

A big year for Visual Ergonomics

The end of the year is a good time to reflect on the past year and to think and plan for the next.

2012 has been a significant year for the IEA Visual Ergonomics (VE) group. We started the year with a bang—13 VE presentations were given at the IEA Triennial Congress in Recife, Brazil and our VE Technical Committee (TC) had its first official meeting. For many of us, this was an opportunity to meet VE colleagues from around the world and to share ideas with each other.

In May the finalized visual ergonomics definition was uploaded onto the IEA VE webpage http://www.iea.cc/02_about/Technical%20Committees/Visual%20Ergonomics.html In the Nordic countries the English version of the definition is in the process of being approved and accepted at an organizational level. Within the next 12 months it will be formally translated into all Nordic languages.

Our current IEA VE project which will carry us through to 2013 is the compilation of

manuscripts for a special VE edition of the journal *WORK*.

I would like to say a big THANK YOU to everyone who has assisted me in my role as the VE TC chairperson during 2012.

On behalf of the IEA VE committee—Hans Richter, Magne Helland and Marino Menozzi—I wish you a happy and safe Christmas season and every good wish for 2013.

Jennifer Long

IEA Visual Ergonomics TC
Chairperson

Helland receives award

In October, optometrist and immediate past-chairperson of the IEA VE TC, Magne Helland, was honoured with a Research and Development prize awarded by Buskerud University College (HiBu), Norway. Magne has worked at the Department of Optometry and Visual Science at HiBu since 1983 and was recognized for being an enthusiastic ambassador for the optometry profession and his work with visual ergonomics and the IEA.



Swedish VE network

The Swedish visual ergonomics network (SNiS), which is a part of the Swedish Society of Ergonomics and Human Factors, is a group of approximately 40 people interested in VE.

Started in 2006 by Ann-Kristin Nyström and Per Nylén, the group met on the 9th November in Sweden to discuss a range of topics including an review of the VE presentations at the recent NES conference in Stockholm, the implications for VE of the new provisions from the Swedish Work Environment Authority, a new 120 page book written by Per Nylén about vision and lighting in the work environment (in Swedish), internet VE resources, and the use of the Frankfurt line for measuring and understanding the eye position in the cranium.



All work and no play? Never—SNiS also discussed the intriguing VE question: why did pirates really use an eye patch?

VE publications

- ☉ The September 2012 issue of *Ophthalmic and Physiological Optics* has the theme Vision and IT displays. Topics featured in this 8-article issue include reading from digital displays (with and without vision impairment), computer vision syndrome, 2D and 3D displays, ocular comfort and visual performance, and multidisciplinary approaches within visual ergonomics.
- ☉ The November 2012 edition of *Ergonomics* includes 3 articles related to visual ergonomics, including Menozzi et al “Working toward a test for screening visual skills in a complex visual environment” *Ergonomics* 55:11, 1331-1339.
- ☉ A succinct overview of task-specific spectacles for computers can be found in the UK journal *Optometry Today*
http://www.optometry.co.uk/uploads/exams/articles/cet_19_october_2012_hughes.pdf

Upcoming Events

**Nordic Ergonomics
Society Annual
Conference,
Reykjavik, Iceland
11-14 August 2013
(will include
parallel sessions
and a keynote
presentation on
visual ergonomics)**

**International
Ergonomics
Association World
Congress,
Melbourne
Australia
9-14 August 2015**

NES2012—More Visual Ergonomics than ever before!

More than 300 participants from 26 countries attended the annual conference of the Nordic Ergonomic Society (NES - www.nordiskergonomi.org) at Saltsjöbaden (outside Stockholm) in Sweden. This was held during 19-22 August 2012.

The conference theme, “Ergonomics for sustainability and growth”, focused on a wide range of topics and included several workshops and more than 150 presentations in seven sets of five parallel sessions.

Visual Ergonomics @ NES

Visual ergonomics presentations have been a part of NES conferences for many years. Since 2007 a group of professionals with a special interest in visual ergonomics, the NES VE Network, have planned and arranged separate VE sessions at the NES annual conference. This year the program offered three VE parallel sessions, one VE workshop, and two VE related posters.

The presentations

The 2012 VE presentations covered a wide range of topics, from “Lighting quality in learning environments” to “Visual ergonomics and eye strain in eye care professionals”. The recently proposed IEA definition of Visual Ergonomics was also presented and discussed.

Lighting workshop

The lighting workshop commenced with a brief overview of visual ergonomics and the importance of optimizing visual surroundings. This was given by the workshop chair, Professor and Architect Werner Osterhaus, Head of Lighting Design Research Laboratory in the Department of Engineering, Aarhus University School of Engineering (ASE), Denmark. After this, Prof Osterhaus and Hillevi Hemphälä (the workshop co-chair) assisted participants as they rotated around six different stations which illustrated various lighting issues such as measurement of light, colour temperature and colour rendering and how to measure up a computer workstation.

Trade exhibition

The conference trade exhibition included VE content:

- 👁️ Rodenstock displayed software to help optometrists find optimal solutions for specific work task optical corrections.
- 👁️ Toobi Technology demonstrated their instrumentation for eye tracking research and the use of vision as an alternative to traditional input devices for controlling and communicating with computers.
- 👁️ Merident Optergo AB, a Swedish company which specializes in visual ergonomics within dentistry, exhibited some of their products.

VE scoops the prize pool

- 👁️ The NES2012 best paper for contributing to sustainable health was awarded to Fostervold and Husby for their paper “Lighting quality in learning environments: premises for new guidelines”.
- 👁️ Merident Optergo AB were awarded the NES 2012 prize for their involvement in scientific work to evaluate the effects of visual corrections for dental workers. Part of this work has recently been published: “Effects of prismatic glasses including optometric correction on head and neck kinematics, perceived exertion and comfort during dental work in the oral cavity - a randomised controlled intervention” (*Applied Ergonomics* 43 (2012): 246-253).

NES 2013

The NES 2013 conference will be held at Reykjavik at Iceland August 11th to 14th (www.nes2013.is) – hopefully with even more Visual Ergonomics content.



VE presentations were popular with 30-40 people attending each session.



Nina Vuorenmaa presents on the topic of task specific spectacles and computer vision syndrome.



Lighting workshop: Hillevi Hemphälä demonstrating how different types of light sources influence the perceived colour of light and of objects.

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