



# ISE Newsletter

Quarterly newsletter of the INDIAN SOCIETY OF ERGONOMICS (ISE)

Vol. 18

January – March 2014

No. 1

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### Forthcoming National events:

- [HWWE 2014, 3 – 5 December 2014, Guwahati, Assam](#)

### Forthcoming International events:

- [1<sup>st</sup> Asian Conference on Ergonomics and Design 2014 – ACED 2014, 21 - 24 May 2014, Jeju, South Korea](#)
- [5<sup>th</sup> International Conference on Applied Human Factors and Ergonomics - AHFE 2014, 19-23 July 2014, Krakow, Poland](#)
- [APCHI-ERGOFUTURE-PEI-IAIFI 2014, 22 – 25 October 2014, Bali, Indonesia](#)
- [3<sup>rd</sup> International Conference of the South East Asian Network of Ergonomics Societies - SEANES2014, 1 - 4 December 2014, Singapore](#)
- [IEOM 2015, 5<sup>th</sup> International Conference on Industrial Engineering and Operations Management, 3-5 March 2015, Dubai](#)
- [IEA 2015, 9-15 August 2015, Melbourne, Australia](#)

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

## \* Welcome New members!

ISE Newsletter welcomes the following new Life Members:



- L405 Vijay Vitthal Aware, Ratnagiri
- L406 Sachin Shravan Shinde, Kolhapur
- L407 Prabhanjan Kumar Pranav, Itanagar

## \* Announcement: HWWE'2014

**HWWE 2014** will be held at the Department of Design, Indian Institute of Technology (IIT) Guwahati, Assam, India, during 3 - 5 December 2014, with pre-conference workshops on "Ergonomics and design issues" during 1 - 2 December 2014. The theme of the conference will be "User centered Design and Occupational Wellbeing". A web announcement will be available at the IIT Guwahati web-sites [www.iitg.ernet.in](http://www.iitg.ernet.in) and [www.iitg.ac.in](http://www.iitg.ac.in).

## \* Announcement: NASI-ICAR Award

In order to reduce the drudgery of farm women by the development of farm implements and to encourage researchers and innovators to develop farm implements for farm women, ICAR (Indian Council of Agricultural Research) and NASI (National Academy of Agricultural Sciences) have instituted the **NASI-ICAR Award for Innovation and Research on Farm Implements - 2013**. The award consists of Rs.1,00,000/- in cash, a citation, and a certificate. The award is annual in nature. All scientists / engineers / innovators engaged in research in agricultural farm implements are eligible. The prescribed eligibility criteria, guidelines and pro-forma for applying for the award may be obtained from the Council by sending a self-addressed stamped envelope to Assistant Director General (Coordination), ICAR, Room No.2-12, Krishi Bhawan, Dr.Rajendra Prasad Road, New Delhi - 110 001.

## \* Member Activities

### Paper Publication



*Kinetic changes in gait during low magnitude military load carriage*

Deepti Majumdar, Madhu Sudan Pala, Anilendu Pramanika & Dhurjati Majumdar  
Ergonomics, 56:12, 2013, 1917-1927

link to this article: <http://dx.doi.org/10.1080/00140139.2013.835871>



*Optimum load for carriage by Indian soldiers on different uphill gradients at specified walking speed*

Madhu Sudan Pal, Deepti Majumdar, Anilendu Pramanik, Bodhisattwa Chowdhury, Dhurjati Majumdar

Intl Journal of Indl Ergonomics 44 (2014); link <http://dx.doi.org/10.1016/j.ergon.2013.09.001>



*Selection of character/background colour combinations for onscreen searching tasks: An eye movement, subjective and performance approach*

Debojyoti Bhattacharyya, Bodhisattwa Chowdhury, Tirthankar Chatterjee, Madhusudan Pal and Dhurjati Majumdar

Available Online: 4 April 2014; link: <http://dx.doi.org/10.1016/j.displa.2014.03.002>

## Study on Ergonomic Improvements in Foundry Operations

Guided by A.M.Qureshi, of the Mechanical Engineering Dept. at KIT's College of Engineering, Kolhapur, Maharashtra, Soumitra Damle, Aishwarya Patil Jadhav, Akhilesh Dingankar, Ankit Kate and Nayan Mirgal undertook a study on "**Ergonomic Improvements in Foundry for Prevention of Accidents and Injuries**".



Foundry workers are exposed to ergonomics-related injury risks, such as lifting heavy items, bending, reaching overhead, pushing and pulling heavy loads, working in awkward body postures, and performing the same or similar tasks repetitively.

The team visited nearly 20 foundries around Kolhapur, during which the total processes were studied, the workstation dimensions measured, and the operators and supervisors were interviewed. Following analysis with different postural tools such as REBA (Rapid Entire Body Assessment),

solutions were developed and awareness workshops conducted.



### \* Ergonomics Standards

PGD 15, the Ergonomics Sectional Committee of the Bureau of Indian Standards, met on 4th April 2014 under the Chairmanship of Prof. G.G.Ray. The proceedings were conducted by the Member Secretary, Shri Tilak Raj. Some of the Indian Standards at reaffirmation / finalization stage are:

- IS 4838 Anthropometric dimensions for school children age group 5-17 years
- IS 5533 Recommendations for dimensions for spaces for human activities
- IS 13214-1 Basic human body measurements for technological design — Part 1: Body measurements definitions and landmarks
- IS 13214-2 Basic human body measurements for technological design — Part 2: Statistical summaries of body measurements from individual ISO populations
- IS 15257 Spatial Orientation and Direction of Movement – Ergonomics Requirements
- IS 15836-1 Ergonomics design for the safety of machinery - Part 1 Principles for determining the dimensions required for opening for whole body access into machinery.
- IS 15836-2 Ergonomics design for the safety of machinery - Part 2 Principles for determining the dimensions required for access opening
- IS 15836-3 Ergonomics design for the safety of machinery - Part 3 Anthropometric data

Standards in Draft/Review stage include:

- 1262 Basic Human body measurement for Technological Design Part 1: Body Measurement Definitions and Landmarks (Based on ISO 7250-1:2008)
- 1263 General Requirement for Establishing Anthropometric Database (Based on ISO 15535:2006)

India was an "O" (Observer) member of the ISO Technical Committee TC 159, and has upgraded its participation level to "P" (Participation).

Some of the International Standards being considered for publication as Indian Standards include:

- ISO 6385 :2014 Ergonomic principles in the design of work systems
- ISO 7250-1 :2008 Body measurement definitions and landmarks
- ISO 7250-3 :2013 Worldwide and regional design ranges for use in ISO product standards
- ISO 9241-161 :2014 Guidance on visual user-interface elements
- ISO 9241-332 :2014 Two-view autostereoscopic displays
- ISO 9241-391 :2014 Requirements, analysis and compliance test methods for the reduction of photosensitive seizures
- ISO 9241-920 :2009 Guidance on tactile and haptic interactions
- ISO 10075 :2014 Mental work-load : General concepts, terms and definitions
- ISO 11228-1 :2009 Manual Handling: 1: Lifting and carrying
- ISO 11228-2 : 2007 Manual Handling: 2: Pushing & pulling
- ISI 11228-3 : 2007 Manual Handling: 3: Low loads at high frequency
- ISO 15535 :2012 General requirements for establishing anthropometric databases
- ISO 15537 :2004 Test persons for testing anthropometric aspects of industrial products and designs
- ISO 24504 :2014 Sound pressure levels of spoken announcements for products and public address systems
- ISO 25023 :2014 Systems and software - engineering – Systems and software Quality Requirements and Evaluation
- ISO 9355 :2009 Design of displays and control actuators
- ISO 11226 :2000 Evaluation of static working postures
- ISO 20646 :2014 Optimization of Musculo-Skeletal work load
- ISO 20685 :2010 3-D scanning methodologies for internationally compatible anthropometric databases.

**\* Knowledge Base**

**Ergonomics helps improve organization productivity**

Godrej Interio has been promoting the need for ergonomics awareness, study, analysis and the need for appropriate action through various Wellness initiatives. This paper by Reena Valecha aims to share the result of a recently concluded Ergonomics & Wellness engagement at an organization - with direct and conclusive proof of increase in comfort and productivity of employees by 15%.

 <p><b>Increased Comfort with new chairs</b></p>	<p><b>↑ INCREASE IN PRODUCTIVITY</b></p>
<p><b>90%</b> felt more comfortable in the new chair</p> <p><b>90%</b> expressed reduction in pain / discomfort as compared to the earlier chair used</p> <p><b>100%</b> stated new chair helps in maintaining correct ergonomic posture for work profile</p>	<p><b>15%</b> Average increase in productivity following various improvements.</p> <p><b>Study Details</b>                      - 55% claimed &gt;20% improvement;                      - 30% claimed no change.</p> <p> Increase in productivity was highly appreciated by Linfox HR Team.</p>

For details, and a copy of the full paper, please contact Reena Valecha at [wellness@godrej.com](mailto:wellness@godrej.com)

Wellness@work is a Godrej Interio initiative committed to helping improve the health of employees in modern workspaces. Godrej Interio is a division of Godrej & Boyce Mfg. Co. Ltd.

## \* Forthcoming Conferences

### **HWWE 2014**

**December 3 - 5, 2014, Guwahati, Assam, India**

#### ***User Centered Design and Occupational Wellbeing***

HWWE 2014 will be held at the Department of Design, Indian Institute of Technology (IIT) Guwahati, Assam, India, during 3 - 5 December 2014, with pre-conference workshops on "Ergonomics and design issues" during 1 - 2 December 2014.

#### *Contact:*

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### **1<sup>st</sup> Asian Conference on Ergonomics and Design 2014**

**21 – 24 May 2014, Jeju, South Korea**

#### ***New Challenge in Asian Ergonomics and Design***

This initiative is the beginning of a new conference series in Asia that focuses on newly emerging fields of ergonomics and design. Geographically, ACED aims to span all the Asian-Pacific regions. This would open a new platform for all pan-Asians scholars and practitioners to get together and discuss issues of academics and industry.

*General Chair:* Jung-Yong Kim (Hanyang University, South Korea)

*Organizing Committee Chair:* Sung H. Han (POSTECH, South Korea)

#### **ACED2014 Secretariat:**

Address: UNIST (Ulsan National Institute of Science and Technology)

50, UNIST-gil, Eonyang-eup, Ulju-gun, Ulsan, 689-798, Korea

Tel: +82-52-217-2711

E-mail: [aced2014.secretariat@gmail.com](mailto:aced2014.secretariat@gmail.com)

Website: <http://aced2014.org/>



The 5<sup>th</sup> International Conference on Applied Human Factors and Ergonomics 2014 and the Affiliated Conferences will be held at Krakow, Poland, from July 19 to 23, 2014.

To join the mailing list, please contact the **Conference Administrator, L. Abell**, [aeiadmin@insightbb.com](mailto:aeiadmin@insightbb.com)

All submissions should be done through the **website**: <http://ahfe2014.org>

#### **Submission Deadlines for Abstract for Posters/demonstrations: Extended to: 15 May 2014**

#### **Keynote Address: The Future of Human Factors and Ergonomics**

Dr. Kay Stanney, President and Founder of Design Interactive, Inc., Orlando, Florida, USA



**APCHI-ERGOFUTURE-PEI-IAIFI 2014**

**22 – 25 October 2014, Bali, Indonesia**

*With new mindset and widen horizon to catch the future: Physiology is the basic science for human life*

This joint international conference marks the 3<sup>rd</sup> meeting of Ergofuture, the 12<sup>th</sup> meeting of APCHI, and the 23<sup>rd</sup> scientific meeting as well as 50<sup>th</sup> birthday of IAFI. Udayana University, Denpasar – Bali, will host this event on the 22-25 October 2014

The conference organized by Perhimpunan Ergonomi Indonesia (PEI) Bali and Ikatan Ahli Ilmu Faal Indonesia (IAIFI) and supported by APCHI, IEA, ICOH, IUPS, Udayana University Bali and Bali Human Ecology Study Group (BALI-HESG).

#### *Important Deadlines*

28 May 2014: Abstract submission.

30 July 2014: Full paper submission; Early bird registration

#### *Secretariat:*

Departemen Fisiologi, Fakultas Kedokteran, Universitas Udayana, Jalan PB Sudirman, Denpasar.

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Email : [ipgdadiatmika@yahoo.com](mailto:ipgdadiatmika@yahoo.com), [Committee2014@yahoo.co.id](mailto:Committee2014@yahoo.co.id)

Website: <http://ergofuture2014.unud.ac.id>



**SEANES 2014**

**1 - 4 December 2014,  
Singapore**

The goal of the SEANES 2014 Conference is to enhance awareness of the importance of Human Factors Engineering (HFE) in various human activities and application domains, including product design, learning, communication, healthcare, transport, defence & security. Hosted by the Ergonomics Society of Singapore, we cordially invite you to participate by contributing papers, posters, workshops, and product demonstrations. The robustness and innovativeness of Singapore provide an excellent venue for scientific exchanges and learning among researchers, practitioners and policy-makers, across professions & disciplines, particularly for the Southeast Asian region.

Full Paper Submission	28 April 2014
Notification of Acceptance	01 July 2014
Camera-Ready Full Paper	15 September 2014
Early-Bird & Author Registration Deadline	30 September 2014

Online registration starts **15 July 2014**. Register before **31 September 2014** to enjoy early bird rates!

Conference Secretariat:

c/o Office for Professional Engineering and Executive Education (OPE3)

Faculty of Engineering, National University of Singapore

Tel: +65 6516 5113, Fax: +65 6874 5097

Email: [seanes14@nus.edu.sg](mailto:seanes14@nus.edu.sg)

Website: <http://seanes2014.org/index.html>

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IEOM Society is organizing the Fifth “International Conference on Industrial Engineering and Operations Management” which will be held in March 3-5, 2015 in Dubai. The conference aims to provide a forum for academics, researchers and practitioners to exchange ideas and recent developments in the field of Industrial Engineering and Operations Management. The conference is also expected to foster networking, collaboration and joint effort among the conference participants to advance the theory and practice as well as to identify major trends in Industrial Engineering and Operations Management.

*Important Dates*

Abstract/Paper Submission: August 30, 2014

Early Bird Registration Deadline: November 30, 2014

*Conference Chair*

Dr. Ahad Ali, Lawrence Technological University

Southfield, Michigan, USA

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**19<sup>th</sup> Triennial Congress of the International Ergonomics Association**

**9 - 14 August 2015, Melbourne, Australia**

***Reaching Out***

**[IEA 2015](#)**