1: Dr. Peter Fernandes, Principal, Alva's Institute of Engineering and Technology **Moderator 2: Dr. Ananda Kumar**, Central Power Research Institute, Bangalore

Theme: "Accelerating Research and Investment in Green Hydrogen and Hydrogen Fuel Cell Technology"

Day - 2

9:30 AM - 10:00 AM: Plenary Talk - 3

Speaker: Dr. Siddhartha Duttagupta, Department of Electrical Engineering, IIT Bombay

Topic: "Novel Techniques in Improving Efficiency of Hydrogen Fuel Cells"

10:00 AM - 10:30 AM: Invited Talk - 6

Speaker: Dr. Jayarama A., Department of Physics, Alva's Institute of Engineering and Technology

Topic: "Photocatalytic Hydrogen Generation for Hydrogen Energy"

10:30 AM to 10:50 AM: Tea Break

10:50 AM - 11:20 AM: Invited Talk - 7

Speaker: Dr. Arjun Rao, Department of Electronics and Communication Engineering, MIT Manipal

Topic: "High Efficiency Direct Methanol Fuel Cells"

11:20 AM - 11:50 AM: Invited Talk - 8

Speaker: Dr. Yuvaraj A. R., Department of Chemistry, Alva's College, Moodbidri

Proposed Topic: "Unlocking the Potential of Metal-Organic Frameworks for Hydrogen

Storage"

11:50 AM - 12:20 PM: Invited Talk - 9

Speaker: Dr. Subhash Pai, CEO, M/s Excel Instruments, Mumbai

Topic: "Role of Industry in Hydrogen Energy Research"

12:20 PM - 12:50 PM: Invited Talk - 10

Speaker: Dr. V. Ravindra, Assistant Professor, Department of Mechanical Engineering, GITAM

(Deemed to be University), Bengaluru

Topic: "Advances in Solar Energy Integration and Vacuum Technology for Sustainable

Clean Energy Solutions" (proposed)

12:50 PM - 1:20 PM: Invited Talk - 11

Speaker: Dr. S. Seetharamu, Director, NDRF (Ex-director, CPRI, Bengaluru)

Topic: "Advancements in Clean Energy Technologies: From Thermoacoustic Refrigeration

to Nanocomposite Materials" (proposed)

1:20 PM - 1:30 PM: Valedictory Programme

1:30 PM - 2:30 PM: Lunch

WORKSHOP DATE AND VENUE

The two-day workshop on "Clean Energy Innovations: Hydrogen Fuel Cells for a Sustainable Future" will be held during May 30 and 31, 2024 at CCAR Auditorium, CPRI, Bengaluru.

WHO SHOULD ATTEND THE WORKSHOP?

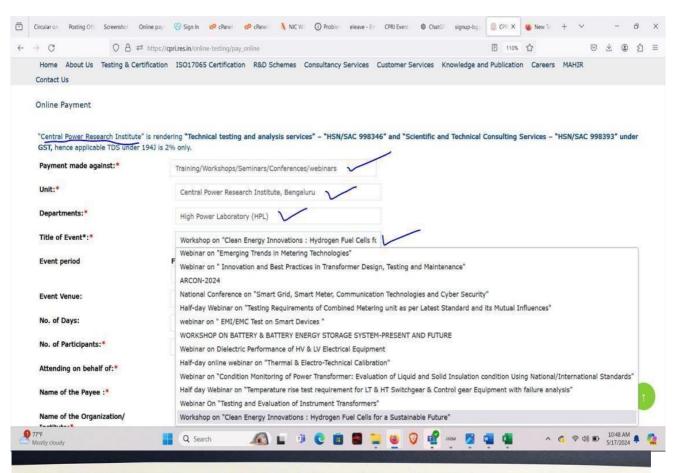
The subject that is deliberated in the workshop will be of interest to the delegates/ groups working in the area of **hydrogen**, **hydrogen fuel cells**, **renewable energy**, **solar energy**, **grid integration**, **clean energy applications**, **green energy production**, **storage devices**, **transportation**, **handling**, etc., The delegate registrations will be restricted to about 60 participants representing various academic institutes, research labs, manufacturers, government bodies and power sector on first come first basis.

The registration fee for each category of participation in the workshop is as follows.

Participants	Registration Fees (₹)
General registration	5000
Delegates from state/ Central govt./ Public sector/ Power	3500
sector Utilities	
Faculty members	3500
Research scholars/ Students	2500
Group concession for organizations which send:	
a) a minimum of three participants	4500
b) a minimum of four or more participants	4000

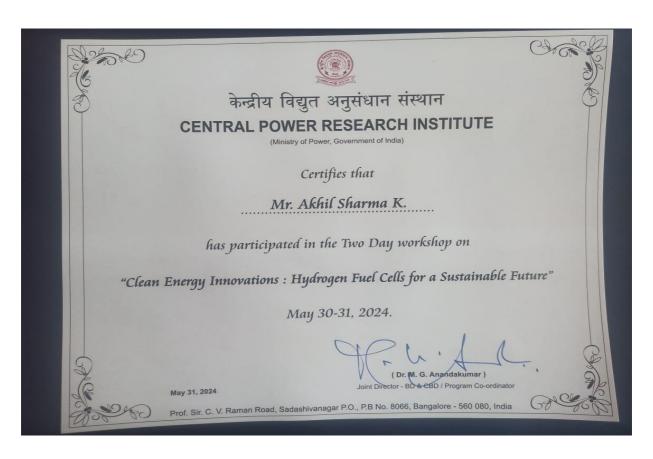
The prospective participants wanting to attend the above workshop may register by sending the following details to CPRI along with payment details to **mgananda@cpri.in**: Name, designation, organisation name, address, phone/email.

Payments of registration fee should be made by Cheque/ At Par Cheques/Demand Draft drawn in favour of "Central Power Research Institute", payable at Bengaluru or by transfer to the bank. Bank Account Number: 10356553310, Bank: State Bank of India, Branch: Indian Institute of Science (IISc), Bengaluru, IFS Code: SBIN0002215, MICR Code: 560002020, PAN Number: AAAAC0268P and GST Number: 29AAAAC0268P1ZF. (As per CPRI payment policy, all transactions must be processed via this portal which can be accessed through the link: https://cpri.res.in/online-testing/pay online. The e-pay portal provides options including NEFT/RTGS, Internet Banking, Credit Card, UPI and SBI Branch Payment.





ARINCIPAL
Alva's Institute of Engg. & Technology,
Mijur. MOODBIDRI - 574 225, D.K





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CENTRAL POWER RESEARCH INSTITUTE

(Ministry of Power, Government of India)

Certifies that

Mr. Ananthesh D. Kamath

has participated in the Two Day workshop on

"Clean Energy Innovations : Hydrogen Fuel Cells for a Sustainable Future"

May 30-31, 2024.

May 31 2024

Prof. S. F. C. V. Raman Road, Sadashiyanagar P.O., P.B. No. 8066, Bangalore - 560 080, India



