ISE Newsletter
Quarterly newsletter of the INDIAN SOCIETY OF ERGONOMICS (ISE)

Vol. 15          October – December 2011          No. 4

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Forthcoming International events:

- **IEA 2012**, February 12-16, 2012, Recife, Brazil
- Ergonomics and its role in the prevention and the development in the developing countries, April 29-30, 2012, Algiers, Algeria
- **SEANES 2012**, July 9-12, 2012, Langkawi, Malaysia

ISE is online at: [http://ise.org.in/](http://ise.org.in/)
**Welcome New members!**

ISE Newsletter welcomes the following new Life Members:

- L375 Buddhadev Nath, Bankura
- L376 Anirban Chowdhury, Guwahati

**ISE News**

Indian Society of Ergonomics invites proposals from Institutions / Organizations for hosting the 10th Meeting of the ISE and HWWE 2012.

The TIMELINE for the conference, and details of the proposal, including criteria for selection of host Institution, submission of proposal, conference organization, technical programme, and provision for ISE requirements are given in the society’s web-site [http://ise.org.in/](http://ise.org.in/) (HWWE page).

**Report – HWWE 2011**

The International Conference on Ergonomics and Human Factors (HWWE 2011) was held in Chennai, Tamilnadu, between 13th to 17th of December, 2011. The venue was the Industrial Consultancy & Sponsored Research of the Indian Institute of Technology Madras. This conference aimed at providing an excellent international forum for sharing knowledge and results in theory, methodology and applications of usability in product and service delivery. The aim of the conference was to provide a platform to the researchers and practitioners from both academia as well as industry to meet and share their experiences, and exchange and cross-fertilize their ideas on advances made in this field.

There was a two day pre-conference workshop on ‘Innovation and Usability in Product Development’ on 13th and 14th of December, 2011. The pre-conference workshop comprised of seven lecture-cum-demonstration sessions for students, researchers and industrialists towards assisting their career and research in ergonomics, which was followed by a panel discussion of experts discussing the recent ergonomics scenario in India and development of a road-map for ergonomics in new product development, human factors and its perception in industry, sports and surgery.
Demonstration session on Biometrics and Bio-signal Data Acquisition System was given by Medi Analytica India Pvt. Ltd., Chennai.

The HWWE 2011 conference was inaugurated by Prof. Bhaskar Ramamurthi, Director, IIT Madras. Prof. T.T. Narendran, IIT Madras, Organising Secretary, welcomed the gathering and Prof. G.G. Ray, IIT Bombay, delivered the presidential address. Prof. Amitabha De, Director, NITIE, delivered the special address and Dr. Venkatesh Balasubramanian, IIT Madras, Organising Secretary, introduced the theme and objective of the conference and also presented a vote of thanks. Prof. Barbara Silverstein, representing the International Ergonomics Association (IEA), presented the views of the IEA International Development Committee with special reference to ergonomics in India and its implementation.

The inaugural session was followed by an inaugural lecture on Ergonomics for the developing countries by Dr. L.P. Gite, AICRP on ESA.

Seven theme lectures were delivered by eminent persons on various aspects of the conference theme.

- Prof. G.G. Ray – Ergonomics in India: Challenges and opportunities in Indian Context
- Prof. Arun Garg – Risk Factors for Musculoskeletal Disorders.
- Dr. Debkumar Chakrabarti – Ergonomics Input in Bachelor of Design Programme: Reference IIT Guwahati Students Design Assignments.
- Mr. Krishna Nirmalya Sen – Safety at Work - Linking Accountability and Performance Evaluation
- Prof. Sudesh Gandhi – Ergonomic Evaluation for Dung Collection and Transportation by Rural Women

Paper presentations were held in parallel sessions on the first and second day of the conference. About ninety participants and delegates from various parts of India and abroad attended the conference and 121 papers were presented. The papers were presented in 26 sessions covering various fields ranging from Agricultural Ergonomics, Industrial Applications, Product Development, Ergonomics in Workplace, Work Posture & Biomechanics, Construction Ergonomics, Ergonomics Issues in Sports and Exercises, Military Ergonomics, Human Factors in Vehicle Design, Usability Issues in Computer Centric Work, Ergonomics in Construction Site, Hospital Ergonomics, Usability Issues in Education and Home Ergonomics.

Dr. P.K. Nag was the Chief Guest for the Valedictory Function held on 17th of December, 2011. He congratulated all the delegates and prize winners for their research interest towards innovation and usability in product development. He encouraged all the researchers and practitioners from both academia as well as industry for sharing their experiences and cross-fertilizing their ideas on advances made in this field.
Best paper awards were given for the category of under-graduate, post-graduate, doctoral and industry based on the participants’ presentation style, depth of research and discussion.

**Best Paper Awards**

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<tr>
<th>Under Graduate Student</th>
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<tr>
<td><strong>P. SWATHY</strong></td>
<td>Design and development of photoplethysmograph: an experimental analysis on treadmill run</td>
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<tr>
<td><strong>M. MANJULA</strong></td>
<td>Virtual reality based therapy for post operative rehabilitation of children with cerebral palsy</td>
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<th>Post Graduate Student</th>
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<tr>
<td><strong>SWATI PAL BISWAS</strong></td>
<td>Determination of twisting force developed by the elderly for opening bottle</td>
</tr>
<tr>
<td><strong>SHILPI JASROTIA</strong></td>
<td>Comparative efficiency of squat and stoop lifting in healthy young adults</td>
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<tr>
<td><strong>ABID ALI KHAN</strong></td>
<td>Effect of EMG activities of forearm muscles while using chain saw</td>
</tr>
<tr>
<td><strong>GANESH BHUTKAR</strong></td>
<td>Long distance visibility testing of visual alerts in medical user interface in ICU</td>
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<th>Industry Category</th>
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<tr>
<td><strong>D. BHATTACHARRYA</strong></td>
<td>Effect of font character and background colour combinations on cognitive performance during on screen visual search</td>
</tr>
<tr>
<td><strong>M. WILSON KUMAR</strong></td>
<td>Manual material handling in industries</td>
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L to R: Prof. T.T. Narendran, Dr. P.K. Nag, Prof. G.G. Ray and Dr. D. Majumdar
A cultural program featuring a Veena recital was presented by Prof. T.T. Narendran accompanied by IITM student artists on 15th of December, 2011 (below).

The Annual General Meeting of the Indian Society of Ergonomics was also held during the HWWE 2011, on 15th of December, 2011

**Member Activities**

**New method developed to determine vitamin E concentration in blood**

Professor Kusal Kanti Das of the Environmental Health Research Unit, Department of Physiology, Al-Ameen Medical College, has come up with a new technique for determination of vitamin E concentration in blood. This new modified technique is said to be economically viable and it is less time consuming.

Professor Kusal Das informed that the new technique, modified from the Baker and Frank method, was found to be very suitable to evaluate serum concentrations of alpha-tocopherol (vitamin E). The team, comprising Salim A. Dhundasi, Shaheen Kousar, Hattiwale, Jameel Jargarand, and Swastika Das, helped him in developing the new methodology.

Technical details of the methodology were submitted to a German medical journal, *J Basic Clin Physiol Pharmacol*, for verification and publication. After verifying the methodology, the journal found that this method was highly satisfactory with less than 5 per cent margin of error. The details of the new technique have been accepted for publication on November 19, 2011.

Incidentally, Prof Kusal Das has been awarded ‘COPE International Scholarship 2012’ by Committee on Publication Ethics, Royal College, UK, to deliver a lecture in COPE European Seminar 2012 at the Charles Darwin House Conference Centre, University of London on 16 March 2012, and at the Institute of Genetics, University of Leeds, on 19 March 2012.

**Congratulations to Prof. Kusal Das!**

**ISE Annual General Body Meeting**

The Annual General Meeting (AGM) of the Indian Society of Ergonomics (ISE) was held on 15 December 2011 at Indian Institute of Technology – Madras, Chennai at 6 p.m.

President of the ISE, G.G. Ray welcomed all the members present in the meeting. D. Majumdar, General Secretary, ISE welcomed all the members of the Society and requested President, ISE to chair the meeting. D. Majumdar, General Secretary, ISE presented the minutes of the last AGM held at Kolkata in December 2010. The Minutes were approved by the General Body (GB).
D Majumdar presented the Annual Report of the Society. He informed about the current state of affairs of the ISE, achievements of different members and the activities of the society during the past year. The ISE Newsletter was appreciated by the GB. Secretary informed about the steps which have been taken to start publication of an online journal, and that at the next IEA Congress in Recife in February 2012, ISE would bid for holding the 2018 IEA World Congress in Mumbai.

In the absence of the Treasurer, D. Majumdar, General Secretary, ISE presented the statement of accounts for the year 2010-2011. The accounts were accepted by the GB. The proposal to appointment M/s Kunal & Associates, Chartered Accountants, Kolkata as Auditor was accepted, and the proposal to fix a remuneration to the auditor for the year was also accepted.

A.K.Ganguli proposed that applications for membership should be accompanied by justification or reference letters (including soft copy with suitable authentication) from current members of the Society. It was decided that justification, particularly from an applicant who states that he/ she does not know any current member could include scientific publication(s) or documentation of professional work in Ergonomics (based on reports or testimonials). These would be evaluated by the Executive Committee. Members who provide references to applicants whose documentation is later seen to be false may face termination of their membership.

It was decided to re-invite bids for holding HWWE 2012 at the earliest (see page 1 of this Newsletter).

Venkatesh Balasubramanian raised the issue of Ergonomics expertise and Certification. It was pointed out that the International Ergonomics Association (IEA) has guidelines for the same. P. C. Ghosh said that a peer review group needs to be formed for evaluation of applications. A. K. Ganguli said that there would be two or three different levels of certification. D. Majumdar, General Secretary, assured the members that he would formulate a proposal within three months.

As per the constitution of the Society, the outgoing Executive Committee nominates a new Committee (including office bearers). The outgoing Executive Committee nominated the existing committee for a further term.

President: G G Ray, IIT Bombay
Vice-Presidents (2): 1. A. De, NITIE, Mumbai
       2. L P Gite, CIAE, Bhopal
General Secretary: D. Majumdar, DIPAS, Delhi
Assistant Secretaries (2): P.C.Dhara, Vidyasagar University, Midnapur
       A K Ganguli, BHEL, Trichy
Treasurer: C K Pradhan, ROHC(E), Kolkata
Members (5): 1. D. Chakraborti, IIT Guwahati
       2. S. Gandhi, CCHAU, Hisar
       3. K. N. Sen, L & T, Chennai
       4. D. Sen, Presidency College, Kolkata
       5. Venkatesh. Balasubramaniam, IIT Madras

As there were no other nominations, the number of nominations matched the number of posts for election. The above committee was declared elected for a further period of three years, and is empowered to take overall administrative, financial and policy decisions.

The meeting ended with vote of thanks to the chair and all the members present.
**Forthcoming conferences**

**18th IEA 2012 - World Congress on Ergonomics**

Recife, Brazil, February 12-16, 2012

The congress is organized on behalf of the International Ergonomics Association by the Congress Organizing Committee in collaboration with the Brazilian Ergonomics Association (ABERGO) and the Union of Latin-American Ergonomics Society (ULAERGO). IEA 2012 will be held for the first time in Latin America: in Recife, Brazil, February 12-16, the week before Carnival. The homepage address is [www.iea2012.org](http://www.iea2012.org).

**Ergonomics and its role in the prevention and the development in the developing countries**

Algiers, Algeria, April 29-30, 2012

This International conference aims to achieve the following objectives:
- Diagnosing the reality of ergonomics in developing countries and means of taking advantage of its applications in various fields.
- Raising awareness of the importance of ergonomics among institutions, industrialists and social partners.
- Researching solutions and finding techniques and methods of applying ergonomic principles in relation to various problems and concerns related to prevention in developing countries.
- Diagnosing challenges and obstacles that prevent the application of ergonomics.
- Motivating and simulating researchers, as well as the economic and social institutions towards benefiting from applying ergonomics in various fields especially the organizational aspects and field of agriculture and even the traditional industry.

No participating fees are required. During the conference, stay and food will be borne by the organizers. Only air tickets are to be arranged by the participants.

**Important dates:**

Abstract deadline: December 31, 2011  
Full paper deadline: February 10, 2012

All correspondence to: Chairman of the Organizing Committee, Professor Hamou Boudrifa, Head of the Laboratory of Prevention and Ergonomics, University of Algiers2. Algiers.  
E-mail: prevention_ergonomics@yahoo.com, Phone/FAX: 021–94–19–43, 021–90–15–99  
The Second SEANES International Conference, SEANES 2012 will be organized by the newly formed Human Factors & Ergonomics Society Malaysia, on 9-12 July 2012, on the beautiful island of Langkawi, Malaysia. SEANES 2012 will be organized by the Human Factors and Ergonomics Society Malaysia, and endorsed by the International Ergonomics Association. Mission: To steer and leverage the science and application of ergonomics, human factors and human-computer interaction, towards a safer, productive and sustainable future.

The conference will include a range of exciting keynote presentations by world-leading ergonomists, practical workshops, research paper presentations in parallel scientific sessions, and exhibits & technical demonstrations. There will be extensive opportunities for networking with fellow human factors professionals, as well as meetings of committees and special interest groups affiliated with SEANES member organisations. A full schedule of recreational and social activities will also be provided.

Details at [http://www.seanes.net/seanes2012](http://www.seanes.net/seanes2012)

**Deadlines & Important Dates**

- Early Bird Registration & Accommodation discounts 1 April, 2012
- Full Paper due 1 March, 2012
- Author registration deadline 1 May, 2012

**General Chair:** Dr. Halimah M. Khalid, President, South East Asian Network of Ergonomics Societies (SEANES), President, Human Factors & Ergonomics Society Malaysia (HFEM)

**Conference Secretariat:** Human Factors & Ergonomics Society Malaysia (HFEM)

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Fax: +603 2282 9004  
Email: info@seanes.net

Click [here](http://www.seanes.net/seanes2012) to download the conference brochure (pdf, 158 kb)

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The 44th Annual Conference of the Nordic Ergonomics and Human Factors Society will be held in Stockholm, Sweden, during August 19-22, 2012. The theme of the conference is to move ergonomics into a new phase, for sustainability and growth, for systems, lives and societies, using ergonomics not just as a goal, but as a means.

**Important dates:**

- Abstract deadline January 15, 2012
- Submission portal: [www.nes2012.se/submission.html](http://www.nes2012.se/submission.html)
- Full paper deadline April 15, 2012
- Early bird registration deadline June 1, 2012

More information on at: [www.nes2012.se](http://www.nes2012.se)