



6th International Ergonomics Conference

ERGONOMICS 2016 – Focus on Synergy

Is organized by



CROATIAN
ERGONOMICS
SOCIETY

The Conference is endorsed by:



International Ergonomics Association



Federation of the European Ergonomics Societies

The Conference is co-organized by:



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Faculty of Mechanical Engineering
and Naval Architecture



University of Zagreb,
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University of Zagreb,
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ERGONOMICS 2016 – Focus on Synergy

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Preface to the Conference Proceedings

The **6th International Ergonomics Conference ERGONOMICS 2016 – Focus on Synergy** was held in **ZADAR**, city monument, surrounded by historical ramparts, a treasury of the archaeological and monumental riches of ancient and medieval times, Renaissance and many contemporary architectural achievements, elected as **2016 EUROPEAN BEST DESTINATION**, from June 15-18, 2016.

The Conference theme **Focus on Synergy** reminiscent that synergy of knowledge and experience as well as mutual cooperation makes effective results, and represents main objective of our Conference. This is great opportunity for all our participants to contribute in valuable exchange of knowledge and experience, as well as great way to open new possibilities, meet new friends, and contribute to advances in ergonomics once again.

The Conferences in this series have been organized by the Croatian Ergonomics Society (HED) from 2001 as part of HED objectives to promote ergonomics and integrate it in academia and industry.

This time, Conference ERGONOMICS 2016 – Focus on Synergy is a joint project with our organizing partners:

- EST (Ergonomics Society of Taiwan),
- CES (Chinese Ergonomics Society),
- CAES (Chinese Association of Ergonomics Societies),
- SwissErgo (Swiss Ergonomics Association),
- FPZ (Faculty of Transport and Traffic Sciences), University of Zagreb,
- FSB (Faculty of Mechanical Engineering and Naval Architecture), University of Zagreb,
- TTF (Faculty of Textile Technology), University of Zagreb

and endorsement partners:

- IEA (International Ergonomics Association),
- FEES (Federation of European Ergonomics Societies).

It is the occasion to express deep appreciation to all co-organizing allies, partners, patrons and sponsors, who enabled and helped to make this Conference a place for sharing knowledge, experience, ideas and findings truly international in scope.

The Organizing Committee (OC) of ERGONOMICS 2016 – Focus on Synergy received more than 90 contributions within diverse range of conference topics, from which most of submitted papers were published in the **Book of Proceedings** (ISSN 1848-9699). All submissions are peer-reviewed by International Scientific Committee and referees engaged to alleviate and advance the papers review process.

The Conference offered the opportunity to demonstrate scientific and professional interests, the potential for cooperation and promotion of ergonomics, and to encourage

stronger interconnections between science and business. Besides, the stronger and more supportive connection with IEA and FEES has been established, as a rewarding benefit. Finally, the Conference provided a good opportunity for new contacts, new experiences and new friendships.

Sincere gratitude to all those who have contributed to producing such comprehensive Conference and Proceedings, that are a credit to a large group of people and everyone should be proud of the outcome. We also acknowledge the authors themselves, who contributed to conference success with their expertise. I would like to thank sincerely to all members of OC, secretaries, and their families.

President of the Croatian Ergonomics Society
General Chair and Conference manager


Assoc. prof. Aleksandar Sušić, PhD

History of the International Ergonomics Conference

The Croatian Ergonomics Society was established in 1974, since the Society has taken care of scientific, professional and educational fields of ergonomic and promoted cooperation with business of the Republic of Croatia. The Society has been interconnected with relevant societies and organizations in the field of ergonomic worldwide to sustain scientific and professional level. In 2014, Croatian Ergonomics Society celebrated its 40th anniversary. This was an excellent opportunity to present the current research and professional activities and contribution of the CES members to development and promotion of ergonomics, Croatian civil society and beyond.

Throughout the history of our Society, numerous activities of our members have contributed to our existence and affirmation in the broader society, and this has been converted into our liability to continue and promote ergonomics based on that foundation. Therefore, the activities of the Croatian Ergonomics Society members arise from our main objectives and strategies that may be presented in short as follows:

1. Increasing the number of active members;
2. Organizing lectures, discussions and exchanging of experiences for the members of the Society;
3. Continuing with activities for introducing the subject of ergonomics into the educational system;
4. Organizing and implementing university study programs of ergonomics;
5. Promoting implementation of ergonomics into professional practice;
6. Organizing conferences within the field of ergonomics;
7. Organizing popular seminars for the extension of ergonomics;
8. Associating and affiliating with other similar and related societies;
9. Encouraging research work within the field of ergonomics.

Therefore, based on enumerated Society objectives, and identified in the early days of the Croatian Ergonomics Society existence, our most prominent action is to organize conferences within the field of ergonomics which is very important, as is the establishing of connections with other complementary Societies and individuals. In December 1999 the congress marking the 25th anniversary of the Society was held in Zagreb, and based on the acquired conclusion, the most appreciated activity in promoting the Society existence and mission was identified as the organization of the International Ergonomics Conferences. Since then, the Croatian Ergonomics Society successfully organized five International Conferences, listed consecutively:

- 1st International Ergonomics Conference – Ergonomics 2001, Zagreb,
- 2nd International Ergonomics Conference – Ergonomics 2004, Stubičke Toplice, Zagreb,
- 3rd International Ergonomics Conference – Ergonomics 2007, Stubičke Toplice, Zagreb,
- 4th International Ergonomics Conference – Ergonomics 2010, Stubičke Toplice, Zagreb,
- 5th International Ergonomics Conference – Ergonomics 2013, Zadar.

The International Ergonomics Conference is founded and created by prof. Budimir Mijović, who was also the president of the conferences listed above.

In our future, we expect that our vision and determined course of action will improve our affirmation and promotion of ergonomics even more.

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