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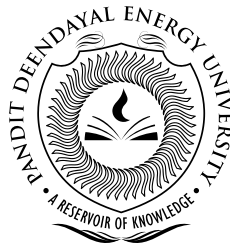
**SMALLEST ELEMENT HYDROGEN OFFERING BIGGEST
OPPORTUNITIES FOR ENERGY TRANSITION: THE GLOBAL TRENDS
FOR GREEN ENERGY**

*Kriti Yadav, S.S. Manoharan, Pradeep P.S., Anirbid Sircar,
Sivaraman Dhanasekaran*



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CONTACT DETAILS:

Dr. Ashutosh Muduli, Managing Editor

School of Petroleum Management,
Pandit Deendayal Energy University
Gandhinagar, Gujarat - 382007, India.

E-mail: jem.pdpu@pdpu.ac.in
jem.pdpu@gmail.com

PUBLISHER'S DETAILS:

Pandit Deendayal Energy University,
Gandhinagar, Gujarat - 382007, India.

Telephone: +91 79-23275101

E-mail: jem.pdpu@pdpu.ac.in
jem.pdpu@gmail.com

Website: <https://www.pdpu.ac.in>

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EDITORIAL

We are pleased to present the VIIIth edition of the PDEU Journal of Energy and Management. The following are the highlights of the papers presented in this edition.

The first paper on Mg-Al layered double hydroxide catalyst for green hydrogen production by Lokesh Sankhula and Rohit Srivastava describes the facile synthesis of Mg-Al Layered Double Hydroxide electro-catalyst through the hydrothermal method for green H₂ generation. The synthesized electrocatalyst possess a cathodic current density of 10 mA/cm² at 1.987 V and anodic current density of 10 mA/cm² which indicates good electrochemical stability of Mg-Al LDH in basic medium.

The second paper by Surendra Singh Kachhwaha and Pravin Kodgire studies novel experimental studies for biodiesel production. The authors commented that globally fast depleting fossilized fuel reserves and increasing environmental pollution problems are the key motivating factors to pursue research on alternative fuels derived from biomass, which can fulfill the increasing future energy demand for sustainable development. In this regard, biodiesel as a sustainable alternative helps to protect the environment due to its non-toxic, renewable, and biodegradable nature and produces less sulphur emissions and greenhouse gases.

The third paper highlights human rights oversight in ensuring energy security. Ms Lesley Amol Simeon, the researcher found that the Narmada Bacho Andolan in September 1989 and the two major power blackouts in India in 2012 are the two examples that put forth the two-fold impact that energy insecurity can have on human lives and their inherent rights. The paper discusses the above-mentioned facets of energy security and poverty through a trio of interrelated parameters - the global quest for energy security, the Human Rights implications of energy security and the Indian response and policy framework, governing energy security.

The fourth paper by Vivek Pathak deliberates on improving the mental health of the workforce under new norms through spirituality. The author sensitises the reader about the new changes at the workplace related to work in isolation and social distancing in the context of the new normal and argues that the new norms create a lot of mental stress in the workforce. The authors explore various mechanisms for developing the individual spiritual strength thereby contributing toward better job performance and organisational growth under ethical leadership. Various solutions are being explored to facilitate individuals' protection from the inherent stress created by this pandemic. The research analysis identifies the application of meditation and related techniques to help workers to handle the mental stress related to the new normal of various organisations.

Finally, the paper titled 'Smallest Element Hydrogen Offering Biggest Opportunities for Energy Transition: The Global Trends for Green Energy' by Dr P.S. Pradeep and the Team provides a comprehensive perspective of the current scenario and potential of Green Hydrogen in India. The paper also focuses on the global demand and supply of hydrogen. A comparative understanding has been done between blue and green hydrogen to understand its scalability along with opportunities and challenges. This paper also narrates the key attributes of the Green Hydrogen policy in India along with future scope on production through less explored resources.

*Dr. S. Sundar Manoharan, Director General
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