



# ISE Newsletter

Quarterly newsletter of the INDIAN SOCIETY OF ERGONOMICS (ISE)

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## Forthcoming International events:

\* **AEC 2019** - Applied Ergonomics Conference,  
25 – 28 March, 2019,  
New Orleans, Louisiana, USA

\* 2<sup>nd</sup> Edition of "International Conference on Ergonomics & Human factors"  
29 – 30 April, 2019,  
London, UK.

\* **ISOES 2019**  
XXXI Annual International Occupational Ergonomics and Safety Conference,  
12 – 13 June, 2019,  
New Orleans, Louisiana, USA

\* **HEPS 2019**  
Health Care Ergonomics and Patient Safety  
3-5 July, 2019  
Lisbon, Portugal

\* **AHFE 2019**  
10<sup>th</sup> International Conference on Applied Human Factors and Ergonomics,  
24 - 28 July, 2019  
Washington D.C. 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

## \* Obituary



Professor Emeritus **Adnyana Manuaba** of the Department of Physiology, Medical Faculty, Udayana University and Ergonomics Program, Denpasar - Bali passed away on November 4, 2018 at the Prima Medika Hospital, Denpasar. The body was buried in the funeral home at Griya Simpangan Blahkiuh Abiansemal Badung, and the “ngaben” ceremony was held on November 12, 2018..

## \* **Welcome** New members!

ISE Newsletter welcomes the following new Life Members:



**L475 SA Binoosh, Thiruvananthapuram**

**L476 Satheeshkumar M, Thiruvananthapuram**

**L477 Deepankar Dass, Gurgaon**



**L478 Abhijit Sen, Kolkata**

**L479 Sunder Subramaniam, Chennai**

## \* **Report: HWWE 2018**

HWWE 2018 was conducted during 14th to 16th 2018 at College of Engineering Trivandrum (CET). Department of Mechanical Engineering, CET and CET School of Management jointly organized the conference. The theme of the conference was Technology Enabled Workplace Design.



*Inaugural function: Lighting of the lamp by Dr. Usha Titus.*

Dr. Usha Titus, (Principal Secretary to Government, Higher education Department & Vice Chancellor in-charge of the APJ Abdul Kalam Technological University) inaugurated the conference. Dr. Jiji C. V., Principal, CET presided over the inaugural function. Dr. Bijulal D., the Organizing Secretary HWWE 2018 briefed the details of conference. Dr. A. K. Ganguli, President of Indian Society of Ergonomics (ISE), Prof. Neena Thomas, PG Dean, CET, and Dr. Suresh Subramoniam, Chairman IIIE Trivandrum Chapter & Director CET School of Management delivered the felicitations. Dr. A. Samson, Head of Department, Mechanical Engg. Department, CET and Chair of HWWE 2018 delivered the Vote of Thanks.



*Releasing the book of abstracts. (L to R) Dr. Bijulal D, Prof. Neena Thomas, Dr. Jiji C. V, Dr. Usha Titus, Dr. A. K. Ganguli, Dr. Suresh Subramoniam, and Dr. A. Samson.*

The Conference was enriched with the plenary sessions, lead lectures and paper presentations at 17 parallel sessions during the three days of conference. Dr. Eva Honeyman (Chairperson of the Israel Ergonomic Association), Dr. Debkumar Chakrabarti (IIT Guwahati), Dr. A. K. Ganguli (President ISE) were presented Keynote Lectures during the first day of the conference. Dr. Jose Orlando Gomes (Vice President & Treasurer, International Ergonomics Association (IEA)), Dr. Peter Honeyman (University of Michigan), Dr. P. C. Dhara (General Secretary, ISE) and Mr. Guenter Fuhrmann have delivered keynote lectures on the second day. The sessions were enlightened with Lead lectures by Dr. M. Muzammil, AMU, Aligarh Dr. Anirudha Joshi, IIT Bombay, Dr. Rauf Iqbal, NITIE, Mumbai, Dr. Nandita Bhattacharya, Dr. Dibakar Sen, IISc. Bangalore, Dr. Ajitha D Singh and Dr. Abid Ali Khan, AMU, Aligarh. A conference workshop has been conducted by Dr. Deepak Sharan, RECOUP, Bangalore.

There were 175 submissions in total and 142 of them were accepted by the review process. The technical paper presentations were conducted in four parallel venues. The best paper awards were sponsored by Springer in under graduate (UG), post graduate (PG) and doctoral research scholar (Ph.D) categories and were presented during the valedictory session of the conference.



*Lead lecture by Dr. Eva Honeyman, Chairperson of Israel Ergonomics Association*

### **Best Paper Award winners in UG category**

1. Rahul Karumuri & Shashank Kappagilmath, NIT Calicut.
2. Rejoy James, Mar Baselios College of Engineering and Technology, Trivandrum.
3. Sandip Prakash, Shiv Nadar University.

### **Best Paper Award winners in PG category**

1. Abhijith Suresh B., College of Engineering Trivandrum
2. Baradwaj K.C., NIT Calicut
3. Ayan Chatterjee, University of Calcutta, Kolkata

### **Best Paper Award winners in Ph.D category**

1. Jayant Raj, IISc., Bangalore
2. Mukesh Kumar Kamti, NITIE, Mumbai
3. Mayank Badola, IISc., Bangalore

Dr. Satheesh Kumar, Director, National Institute of Speech and Hearing (NISH) was the Chief Guest in the valedictory function. Dr. Jiji C. V. presided over the function. Dr. Suresh Subramoniam (Director School of Management) delivered the welcome speech and Dr. S. A. Binoosh (Technical Committee Member HWWWE 2018) summarized the conference. Dr. Bijulal D. (Organizing Secretary, HWWWE 2018) delivered the Vote of Thanks.



Valedictory address by Dr. Satheesh Kumar. On the dais: (L to R) Dr. Bijulal D., Dr. Jiji C. V, Dr. Suresh Subramoniam and Dr. S. A. Binoosh.

## ✿ Annual General Body Meeting

The **Annual General Body Meeting (AGM)** of the Indian Society of Ergonomics (ISE) was held at College of Engineering, Thiruvananthapuram, on Saturday, 15<sup>th</sup> December 2018. Minutes of the AGM has been sent to all the members. Please contact the Hon'y. General Secretary in case you have not receive the AGM minutes.

## ✿ Publications

### **Gaze behavior and human error in distracted driving: Unlocking the complexity of articulatory rehearsal mechanism**



A team of researchers working in the domain of Automotive Human Factors at 'Human Factors & Applied Cognition Lab, Indian Institute of Technology Indore' investigated issues related to suppression of Articulatory Rehearsal Mechanism (ARM) in the context of distracted driving. This study reports development of an experimental paradigm named as 'Direction Following in Distracted Driving - Suppression of Articulatory Rehearsal Mechanism (D3-SARM)'. It investigates the effect of suppressed articulatory rehearsal mechanism (ARM) on gaze behavior and driving performance in a naturalistic driving environment. There were three levels of suppression of ARM namely, non-suppression (NS), simple suppression (SS), and complex suppression (CS). Equal number of participants were randomly assigned to each level of suppression. The results demonstrate that there are significantly lesser fixation durations and fixation counts under CS of ARM as compared to the other two levels. Overall driving error analysis revealed that there are more significant errors under CS as compared to SS and NS. Moreover, drivers committed more slips than lapses irrespective of the levels of suppression. On the whole, this study suggests that suppression of ARM affects gaze behavior and compromises driving

performance. Also, even in the case of drivers being unable to have fixation on target visual information irrespective of non-suppressed ARM or suppressed ARM, drivers paid visits.

#### Highlights

- Substantial increase in suppression of ARM reduces fixation duration and counts.
- Drivers paid visits to target visual information even when there is no fixation.
- Suppressed ARM increases vulnerability to errors.
- Slips ha higher contribution to overall driving errors as compared to lapses.

Najar, S. A., & Sanjram, P. K. (2018). Gaze behavior and human error in distracted driving: Unlocking the complexity of articulatory rehearsal mechanism. *Transportation Research Part F: Traffic Psychology and Behaviour*, 59, 12–23. <https://doi.org/10.1016/j.trf.2018.08.005>

URL to access the paper <https://www.sciencedirect.com/science/article/abs/pii/S1369847818300305>

## \* Member Activities

### Short term course on "Ergonomics in Design and Engineering Education"

A short-term course under the MHRD sponsored TEQIP-III on "Ergonomics in Design and Engineering Education" during 26/11/2018 to 30/11/2018 was organized by Center for Ergonomics: User Centred Design and Occupational Wellbeing, Ergonomics Laboratory Department of Design, IIT Guwahati. The event was hosted with support from KIT-CET IIT Guwahati.



Dr. Sougata Karmakar coordinated this short-term course with the support of an organizing committee comprising members of faculty, staff, research scholars and students of the Department of Design. The inaugural ceremony was graced by Prof. P S Robi, the Deputy Director, IIT Guwahati; Prof. Gopal Das, Dean R&D, IIT Guwahati; Prof. S Khijwania, HoC, CET, IIT Guwahati; Dr. D Udaya Kumar, HoD, Dept. of Design, IIT Guwahati and Mr. Samiran Das, Chief Inspector of Factories, Govt. of Assam.



The focus area of the short-term course was on the importance of ergonomics in design and engineering education. This short-term course covered various topics like industrial ergonomics; occupational health and safety; design research methodology; design innovation; workplace ergonomics; ergonomics in product and facility design; ergonomics issues in better acceptance of design; ergonomics tools and techniques; ergonomics and packaging; virtual ergonomics and others.



The short-term course was attended by 68 participants from institutes, R&D organizations, and industries.

## Prevention of musculoskeletal disorders due to poor body mechanics

Vijayan Gopalakrishna Kurup delivered a health talk on "Prevention of musculoskeletal disorders due to poor body mechanics" at Apollo Tyres, Kalamassery, Ernakulam, Kerala on 11<sup>th</sup> December 2018. The talk was given for the managerial staff of this organization considering the prevalence of such issues among them. They were given awareness on the ergonomic ways of doing office activities, importance of physical activities and exercises, stress management and the importance of rest and sleep.



Rajagiri Hospital, Aluva is planning to organize such events in other organizations also, which would help the employees with the common musculoskeletal disorders due to poor ergonomic factors could be prevented.

## \* Forthcoming International Events



The 22<sup>nd</sup> Annual Applied Ergonomics Conference (AEC), presented by GOErgo, a worldwide resource dedicated solely to the support of the profession and individuals involved with improving workplace performance, quality, sustainability and employee availability is scheduled for March 25 - 28, 2019 at the Hyatt Regency New Orleans, New Orleans, Louisiana, USA.

The Applied Ergonomics Conference (AEC) is one of the largest and most impressive ergonomics conferences in North America. Presenters are practitioners sharing real-world experiences and practical solutions to common problems in industry. This conference provides comprehensive and broad-spectrum education for employees at all levels (managers to professionals to line-workers).

Oral and Poster presentations will be presented in the following areas:

- Advancements in Ergonomics
- Ergonomics in Action
- Ergonomics Programs



- Office Ergonomics Programs and Applications
- Ergonomics in Health, Safety and the Environment (HSE)
- Multi-skilled Ergonomics Practitioners
- Master Track

ISE continues to be an International Alliance Partner of AEC. **ISE Members will get Discounted Registration**– contact the Hony General Secretary for Alliance Partner Code.

For additional information, please visit the Applied Ergonomics Conference website:

[www.appliedergoconference.org](http://www.appliedergoconference.org)



**2<sup>nd</sup> Edition of “International Conference on Ergonomics & Human factors”**  
**April 29-30, 2019,**  
**London, UK.**

Ergonomics 2019 conference is a leading forum for Ergonomists, Psychologists, Physiotherapists, Orthopedists, Agricultural ergonomists, Forensic etc... The main theme of the conference is “Easy actions today, Less pain tomorrow” which covers a wide range of critically important sessions from basic research to innovations in the area of Ergonomics. For more details about the conference please visit:

<https://ergonomics.euroscicon.com/>



**International Society for  
Occupational Ergonomics & Safety**

**XXXI Annual International Occupational  
Ergonomics and Safety Conference,**  
**June 12 - 13, 2019**  
**New Orleans, Louisiana, USA**

The **ISOES 2019 Conference** will be held concurrent with the Academic Forum of the American Society of Safety Professionals (ASSP)2019 Safety Professional Development Conference and Exposition.

For additional information, please visit: <http://www.iso.es/info/index.html>



**Health Care Ergonomics and Patient Safety**  
**July 3 - 5, 2019**  
**Lisbon, Portugal**

Building Health and Social Care Systems for the Future: Demographic Changes, Digital Age and Human Factors.

- The complexity of healthcare delivery means that there are extensive opportunities for human factors to contribute to improvements in working conditions and patient safety.
- Technology has the potential to transform healthcare, placing the patient at the center of the healthcare ecosystem and looking at healthcare workers.
- Technological change is astonishing, whether it's in the volume of health data generated, the ability to process and analyze that data, the advances in robotics and the rise in mobile and wearable technologies.
- Changes in demography challenges patient safety and quality of life. The growing demands of an ageing population whilst simultaneously attempting to absorb huge levels of technological innovation.

- Healthcare in the age of the Internet and social media has patients shopping around for their health needs. How to organize e-ergonomics and e-occupational health services towards patient safety and quality of life.
- Innovation in healthcare covering the discussion on patient satisfaction and overall quality of care, volume-to-value-based business models, reorganization and restructuring of the healthcare systems and leadership competency gaps in a patient-centered model.

**ISE is a partner of HEPS**

**ISE Members will get Discounted Registration** - contact Hony General Secretary for details.

For conference details, please visit <https://www.heps2019.com/>

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**10<sup>th</sup> International Conference on Applied Human Factors and Ergonomics (AHFE 2019)**

**July 24-28, 2019**

**Washington D.C. USA**

The AHFE 2019 conference incorporates 35 thematic areas with participation of more than 2000 researcher and industry participant from around the world.

New Session Proposals: if you would like to propose session(s) or special interest group topic then please send the title of your proposed session(s) and possible speakers to: [admin@ahfe.org](mailto:admin@ahfe.org)

Tutorial Proposals: if you would like to propose a tutorial then please submit the title of your proposed tutorial and speakers name online in the submission system under the tutorial track.

For details, please visit: [www.ahfe2019.org](http://www.ahfe2019.org)