



# INTERNATIONAL WORKSHOP ON

# ENERGY SECURITY AND ENERGY ACCESS: HEALTH IMPLICATIONS OF POOR ENERGY QUALITY IN DEVELOPING COUNTRIES

Jointly Organised by

Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre), New Delhi, India

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CSIR - Indian Institute of Petroleum (IIP), Dehradun, India 26-27 July, 2021 (VIRTUAL MODE)



#### INTRODUCTION

Two major concerns in developing countries are **Energy Security** and **Energy Access**. Energy security is the continuous availability of energy in varied forms and sufficient quantities, at an affordable price, to meet domestic, industrial, transport and military requirements. It entails the high prospects of current and future energy needs being met, irrespective of economic or political instability. In the past, and especially since the early 1970s, the major concerns have been to reduce dependence on fossil resources energy and changes have come about in production, marketing and determination of prices.

However, more needs to be done with respect to energy security for developing nations through a range of strategies, e.g. **exploiting own resources** to achieve as close to full self-sufficiency as possible, **supplementing own energy resources** with imports from reliable and consistent supplier nations, and **enhancing energy efficiency while incentivizing energy conservation** on the demand side. Moreover, focus should be on the use of **non-fossil sources of energy, such as solar, wind, tidal, geothermal etc.** 

Energy is an essential part of innovation, progress and life. It plays vital roles, directly as well as indirectly, in the survival of human beings, as well as to a country's economic development. For overall economic development energy access needs to be improved particularly in remote, backward and inaccessible regions, which can be achieved through proper infrastructure for the generation, transmission and supply of energy, as well as the human skills and expertise needed to maintain and improve the system. Access to modern energy is essential for the provision of clean water, sanitation and healthcare and for the provision of reliable and efficient lighting, heating, cooking, mechanical power, transport, and telecommunications services.

Poor energy quality in developing nations has had serious implications on health and environment and it is high time we address these issues.

In order to discuss various aspects of energy security, clean and affordable energy for all, and health hazards associated with poor energy quality, the Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre), New Delhi, India jointly with the CSIR-Indian Institute of Petroleum, Dehradun, India, will be organizing an International Workshop on 'Energy Security and Energy Access: Health Implications of Poor Energy Quality in Developing Countries' during 26-27 July, 2021. The Workshop will be hosted by CSIR-Indian Institute of Petroleum, Dehradun and will be organised in Virtual-Mode.

#### **WORKSHOP OBJECTIVES**

This Workshop aims to bring together experts, professionals and policy makers from the developing countries across a wide range of areas spanning conventional and non-conventional energy, and the nexus between energy,

climate change and human well-being, to exchange knowledge, ideas and thoughts on **United Nations Sustainable Development Goal No. 7** - "Ensure access to affordable, reliable, sustainable and modern energy for all."

#### **TOPICS TO BE COVERED**

- Access to Affordable Clean Energy
  - o Smart Energy Networks
  - o Hydrogen Energy
  - o e Mobility- Technology and Infrastructure
  - o Battery Technologies
  - o Solid Waste Management & Disposal- Recyclable
  - o CO<sub>2</sub> Capture-Storage-Conversion
  - o Renewable Energy

### Energy Security

- The Energy of Today and Tomorrow
- Enhancing the Energy Security: Energy Markets in the Developing Countries
- Development of Renewable Energy Market
- Development of Natural Gas and LNG Markets and their Role in Future Energy Mix
- Alternative Energy Futures: Solar PV, Solar Thermal, Fuel Cells, Biomass, Wind, Geothermal
- Fuels and Chemicals from Biomass
- Energy Conservation, Energy Efficiency
- Health Implications of Poor Energy Quality in Developing Countries

#### **IMPORTANT DATES**

ACTIVITY	DATE
Registration/Submission of Application Starts	24 May 2021
(along with the Extended Abstract)	
Last Date of Submission of Application	16 July 2021
Deadline for Submission of Full Manuscripts	23 July 2021
Acceptance/Selection of Applicants	23 July 2021
Issue of Online Conference Link to Participants	23 July 2021
Workshop Dates	26 - 27 July 2021

#### TENTATIVE PROGRAM OF THE WORKSHOP

	Programme – India Time			
Date	10:30-11:30 Hrs	11.30- 13:30 Hrs	14:00-15:00 Hrs	15:00- 16:30 Hrs
26 <sup>th</sup> July 2021	Official Opening	Plenary Session/ Keynote Lecture  Technical Session - I  (Presentation by Participants)	Technical Session – II (Presentation by Participants)	Technical Session – III (Presentation by Participants)
27 <sup>th</sup> July 2021	Plenary Session/ Keynote Lecture	Technical Session – IV (Presentation by Participants)	Technical Session – V (Presentation by Participants)	Concluding Session, Discussions & Adoption of Resolutions

Note: A detailed session-wise programme will be made available to all the selected participants before the Workshop.

#### WHO SHOULD ATTEND

Scientists & Researchers from Conventional and Renewable Energy, Technology providers and start-ups, LCA professionals, Energy technology consultants, Project-planners, Government officials, Policy makers and other Stakeholders from industry and non-government organizations from various NAM and other developing countries and island nations who are engaged in R&D, generation, promotion and policy making on Energy Security, Energy Access, Affordable Clean Energy, and Climate Change and available supported technological solutions for minimizing environmental impact on human health, are invited to participate in this Virtual Workshop.

Experts and professionals from the developed countries are also welcome to participate as resource persons for delivering keynote lectures on relevant topics during the workshop.

#### **CERTIFICATION**

E-Certificates will be awarded to participants upon successful completion of the Workshop.

#### **RESOURCE PERSONS**

The resource persons for the Workshop will comprise eminent experts and professionals in the relevant fields from India and other countries.

#### **ABOUT THE ORGANISERS**

#### NAM S&T CENTRE

The Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre), New Delhi is an Intergovernmental Organization with a Membership of 47 countries spread over Asia, Africa, Middle East and Latin America. The Centre was set-up in 1989 in New Delhi, India in pursuance of the decisions of various NAM Summits with the objective of promoting mutually beneficial S&T cooperation among the NAM and other developing countries for collective self-reliance.

The Centre undertakes a variety of programmes, including organization of International Workshops, Conferences and Training Courses, and implementation of Collaborative S&T Projects. It also offers short-term Research Fellowships to Scientists and Technologists from developing countries in association with the Centres of Excellence in various countries. The Centre also brings out books, monographs and other scientific publications in different subjects that are of interest to developing countries.

The Centre's activities provide opportunity for scientist-to-scientist contact and interactions, familiarizing participants on the latest developments and techniques in the subject areas, identification of the requirements of training and expert assistance, locating technologies for transfer between the Members and other developing countries, and dissemination of STI information etc. In addition, the Centre encourages Academic R&D-Industry interactions in the developing countries through its "NAM S&T-Industry Network".

#### **CSIR-INDIAN INSTITUTE OF PETROLEUM**

A constituent laboratory of the Council of Scientific & Industrial Research (CSIR), Government of India, CSIR-Indian Institute of Petroleum (CSIR-IIP) was established in 1960. Accredited with ISO 9001: 2015 certificate, the institute is devoted to multidisciplinary areas of research and development in the Energy sector. Areas of activity include petroleum refining, petrochemicals, biofuels, natural gas, alternative and clean energy, catalysis, adsorption, separations, CO<sub>2</sub> recovery and utilization, nanomaterials, biotechnology, IC engines, lubricants and combustion. CSIR-IIP offers globally competitive technology and services for hydrocarbon, chemicals and automotive industries. It has close collaborations with other research and academic institutes/universities, both within country and aboard, and an impressive track record of placements.

Some of IIP's major activity areas are Petroleum Refining, Catalytic Refining and Catalysis, Separation Process, Solvent Extraction, Adsorption, Membranes, along with evaluation and characterization of Lubrication Oil and Modified Bitumen and Carbon Materials. Other areas of expertise are Thermal Conversion Process, Modeling and Simulation, Chemicals /Petrochemicals, Intermediates and Additives for relevant industries. Process and product development for Specialty Chemicals, Petrochemical intermediates, Bio-processing of petroleum streams; Fuel, Lubes and Chemicals from Biomass are recently introduced.

Institute has developed a large number of processes and technologies and many of them have been transferred to the industry. Almost every refinery in the country has a product/ technology licensed by the institute. Test techniques are also developed for evaluation of petroleum products with BIS specifications. The institute has also established global tie-ups for contract research and technical services and has filed/granted patents in India and abroad. Large numbers of research papers are published in reputed International and National journals. The institute is bestowed with many prestigious awards in recognition of excellence in various fields.

#### SUBMISSION OF APPLICATIONS

Applications for participating in the Workshop may be submitted electronically to the NAM S&T Centre (Email: namstcentre@gmail.com) as early as possible but latest by 16 July 2021.

Participants are welcome to submit abstracts of papers to be presented during the International Workshop. However, the Workshop is also open to all scientists and professionals with an interest in Energy Sector, supported technological solutions and related areas.

The following documents must be submitted as e-mail attachments:

- i. Filled-in Application Form (Blank-form **enclosed**)
- ii. An Opinion (a short paragraph; in MS-Word only) on what qualifies you to participate in the Workshop
- iii. A Short CV (maximum two pages in the format enclosed; in MS-Word only)
- iv. An Extended Abstract (in MS-Word only) of the Paper that would be presented at the Workshop (about 1-1 ½ pages)

**Note:** The documents at (ii), (iii) and (iv) above must be in MS-Word format only; PDF or image files will not be accepted. Hard copies of the Nomination Form and the above attachments are NOT REQUIRED to be submitted.

#### PRESENTATION OF PAPERS

Participants are welcome to present a Country Status Report and/or a research/ scientific paper on any of the themes appropriate to the Workshop.

#### PUBLICATION OF PROCEEDINGS OF THE WORKSHOP

A Publication edited by one or more international experts and based on the papers presented by the participants during the Workshop and also containing papers contributed by other eminent experts in the field will be published in the form of a book as follow-up of this Workshop. Therefore, all participants are requested to submit the manuscripts of their full papers in MS-Word format only well in advance, but latest by **23 July 2021**.

#### SELECTION OF APPLICANTS

Selection of applicants will be made based on their academic and professional background, relevance of their current engagements in the

relevant field and the abstract of paper submitted by them. Successful applicants will be electronically informed about their selection by 23 July 2021 The details about the virtual-platform that will be used for the Workshop including the log-in details will be communicated to all the selected applicants by 23 July 2021. Other details and terms & conditions for the participation of scientists from various countries will be given to the individual candidates on receipt of their applications.

#### **CONTACT DETAILS**

### Dr. Amitava Bandopadhyay

**Director General** 

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Fax: +91-11-24644973

E-mail: <a href="mailto:namstcentre@gmail.com">namstcentre@gmail.com</a>
Website: <a href="mailto:http://www.namstct.org">http://www.namstct.org</a>

#### **HOST ORGANISATION, CSIR - IIP**

#### Dr. Anjan Ray

Director CSIR-Indian Institute of Petroleum Haridwar Road, Mohkampur Dehradun 248005 India

Tel: +91 135 2525 709 Fax: +91 135 2660205 E-mail: director@iip.res.in Website: www.iip.res.in

## CENTRE FOR SCIENCE AND TECHNOLOGY OF THE NON-ALIGNED AND OTHER DEVELOPING COUNTRIES (NAM S&T CENTRE)

## INTERNATIONAL WORKSHOP ON

# ENERGY SECURITY AND ENERGY ACCESS: HEALTH IMPLICATIONS OF POOR ENERGY QUALITY IN DEVELOPING COUNTRIES

26-27 July, 2021

### **APPLICATION FORM**

PLEASE TYPE OR USE BLOCK CAPITALS (NO COLUMN SHOULD BE LEFT BLANK)

SECTION -A (*To be filled in by the Nominee*)

CII	TION -A (10 be filled iff by the Northhee)	
1.	1. First Name (Prof. /Dr. /Mr. /Mrs. /Ms.):	
	Middle Name: Las	t Name:
2.	2. Father's / Spouse Name:	
3.	3. Designation (Position held):	
4.	4. Nationality:	
5.	5. Date of Birth:	
	Place of Birth (City)(C	ountry)
6.	6. Name of the Parent Institution (Employer	):
7.	7. Full Address (Office):	
	Phone: Fax	
	E-mail:	
	Full Address (Home):	
	Phone: Mob	
	Fax: E-m	ail:
8.	8. Educational Qualifications:	
	Highest Degree Ye	ear of Award:
	University:	
	Field of Study	
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9.	9. Brief Bio data (CV):	
	(Maximum two pages in MS Word only; to	
	per the attached format)	s so attached on coparate shoot as
10	10.A Write-up (in MS-Word format only) o	
	Workshop 11 An Extended Abstract (ii	
	would be presented at the Workshop (abo	out I-I ½ pages)
	Date: Signatu	re:
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#### SECTION -B: ENDORSEMENT BY THE NOMINATING AUTHORITY

(The Applicant in a member country of the NAM S&T Centre must get the Nomination Form endorsed by the Focal Point of the Centre in his/her country, if he/she wishes to take advantages extended to the official nominee of the country. For the list of member countries and names/addresses of the Focal Points please visit the Centre's official website; www.namstct.org.)

Signature:
Name (in full):
Designation:
Date:
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#### Enclosures:

- A Brief CV (maximum two pages, as per attached format; in MS Word only)
- o An Opinion (in MS-Word format only) on what qualifies you to attend the Workshop
- o An Extended Abstract (in MS-Word only)of the Paper that would be presented at the Workshop (about 1-1 ½ pages)

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## **CURRICULUM VITAE**

## 1. Personal Details:

Name: (Prof./Dr./Mr./Mrs./Ms.)

Designation: Position Title

Present Employer: Full Address (Office)

City/State/Province:

Country: Nationality:

Date of Birth: dd/mm/yyyy

Proficiency in English Language:

Permanent Address: Full Address (Home)

Gender:

Contact: Mobile:

Telephone Office: Fax:

E-mail: Alternative e-mail:

2. Academic Qualifications: In chronological order

Qualification Awarded	Major	University/	Year
Degree/Diploma/Certificate	Subject	Institution	(From-To)

3. Professional Experience: In chronological order

Organisation/ Institution	Position Title	Year (From-To)	Nature of duties

Total number of years of relevant experience –

4. Research Experience: In chronological order

Research Title	Duration	Status

- 5. Administrative Experience: Not more than 100 words
- 6. Experience with respect to the title of the Workshop:
- 7. Details of Awards/Recognitions (if any):
- 8. Any other information: Not more than 50 words
- 9. Recent Publications: Only five recent publications to be mentioned

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