

IEA VE NEWS

IEA Visual Ergonomics Technical Committee Newsletter

August 2019

Welcome

Dear visual ergonomists,

What a summer in the northern hemisphere! The high temperatures (37° C in Zürich, 42° C in Paris, 48° C in Delhi) are making people more and more dislike summertime.

To me summertime is kind of a trigger for compiling questions for the exams in Human Factors. Classrooms offer me a good pool for generating exam questions. For instance, I ask students to elaborate about the lack of visual ergonomics in their classroom. When correcting the exams I wonder why students are so good in answering this question. Even students not regularly following my lecture know a lot about insufficient visual ergonomics in the classroom. After teaching in hundreds of classrooms, I conclude that in general, visual ergonomics in classrooms leaves a lot to be desired, even for the non-experts.

It is surprising that only twelve reports pop up when searching scientific databases with the combination of keywords “classroom visual ergonomics”. I don’t believe that the low number of research papers is due to the triviality of the matter, in particular when it comes to suggesting and investigating solutions for better visual ergonomics. Visual ergonomic issues are in part easy to detect—but it requires solid expertise to fix the issues.

Ergonomists should be more intensively involved in planning new classrooms and in providing solutions for the remedy of visual ergonomic issues. By the way, please don’t tell my students: another way for generating questions for exams in ergonomics, is by reading our newsletter.



With best wishes,

Marino Menozzi

Chair, IEA Visual Ergonomics TC

Mark your diaries

The next IEA Triennial Congress

IEA2021—21st triennial congress, Vancouver, Canada. June 13-18, 2021.

For more information, see <https://iea2021.org/>



IEA
VANCOUVER
2021

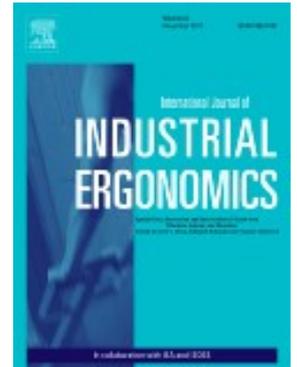
Publications

International Journal of Industrial Ergonomics— special Visual Ergonomics edition

By Marino Menozzi

In September 2018 the IEA VE TC launched a call for papers for a special issue “Advances in Visual Ergonomics” to be published in the International Journal of Industrial Ergonomics (Elsevier B.V.). Papers submitted were peer-reviewed by an international group of scientists with a high reputation in the field of visual ergonomics. Selected papers are published in the special issue, which was released in August 2019.

A broad variety of topics in visual ergonomics are addressed in the published papers, including 3D displays, lighting, eye symptoms, productivity, and tools for the assessment of visual ergonomics and attentional performance at work. The guest editors Marino Menozzi, Jennifer Long, Ying-Yin Huang, Hans O. Richter wish to thank the contributors and reviewers for all their efforts in realizing the special issue.



Here is a list of the published articles, as of 21st August 2019.

- Aarts MPJ, Craenmehr G, Rosemann ALP, van Loenen EJ, Kort HSM. Light for patient safety: Impact of light on reading errors of medication labels.
- Glimne S, Österman C. Eye symptoms and reading abilities of computer users subjected to visually impaired direct glare.
- Huang Y-Y, Menozzi M, Favey C. A screening tool for occupations requiring a high level of attentional performance.
- Heiden M, Zetterberg C, Lindberg P, Nylén P, Hemphälä H. Validity of a computer-based risk assessment method for visual ergonomics.
- Li Q, Luximon Y. The effects of 3D interface metaphor on older adults' mobile navigation performance and subjective evaluation.
- Lin P-H, Chen C-H. Evaluating autostereoscopic 3D baseball games using signal detection theory and receiver operating characteristic space.
- Richter HO, Sundin S, Long J. Visually deficient working conditions and reduced work performance in office workers: Is it mediated by visual discomfort?
- Zetterberg C, Heiden M, Lindberg P, Nylén P, Hemphälä H. Reliability of a new risk assessment method for visual ergonomics.

The papers can be accessed at:

<https://www.sciencedirect.com/journal/international-journal-of-industrial-ergonomics/special-issue/10G2JJTW6KJ>

Publications

Here are some other journal articles by members of our network

- Brown E, Foulsham T, Lee C-S, Wilkins A (2019) Visibility of temporal light artefact from flicker at 11kHz. *Lighting Research and Technology* DOI: 10.1177/1477153519852391
- Huang YY, Menozzi M, Beldi G, Brand Y (2019) Training visual attention in a naturalistic visual environment. *Ergonomics* 62(6): 748-758.
- Long J, Richter H (2019) The pitfalls of the traditional office ergonomics model in the current mobile work environment: Is visual ergonomics health literacy the remedy? *WORK* 63: 447-456
- Long J, Richter H (2019) Visual ergonomics on-the-go. *WORK* 63: 321-324
- Lukman AL, Bridge C, Dain SJ, Boon MY (2019) Luminance contrast of accessible tactile indicators for visual impairment. *Ergonomics in Design* DOI: 10.1177/1064804619841841
- Mehri A, Sajedifar J, Abbasi M, Naimabadi A, Mohammadi AA, Teimori GH, Zakerian SA (2019) Safety evaluation of lighting at very long tunnels on the basis of visual adaptation. *Safety Science* 116: 196-207
- Roberts AC, Yap HS, Kwok KW, Car J, Soh C-K, Christopoulos GI (2019) The cubicle deconstructed: Simple visual enclosure improves perseverance. *Journal of Environmental Psychology* 63: 60-73
- Yoshimoto S, Jiang F, Takeuchi T, Wilkins AJ, Webster MA (2019) Adaptation and visual discomfort from flicker. *Vision Research* 160: 99-107

Conferences

CIE2019 conference report, Washington DC

By Jennifer Long

The International Commission on Illumination (CIE) held the 29th Quadrennial Conference in Washington DC, 14-22 June 2019. The three day conference program (17-19 June) was bookended by Division and Technical Meetings, and included presentations, posters and workshops on a range of topics including road lighting, photobiology, measurement of light and colour, daylight, glare, interior lighting and urban lighting.

Written conference papers are open access and are available at:
<http://www.cie.co.at/publications/cie-session-washington-2019>

National Ergonomics Conference and Exhibition, Las Vegas

On the 21st August 2019, Jeff Anshel will be speaking on the topic "Digital Eyestrain: The eyes have it."

NEXT NEWSLETTER DEADLINE: 30th November 2019

Please send any visual ergonomics news or announcements to Jennifer Long at
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