



ISE Newsletter

Quarterly newsletter of the INDIAN SOCIETY OF ERGONOMICS (ISE)

Vol. 24

October - December 2020

No. 4

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Forthcoming National events:

HWWE 2021

Annual Conference of the Indian Society of Ergonomics,
November 29 – December 3, 2021
Guwahati, Assam

Forthcoming International events:

- * 21st Triennial Congress of the International Ergonomics Association (**IEA 2021**)
June 13-18, 2021 **Registrations Open**
Vancouver, Canada **Gone Hybrid!**
- * AHFE 2021 International Conference
July 25-29, 2021
New York, USA

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

* Welcome New members!

ISE Newsletter welcomes the following new Life Member:



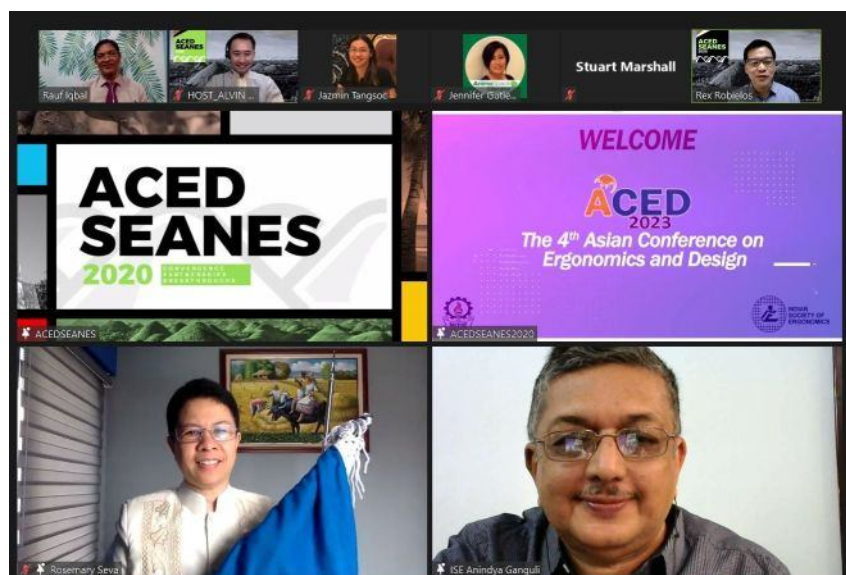
L-499 Subhadip Das, Kolkata

* ISE Annual General Body Meeting

The Annual General Body meeting of the Indian Society of Ergonomics was held on **Saturday, 5 December 2020 at 7:00 pm**. Considering the priority of safeguarding the health and wellbeing of people in the ISE community, and to ensure compliance with the Bye-Laws of the Society, the meeting was held in **Virtual mode**. Link to join the meeting, along with the agenda, annual report, audited accounts and minutes of the meeting have been sent to all ISE members.

* ACED 2023 in India

The 4th triennial conference of the Asian Council on Ergonomics and Design (ACED) - ACED 2023 has been awarded to India. The decision was taken at a meeting of the ACED Council held online on October 22, 2020, attended by ISE President and other EC members of ISE nominated to represent ISE at ACED. The conference will be held at NITIE, Mumbai tentatively in December 2023. Prof. Rauf Iqbal, NITIE will take the initiative and formulate plans for holding the conference.



Prof. Rosemary Seva of Phillipines handed over the ACED flag virtually to Dr. A.K.Ganguli on the last day of the 3rd ACED 2020 conference on December 4, 2020.

* Achievements

ACED – SEANES 2020 Best Paper



The paper entitled "**Spatial ability - an approach in children learning materials for children**" by Tulika Bora, Juri Baruah and **Nandita Bhattacharyya** from Assam Agricultural University was selected as one of the best papers in the 3rd ACED - SEANES 2020 conference. Prof. Ravindra Goonetilleke presented the award virtually during the inaugural session of the conference on December 2, 2020. **Congratulations!**

Dr. C R Mehta awarded NAAS Recognition Award 2019-20



Dr. C. R. Mehta, Director, ICAR-Central Institute of Agricultural Engineering, Bhopal has been awarded Recognition Award 2019-20 from National Academy of Agricultural Sciences (NAAS), New Delhi for his contribution in the field of Agricultural Engineering and Technology. He has made distinguished contributions in the area of tractor ergonomics. **Congratulations!**

* HWWE 2020 report

The 18th Conference of the Indian Society of Ergonomics (ISE) 'Humanizing Work and Work Environment' (HWWE 2020) endorsed by International Ergonomics Association (IEA) focusing on the theme 'Technology Enabled Ergonomic Design' was held at Theem College of Engineering, Boisar, Mumbai during December 10-12, 2020 in "Virtual Mode" due the Corona pandemic situation.

The conference offered an international platform for exchange of ideas along with dissemination of knowledge, experience and expertise in various aspects of Ergonomics and Human Factors Engineering among academia, industry, scientists, entrepreneurs, research scholars and students. HWWE 2020 covered issues related to Covid 19 pandemic, agriculture & animal husbandry; transport; industrial applications; public utilities; psychology & cognitive science; HCI; occupational stress; health & safety; defence; work physiology & sports science; rehabilitation; elderly and women concerns; design & usability; covering all appropriate applications of ergonomics in every walk of life. About 250 participants attended the conference virtually and 63 full length papers were selected for oral presentation.

Day 1 - HWWE 2020 Plenary & Keynote Speakers



Inauguration



Dr Kathleen Mosier



Dr A K Ganguli



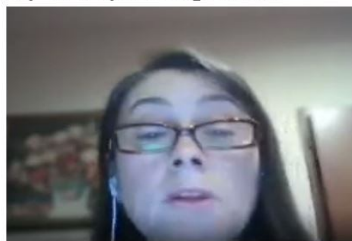
Dr Debkumar Chakrabarti

Prof. Kathleen Mosier, President, IEA and **Dr. A. K. Ganguli**, President, ISE, **Prof. G. G. Ray**, IIT Bombay, Mumbai and other dignitaries graced the inaugural ceremony in virtual mode from all over the globe along with Mr Sharif A Thim, Trustee H J Thim Trust, **Dr. N. K. Rana**, Conference Chair and Dr. Aqueel A. Shah, Conference Co-chair were present physically on dais. **Dr. N. K. Rana** presented the summary of the program of all three days to the audience. **Prof. G. G. Ray** spoke about the conference and introduced Prof. Kathleen Mosier, President, IEA to the attendees. Prof. Mosier delivered her plenary session on “Technological Challenges for Human Factor/ Ergonomics in the Future of Work” and **Dr. A K Ganguli**, spoke on “Changing Concepts of Work & the Future of Ergonomics in India” in his plenary address during inaugural ceremony.

Day 1 - HWWE 2020 Plenary & Keynote Speakers



Dr Andrew Thatchar



Dr Anabela Carvalho Alves



Dr G. G. Ray



Dr Rauf Iqbal

Apart from the two plenary sessions, eight keynote talks and ten lead lectures were presented by experts who shared their research and experience. Dr. Jose Orlando Gomes, Vice President and Treasurer IEA, Dr. Ali Hosseini, University of Tehran, Iran, Dr. Anabela Carvalho Alves, University

of Minho, Portugal, Dr. Andrew Thachar, Univ. of Witwatersrand, South Africa, **Dr. D. Majumdar**, Vice President, ISE, **Dr. Debkumar Chakrabarti**, IIT Guwahati, **Dr. Shrawan Kumar**, University of Alberta, Canada and Dr. Wei Zhang, Tsinghua University, China delivered Keynote talks through virtual mode on various insightful topics and created enthusiasm and curiosity among budding researchers.

Day 2 - HWWE 2020 Keynote Speakers



Dr Shrawan Kumar



Dr D. Majumdar



Dr Ali Hosseini



Dr Wei Zhang

A galaxy of academician and expert from industries graced the conference through their Lead Lectures and chaired the various sessions during these three days, including: **Dr. Abid Ali**, Aligarh Muslim University, **Dr. Ajita K. Singh**, Punjabi University, Patiala, **Dr. Manjit Kaur Chauhan**, SNDT Women's University, Mumbai, **Prof. Prakash Dhara**, Secretary, ISE, Dr. Qutubuddin S M, PDA College of Engg., Kalaburgi, **Dr. Rauf Iqbal**, NITIE Mumbai, **Dr. Somnath Gangopadhyay**, University of Calcutta, **Dr. Sougata Karmakar**, IIT Guwahati, **Dr. Swati Pal**, IIT Bombay, Mumbai, **Prof L P Singh**, NIT Jalandhar.

The valedictory program was conducted in hybrid mode wherein experts and researchers got connected online and the host team was present on the dais. The conference report was presented by Dr. Nazmuddin Amer, Technical committee-chair to the audience. The book of abstracts (ISBN 987-93-5419-847-2) was unveiled by dignitaries present on the dais and a soft copy of the same was made available to all participants.

Day 2 & 3 - HWWE 2020 Keynote Speakers & Valedictory Session



Dr Jose Orlando Gomes



Unveiling Proceedings



Handing over Ceremony



Valedictory

The baton for HWWE 2021 to be hosted by Department of Design, IIT Guwahati was handed over virtually to Prof. Debkumar Chakrabarti and he invited all to IIT Guwahati in 2021. **Dr. A. K. Ganguli**, **Prof. G. G. Ray** and **Prof. Rauf Iqbal** expressed their views and appreciated the successful organization of the conference by Them College of Engineering, Boisar, Mumbai through virtual mode by reminding all that history had been created in the journey of HWWE. Many participants also appreciated the arrangements done through their views and feedback. The full proceedings is accepted for publication Springer as a special issue.

*** CIEHF-ISE Collaboration**

Collaboration between ISE and CIEHF, UK continues following the successful joint webinar reported in the previous issue of the ISE Newsletter. More exciting programmes are planned for 2021.

Meanwhile, CIEHF offers subscriptions to THINK, their free online magazine to all ISE members and encourages articles in THINK and in The Ergonomist.

https://www.ergonomics.org.uk/Public/Resources/Think/eNewsletter_Sign_Up.aspx

Take 10!

CIEHF also invites ISE members to help Improve design by taking part in a community science project - Institute of Ergonomics and Human Factors "Design for Everybody" project.

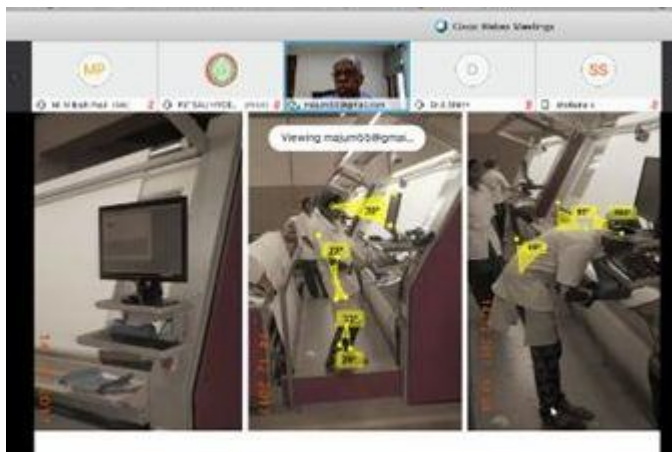
Visit https://www.ergonomics.org.uk/Public/News_Events/News_Items/community-science-design-project.aspx to know more and help improve design!

Webinar Webinar on "Visual Ergonomics in Digital Era"

The Department of Resource Management and Consumer Sciences, College of Community Science, organised a webinar on 'Visual Ergonomics in Digital Era' on September 10, 2020. The Webinar Director was **Dr. D.Ratna Kumari**, Professor (RMCS) & Associate Dean, C.C.Sc and the coordinator was Dr.V.Vijaya Lakshmi, Professor & Head, RMCS Dept.



105 participants from 18 states (Telangana, Andhra Pradesh Tamilnadu, Kerala, Gujarat, Delhi, Maharashtra, Uttar Pradesh, Punjab, Rajasthan, Bihar, Assam, West Bengal, Uttar Pradesh Madhya Pradesh, Karnataka, Uttarakhand, Chattisgarh), and two participants from Indonesia and Philippines joined the webinar. Majority of the participants belonged to academic institutions.



The objective of the webinar was to understand the problems faced due to poor visual ergonomics and to suggest the precautionary measures to ensure comfortable working, reduce psychological stress and overcome visual stress. **Dr. D.Majumdar**, Scientist G (Retd), DRDO, Delhi spoke on Visual Ergonomics issues during Covid 19 Pandemic and Coping Strategies; **Dr. A. Mrunalini**, Dean of H.Sc.(Retd), PJTSAU, Hyderabad reviewed the Parameters of concern in visual ergonomics and their assessment; and Dr. K. Mayuri, Professor & Head (Retd), Dept. of HDFS, PJTSAU, Hyderabad discussed the Psychological issues in dealing with the pandemic

Best practices in Ergonomic risk reduction - Best practices in machinery safety

Jignesh Vadher, Michelin Tyres, Chennai, spoke on "Best practices in Ergonomic risk reduction - Best practices in machinery safety" at Confluence 2020, jointly organized by the Safety Council of Kerala and Saint Gobain, on October 30, 2020.

Webinar on Occupational Health and Safety challenges and possible solutions in the new normal

The Indian Chamber of Commerce organised a webinar to focus on the results of scientific studies on the health and well being of the population during the COVID 19 pandemic, initial lockdown and subsequent new normal life. Possible solutions suitable for the Indian context were highlighted.

Webinar on Occupational Health & Safety Challenges and Possible Solutions in the New Normal
7th November 2020; 3.30 pm to 5.30 pm; Zoom

Session 1 : Ergonomic Perspective

Speaker : Dr. Subhashis Sahu, FABMS
In-Charge, Ergonomics and Occupational Physiology Laboratory
Associate Professor and Head Department of Physiology, University of Kalyani
Visiting Faculty : NID, (Ahmedabad, Kurukh/Kejri), RLI (Kolkata),
Ram Mohan College Visen Zero Trainer

Session 2 : Occupational Safety & Health Concerns and Possible Solutions

Speaker : Dr. Krishna Nirmalya Sen
Head EHS (MMH), L&T MMH S&G
Chair, OHSE Expert Panel, Indian Chamber of Commerce, Chair,
ASSP India Chapter Chair, IOOH Scientific Committee in the Construction Industry

Dr. Subhashis Sahu and **Dr. Krishna Nirmalya Sen** were the speakers. A large number of participants from industry and academia attend the webinar.

ABERGO 2020 virtual conference - panel discussion on "Covid-19 in BRICS countries"



Prof. Rauf Iqbal member of BRICS Executive Committee for Human Factors and Ergonomics (HFE) in BRICS countries participated in the ABERGO 2020 Brazil virtual conference Brazil on November 27, 2020. Topic of the panel discussion was "Covid-19 in BRICS countries".

Webinar on "Applied Ergonomics @ Home, Office & Industry"



Central Industrial Hygiene Association of India
Invites you to Join Webinar
On
Applied Ergonomics @ Home, Office & Industry



OBJECTIVE

Provide individuals with the awareness, knowledge and ideas of ergonomic application to do their jobs comfortably and safely, whether be at home, office or industry.

CIHA, the Central Industrial Hygiene Association organized a webinar on Applied Ergonomics at Home, Office and Industry on November 28, 2020. The speakers were **Dr.A.K.Ganguli**, President ISE, Kirsty Angerer, Certified Professional Ergonomist, **Bharati Jajoo**, Chief of BodyDynamics, **Dr.Reena Valecha**, Principal Ergonomist with Godrej Interio, and **Jignesh Vadher**, TZ EHS Expert at Michelin.

Newly designed water bag to reduce drudgery.

Under the project "Role of women in management and conservation of natural water sources for domestic uses" of AICRP, Home Science, Pantnagar, a study was conducted in the Jaunsar region of Kalsi block, Dehradun in Uttarakhand. A total of 200 respondents were selected and mainly three activities (carrying water, fuel and fodder) performed by women were investigated. Drudgery index was calculated for all the three activities. For carrying water in the hills, a water bag was designed by AICRP on Home Science at GBPUA&T, Pantnagar. This water bag is made up of plastic and it has carrying straps made up of synthetic leather. With these straps, it can be carried on back for ease of carrying water, this significantly reducing drudgery.

Highlights:

- Majority of women carried water for 2 times in a day which takes about 2-4 hours in a day.
- Among the three tasks (Carrying water, fodder and fuelwood), fuel wood collection was the most difficult work.
- The drudgery index was higher for fuelwood carrying activity (39.80) followed by water carrying (39.50). The introduction of water carrying bag significantly reduced the drudgery index.



Distribution of water carrying bags: 40 water carrying bags were distributed to the farm women of various adopted villages.

Furniture for WFH

At the recent Annual General Body meeting of the ISE, **Mr. Vinod Gupta** of Space Design Consultants and Opus Indigo Designs Pvt. Ltd. had shared with our members the new range of ergonomic furniture brought out by Opus Indigo that is not just a range of office furniture for which several international standards are available but deals with issues of available space and multiple use that Work from Home requires. It also deals with the ergonomic problems that prolonged laptop computer use creates. The range can be seen at www.opusindigo.com/.

International Conference on Industrial and Mechanical Engineering and Operations Management - IMEOM 2020, Dhaka

The International Conference on Industrial and Mechanical Engineering and Operations Management - IMEOM 2020, Dhaka, Bangladesh, was held virtually on December 26, 2020. **Prof. Rauf Iqbal** delivered a keynote speech entitled “Human Factors at work in office and at home: The New Normal”.



Based on the interactions between **Prof. Rauf Iqbal** and the organizers of the conference, the door has opened for joint activities between the ISE and the Ergonomics Society of Bangladesh (ESB).

* Publications

The pandemic and subsequent lockdown resulted in social distancing and isolation that had a detrimental effect on health and wellbeing, with increased reliance on digital use presumably both due to needing as well as to escape the isolation among all. People were struggling to maintain physical and mental health. In the new normal life, work from home creates different ergonomic issues like workstation configuration, proper workspace, biological rhythm desynchronization and family conflict. However, actual studies on the Indian aspects are limited. So, the research scholars of Ergonomics and Occupational Physiology Laboratory, Department of Physiology, University of

Kalyani under the mentorship of **Dr. Subhashis Sahu** undertook extensive research study on different working groups from the view point of occupational physiology. The results were published in different International Journals with high impact factor.

- Majumdar P, Biswas A, **Sahu S.** (2020). COVID-19 Pandemic and Lockdown: cause of sleep disruption, depression, somatic pain and increased screen exposure of office workers and students in India, *Chronobiology International*, D.O.I:10.1080/07420528.2020.1786107
- Majumdar P, Barman A, Chakraborty P, **Sahu S.** (2020). COVID-19 Pandemic and Rotational Shift Work: Impact on Physical and Mental Health of Indian Nurses, *International Journal of Research*, 6(2):60-72 (ISSN:2394-885X)
- Dey A, Majumdar P, Saha A, **Sahu S.** (12th October 2020): COVID-19 pandemic lockdown-induced altered sleep/wake circadian rhythm, health complaints and stress among traffic police personnel in India, *Chronobiology International*, D.O.I:10.1080/07420528.2020.1831524
- Dutta K, Mukherjee R, **Sen D, Sahu S** (2020): Effect of COVID-19 lockdown on sleep behaviour and screen exposure time: an observational study among Indian school children, *Biological Rhythm Research*, DOI: 10.1080/09291016.2020.1825284

* **Forthcoming International Events**



IEA
VANCOUVER
2021

21st Triennial Congress of the International Ergonomics Association (IEA 2021)

June 13-18, 2021

Vancouver, Canada

The 21st Triennial Congress of the International Ergonomics Association (**IEA 2021**) will be held in Vancouver, Canada in June 2021. The Congress theme, “**HFE (Human Factors and Ergonomics) in a connected world/L, ergonomie 4.0**”, speaks to the role of emerging G5 technologies. While the technical program will feature theme-related sessions, the Congress will cover the full breath of traditional and emerging HFE topics and applications.

IEA2021 will be a hybrid event, comprising both an in-person conference and a virtual conference.

Going hybrid will allow people who, for a variety of reasons, will not be able to join the in-person conference in Vancouver to participate in the most important human factors and ergonomics conference of 2021.

The virtual conference will be an integral part of the Congress, but it will have more limited technical content than the in-person conference. The virtual conference will have up to 28 unique webinar-style sessions, compared with about 144 sessions of the in-person conference. The plenary sessions in Vancouver will be live streamed to the virtual conference delegates.

Registration fees will be reduced to make the virtual conference widely accessible. Virtual session delegates will be able to join the online webinars at scheduled times to pose questions and interact with the authors. The recorded virtual sessions will be available on demand for 30 days post Congress. In-person delegates will have access to the virtual conference as well.

Registrations are now open: <https://iea2021.org/registration-information>

Website: <https://iea2021.org/>

Contact: Info@IEA2021.org



AHFE 2021 International Conference

July 25-29, 2021

New York, USA

You are cordially invited to submit an abstract for paper presentation or poster demonstration at the 12th International Conference on Applied Human Factors and Ergonomics (AHFE) 2021 and the Affiliated Conferences which will be held at the Sheraton Times Square, Manhattan, New York, July 25-29, 2021.

Abstract Submission Deadline (500 words): 1 December 2020

AHFE Submission System: <https://www.ahfe-cms.org>

Knowledge Base

Free seminar on "Practical Management of 'COVID-Normal' in Workplaces"

La Trobe University Centre for Ergonomics and Human Factors is hosting a free online seminar on practical management strategies for working in "COVID-Normal" on 8 February 2021, at 2:30 UTC. A series of expert speakers will give short presentations with practical examples of dealing with issues related to working in the "COVID-Normal" environment in different occupations, industries, and work arrangements. This seminar will be recorded. After registering, you will receive the Zoom link for the seminar on 1 February 2021. The registration link (which should convert the event to your local time) can be found here: <https://www.eventbrite.com.au/e/practical-management-of-covid-normal-in-workplaces-tickets-131292317857>