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European Safety and Reliability Conference

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*Panel session on
TC12 on risk analysis and safety of large
structures and component*

Abstract

European Structural Integrity Society (ESIS) is leading association of scientists and researchers who deal with failures, fracture mechanics, structural integrity and related topics like reliability and safety. The ESIS has a number of Technical Committees specialized in different topics, including TC12 on Risk analysis and safety of large structures and component, coordinated by Aleksandar Sedmak & Snežana Kirin, Belgrade, Serbia, José A.F.O. Correia & Abílio M.P. De Jesus, Porto, Portugal and Vladimir Moskvichev & Elena Fedorova, Krasnoyarsk Russia. Ongoing collaborative research covers Fracture Mechanics Applied to the Risk Analysis and Safety of Technical Systems, Degradation Theory of Long Term Operated Materials, Fatigue Evaluation in Offshore and Onshore Structures, Fatigue Analysis in Bridge Structures, Modeling of Offshore Structures, International Symposia on Risk Analysis and Safety of Complex Structures and Components, Workshop on Risk based Fracture Mechanics Analysis.

Recent Projects include:

- 1. The European “FASTCOLD -Fatigue STrength of COLD formed structural steel details” aims to develop design fatigue curves of details made of cold-formed profiles.*
- 2. The National project called “FIBERBRIDGE -Fatigue strengthening and assessment of railway metallic bridges using fiber-reinforced polymers” aims the fatigue strengthening and assessment of railway metallic bridges using fiber-reinforced polymers.*
- 3. Research projects financed by the Serbian Ministry for Education, Science and Technological Development: Risk analysis in mining industry and New Advances in Fracture Mechanics and Structural Integrity.*

The ESIS TC12 is organized in several working groups: WG1 on Engineering Structures and Technologies, Chairs José António Correia, Grzegorz Lesiuk & Pedro Montenegro, WG2 on Safety of Technical Systems, Chairs Aleksandar Sedmak & Vladimir Moskvichev, WG3 on Reliability and Probabilistic Approaches, Chairs: Miguel Calvente & Shun-Peng Zhu, WG4 on Environmental effect on structural integrity, Chair Elena Federova, and WG5 on Structural integrity of composite materials and structures, Chairs Lothar Kroll & Wojciech Błażejowski

Moderator

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