



ISE Newsletter

Quarterly newsletter of the INDIAN SOCIETY OF ERGONOMICS (ISE)

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Forthcoming National & International events:

- * [IEA 2024](#)
Triennial Conference of the International Ergonomics Association (IEA),
Jeju Island, South Korea
25-29 August 2024
- * [HWWE 2024](#)
Annual Conference of the Indian Society of Ergonomics,
December 13-15, 2024
Kolkata

ISE is online at: <https://ise.org.in/>

For your security, ensure that you can view the padlock symbol  and <https://ise.org.in> on the web address before you enter





Conference Date: 13th - 15th December, 2024

Conference Theme: **Ergonomics for Everyone: Future challenges in Health, Safety and Design**

Conference Venue: **University of Calcutta**

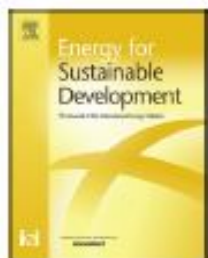
Registration (Initial) link: <https://forms.gle/Zbcf2XY8vmZVpgQT6>

For conference-related enquiry: secretaryhwwe24@gmail.com

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* Publications



A user-centric assessment of solar-photovoltaic-home-lighting systems in rural parts of Assam, India

Brajesh Dhiman^{a,b}, Divya Zindani^c, **Debkumar Chakrabarti^a**, **Gurdeep Singh^a**

a Indian Institute of Technology Guwahati

b Karnavati University, Gujarat

c Sri Sivasubramaniya Nadar (SSN) College of Engineering, Kalavakkam

This paper intends to investigate the user and context-specific barriers associated with conventional solar home systems (SHSs) that will lead to a better comprehension of user preferences. It proposes and analyzes the user's perception of safety and effort when interacting with the proposed and conventional SHSs. It also assesses the working postures for both the proposed and conventional SHSs to analyze the risk of musculoskeletal disorders (MSDs).

<https://doi.org/10.1016/j.esd.2023.101290>

Dr.G.Arjundas Oration Award

Dr.S.Sunder, the CEO of the ergonomics consulting firm Prem Ergo Solutions, was the proud recipient of the Dr.G.Arjundas oration at the annual conference of the Indian association of Occupational Health held recently at Vadodara in February this year. He is a specialist in Physical medicine and Rehabilitation and is currently the director of the Rehab Center at MIOT, a large international hospital in Chennai.



Dr.Sunder's interest in ergonomics started early in the 2000's when he used to give awareness lectures on posture in several IT companies and later he expanded his services to do industrial ergonomic assessment at large steel and power companies.

The topic of his lecture was **DIGITAL BIOMARKERS AND THERAPEUTICS IN ERGONOMICS**. In



the half hour session, he brought the attention of the audience, comprising of industrial medical officers, hygienists, and safety officers, to the rapidly developing technology in the digital space. He spoke about the use of EMG biofeedback, motion sensors, artificial intelligence and virtual reality in the assessment, real time analysis and the therapeutic applications in the field of ergonomics and how the future of ergonomic assessment in industry is going to evolve.

He envisioned a scenario where a trained person can capture data on a mobile camera and an ergonomist in a remote location can evaluate the ergonomic postural risk real time. Of course, this would not replace the actual on-site evaluation by an ergonomist, but would be of use in hazardous areas, or those activities that need continuous monitoring.

* Patents

A design Patent has been granted to Professor **Suman Singh**, ICAR Emeritus Professor, MPUAT, Udaipur and Dr. Hemu Rathore and Dr. Neelima Sinwal., for the design and application of "**Hand Trolley for Handling and Shifting of Goods**"



Indian Utility Patent titled '**A system to utilize a hybrid renewable source of energy obtained from roadways to generate electricity**' Patent Number: 526985 has been granted to Mr. **Gurdeep Singh** and Dr. Abhishek Singh of Department of Design, IIT Guwahati, Assam, India on 15th March 2024 by the Indian Patent Office (IPO). The invention presents a platform to be equipped on roads to protect the roads against harsh weather along with being equipped with components to generate a renewable source of energy using solar panels equipped on movable rooftops, platform poles made using vertical windmills to absorb backdraft force, and piezoelectric sensor plates on the road. The team members were Mr. Gurdeep Singh and Dr. Abhishek Singh.



* Appointments

Kamalpreet Sandhu, Lovely Professional University has been selected as a member of the College of Reviewers of the The Design Journal. The Design Journal is Taylor & Francis' flagship design journal, which publishes research on design management, theory, education, and practice in both cultural and commercial contexts, with direct impact on design knowledge. This appointment recognizes Mr. Sandhu's expertise and contributions to the field of design, especially ergonomics-related design and innovation.





22nd Triennial Congress of the International Ergonomics Association (IEA)
Jeju, South Korea
25 – 29 August 2024

The 22nd Triennial Congress of the International Ergonomics Association (IEA) will be held in Jeju, South Korea, from 25th – 29th August 2024 (Sunday – Thursday). The Ergonomics Society of Korea (ESK) and the Korea Occupational Safety and Health Agency (KOSHA) are the hosts. The venue will be the **ICC at Jeju Island**. IEA2024 will be held jointly with INCOSE HSI 2024, the 3rd International Conference on Human Systems Integration (HSI) of the International Council on Systems engineering (INCOSE).

It promises to be an exceptional event for both HFE academics, practitioners, and other interested partners. The program will include a wide range of sessions, workshops, panel discussions, plenary sessions, and other activities, and stretch from traditional HFE themes to new areas of interest and future perspectives. It will offer a wide range of opportunities for personal contact, including special events for students and early career professionals. The venue will be on Jeju Island, a very popular and beautiful tourist destination, with sustainability and environmental protection being a priority. The island can be reached directly from several neighbouring countries as it has an international airport. Paper submission is now open!



Early bird registration deadline: **30th June, 2024**

Enjoy Reduced Member discounts in Registration fees as a member of the Indian Society of Ergonomics

Congress website: <http://iea2024.com/>