

SSARS 2013

7th Summer Safety and Reliability Seminars
June 23-29, 2013, Gdańsk/Sopot-Jelitkowo, Poland

PROGRAMME

Organisers and Sponsors

*Polish Safety and Reliability Association (PSRA)
European Safety and Reliability Association (ESRA)
Gdynia Maritime University (GMU), Poland*

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Invited Professors & Thematic Days, Plenary Lectures (Topics)

Heinz-Peter Berg, Bundesamt für Strahlenschutz, Germany (Reliability and Vulnerability of Critical Infrastructure – Electricity Distribution)
José Caldeira Duarte, Setubal University of Technology, Portugal (An Unified Approach to Maintenance Management Supported by Statistical Techniques)
Franciszek Grabski, Gdynia Naval Academy, Poland (Applications of Perturbed Semi-Markov Processes in Reliability)
Krzysztof Kołowrocki, Gdynia Maritime University, Poland (On Safety of Critical Infrastructures with Application to Port Transportation System)
Kazimierz Kosmowski, Gdańsk University of Technology, Poland (Problems in Designing and Operating Functional Safety Solutions of Higher Integrity Levels)
Maria Francesca Milazzo, University of Messina, Italy (Approaches to Industrial Risk Assessment Coupled with Catastrophic Natural Phenomena)
Nikitas Nikitakos, University of Aegean, Greece (Risk Management for Sea Boarders Control)
Tomasz Nowakowski, Wrocław University of Technology, Poland (Vulnerability and Resilience of Supply Chains)
Joanna Soszyńska-Budny, Gdynia Maritime University, Poland (Modelling Safety of Multistate Systems with Ageing Components)
Christian Tanguy, Orange Labs, France (Influence of Polarization-Mode Dispersion on Availability of Connections in Telecommunication Optical Networks)
Barbara Tchórzewska-Cieślak, Radom University of Technology, Poland (Safety of Water Supply Networks)

Educational & Training Course Lecturers (Topics)

Heinz-Peter Berg, Bundesamt für Strahlenschutz, Germany (Considerations on Applying Risk-Informed Decision Making Process to Security Issues)
Mohamed Eid, Commissariat à l'Énergie Atomique, France (Workshop on Monte Carlo Simulation: Introduction and Applications in System Safety and Reliability)
Krzysztof Kołowrocki, Gdynia Maritime University, Poland (Identification of Complex Technical System Component Safety Models)
Krzysztof Kołowrocki, Gdynia Maritime University, Poland (Workshop on Safety of Critical Infrastructures)

Organising Board

Sambor Guze
Ewa Kuligowska
Joanna Soszyńska-Budny - Chairman

Seminar Rooms [Responsible Persons]

Knight's Room [Ewa Kuligowska]
Hunter's Room [Ewa Kuligowska]

SEMINAR PROGRAMME

Sunday, 23.06.2013

Time	Seminar Events
12 ⁰⁰ - 18 ⁰⁰	Participants' Arrival ("Dwór Prawdzica" Hotel)
18 ⁰⁰ - 19 ⁰⁰	Participants' Registration (Seminar Desk)

Monday, 24.06.2013

Time	Seminar Events (Hunter's Room)
	Opening Ceremony
7 ⁰⁰ – 8 ⁴⁰	Breakfast (Hotel Restaurant)
8 ⁴⁰ - 9 ⁰⁰	Welcome (<i>Kołowrocki Krzysztof</i> – Chairman) Technical Information (<i>Soszyńska-Budny Joanna</i> – Organising Chairman)
9 ⁰⁰ – 10 ³⁰	Plenary Lectures (Presentations including 10 minutes for discussion) <i>Chair: Eid Mohamed</i> Title: Reliability and Vulnerability of Critical Infrastructure – Electricity Distribution <i>Speaker: Berg Heinz Peter, Fritze Nicole</i> Title: On safety of critical infrastructures modeling with application to port oil transportation system <i>Speaker: Kołowrocki Krzysztof, Soszyńska-Budny Joanna</i> Title: Risk management for sea boarders control <i>Speaker: Nikitakos Nikitas</i>
10 ³⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
11 ⁰⁰ – 12 ³⁰	Seminar Sessions (Presentations including 10 minutes for discussions) <i>Chair: Kosmowski Kazimierz</i> Title: Semi-automatic geo-processing procedure for the vulnerability mapping of industrial facilities in areas with the potential volcanic ash fallout <i>Speaker: Ancione Giuseppa, Milazzo Maria Francesca, Salzano Ernesto, Maschio Giuseppe</i> Title: A topological model to assess networks connectivity and reliability <i>Speaker: Eid Mohamed, Souza de Cursi Eduardo, El Hami Abdelkhalak</i> Title: Failure risk analysis in the collective water supply systems in crisis situations <i>Speaker: Tchórzewska-Cieślak Barbara, Pietrucha-Urbanik Katarzyna</i> Title: Risk in systems with virtualization – test case analysis <i>Speaker: Stanclik Miłosz, Walkowiak Tomasz</i> Title: Combat Survivability of hit aircraft <i>Speaker: Woch Marta, Bońkowski Tomasz, Kłysz Sylwester</i>
12 ³⁰ – 14 ⁰⁰	Lunch (Hotel Restaurant)

14 ⁰⁰ – 15 ³⁰	<p style="text-align: center;">Educational & Training Course 1</p> <p style="text-align: center;">Considerations on applying risk-informed decision making process to security issues</p> <p><i>Lecturer: Berg Heinz Peter</i></p>
15 ³⁰ – 16 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
16 ⁰⁰ – 18 ⁰⁰	Participants Individual Meetings and Discussions
18 ⁰⁰ - 19 ⁰⁰	Free Time
19 ⁰⁰ - 23 ⁰⁰	Welcome Party (“Gianni” Restaurant, Sopot, Bohaterów Monte Cassino 63 street)

General Assembly of Polish Safety and Reliability Association (16⁰⁰ – 18⁰⁰, Knight’s Room)

Tuesday, 25.06.2013

Time	Seminar Events (Hunter's Room)
7 ⁰⁰ – 8 ⁴⁰	Breakfast (Hotel Restaurant)
8 ⁴⁰ - 9 ⁰⁰	Organizational details and advertisements
	Plenary Lectures (Presentations including 10 minutes for discussion)
	<i>Chair: Nikitakos Nikitas</i>
9 ⁰⁰ – 10 ³⁰	Title: A unified approach to maintenance management supported by statistical techniques <i>Speaker: Duarte José Caldeira</i> Title: Application of Perturbed Semi-Markov Processes in Reliability <i>Speaker: Grabski Franciszek</i> Title: Vulnerability and Resilience of Supply Chains <i>Speaker: Nowakowski Tomasz</i>
10 ³⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
11 ⁰⁰ – 12 ³⁰	Seminar Sessions (Presentations including 10 minutes for discussions)
	<i>Chair: Duarte José Caldeira</i>
	Title: Critical infrastructure and resilience goals <i>Speaker: Berg Heinz Peter</i> Title: Monte Carlo simulation for reliability assessment and optimization of an object subjected to varying operation conditions <i>Speaker: Kuligowska Ewa</i> Title: Low-cost hardware implementations of Salsa20 stream cipher in programmable devices <i>Speaker: Sugier Jarosław</i> Title: Safety analysis of water supply systems including protection barriers <i>Speaker: Tchórzewska-Cieślak Barbara, Pietrucha-Urbanik Katarzyna, Rak Janusz Ryszard</i>
12 ³⁰ – 14 ⁰⁰	Lunch (Hotel Restaurant)
14 ⁰⁰ – 15 ³⁰	Workshop 1 Monte Carlo Simulation: Introduction and Applications in System Safety and Reliability
	<i>Chairman/Lecturer: Eid Mohammed</i>
15 ³⁰ – 16 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)

16 ⁰⁰ – 18 ⁰⁰	Participants Individual Meetings and Discussions
18 ⁰⁰ - 19 ⁰⁰	Free Time
19 ⁰⁰ - 23 ⁰⁰	Bowling and Dinner (Aqua Park, “Pick & Roll Club” Sopot, Zamkowa Góra 3-5 street)

Wednesday, 26.06.2013

Time	Seminar Events
7 ⁰⁰ – 8 ⁴⁰	Breakfast (Hotel Restaurant)
8 ⁴⁰ - 9 ⁰⁰	Organizational details and advertisements (Hunter's Room)
	Plenary Lectures (Presentations including 10 minutes for discussion)
	<i>Chair: Grabski Franciszek</i>
9 ⁰⁰ – 10 ³⁰	Title: Influence of Polarization-Mode Dispersion on Availability of Connections in Telecommunication Optical Networks <i>Speaker: Tanguy Christian</i> Title: Safety of Water Supply Networks <i>Speaker: Tchórzewska-Cieślak Barbara</i>
10 ³⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Presentations including 10 minutes for discussions)
	<i>Chair: Tchórzewska-Cieślak Barbara</i>
11 ⁰⁰ – 12 ³⁰	Title: An optimal preventive maintenance policy of parallel-series systems <i>Speaker: Duarte José Caldeira, Craveiro João Taborda</i> Title: Risk to built property posed by transportation of liquied gasses <i>Speaker: Kisezauskiene Lina, Vaidogas Egidijus Rytas</i> Title: Softcomputing approach to discrete transport system analysis <i>Speaker: Mazurkiewicz Jacek</i> Title: On a risk perspective for maritime domain <i>Speaker: Montewka Jakub, Goerlandt Floris, Kujala Pentti</i> Title: Application of Analytic Hierarchy Process and TOPSIS methodology on ships' maintenance strategies <i>Speaker: Diagkinis Ioannis, Nikitakos Nikitas</i>
12 ³⁰ – 14 ⁰⁰	Lunch (Hotel Restaurant)
14 ⁰⁰ – 15 ³⁰	Educational & Training Course 2 Identification of Multistate System Component Safety Models <i>Lecturer: Kołowrocki Krzysztof</i>
15 ³⁰ – 16 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)

16 ⁰⁰ – 18 ⁰⁰	Participants Individual Meetings and Discussions
18 ⁰⁰ - 19 ⁰⁰	Free Time
19 ⁰⁰ - 23 ⁰⁰	Seminar Dinner and New SSARS Professor's Coronation ("Villa Antonina" Restaurant, Sopot, Bohaterów Westerplatte 36 A street)

Thursday, 27.06.2013

Time	Seminar Events
7 ⁰⁰ – 8 ⁴⁰	Breakfast (Hotel Restaurant)
8 ⁴⁰ - 9 ⁰⁰	Organizational details and advertisements
9 ⁰⁰ – 23 ⁰⁰	Visiting Gdańsk Old Town Going by bus to Gdańsk, Departure time: 9 ⁰⁰ Visiting Amber Museum and Gallery S&A Jewellery Design in Torture Chamber (10 ⁰⁰ -12 ⁰⁰) Visiting Gdańsk History Museum or Climbing Saint Maria Church Tower, 402 stairs up and down (12 ⁰⁰ -13 ³⁰) Lunch at “Cała Naprzod” Restaurant at Mołtawa River Bank (13 ³⁰ -15 ⁰⁰) Visiting the Polish Maritime Museum (15 ⁰⁰ -17 ⁰⁰) Free Time in Gdańsk Old Town (17⁰⁰-19⁰⁰) Dinner at “Kokieteria” Restaurant at Mołtawa River Bank (19 ⁰⁰ -22 ⁰⁰) Coming back by bus to Sopot (22 ⁰⁰ -23 ⁰⁰)

Friday, 28.06.2013

Time	Seminar Events (Hunter's Room)
7 ⁰⁰ – 8 ⁴⁰	Breakfast (Hotel Restaurant)
8 ⁴⁰ - 9 ⁰⁰	Organizational details and advertisements
	Plenary Lectures (Presentations including 10 minutes for discussion)
	<i>Chair: Berg Heinz Peter</i>
9 ⁰⁰ – 10 ³⁰	Title: Approaches to Industrial Risk Assessment Coupled with Catastrophic Natural Phenomena <i>Speaker: Milazzo Maria Francesca</i> Title: Problems in designing and operating functional safety solutions of higher integrity levels <i>Speaker: Kosmowski Kazimierz</i> Title: Modeling safety of multistate systems with ageing components <i>Speaker: Soszyńska-Budny Joanna</i>
10 ³⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Presentations including 10 minutes for discussions)
	<i>Chair: Tanguy Christian</i>
11 ⁰⁰ – 12 ³⁰	Title: Knowledge-based functional safety management using ProSIL software <i>Speaker: Barnert Tomasz, Kosmowski Kazimierz T., Śliwiński Marcin</i> Title: Time between inspections optimization for technical object with time delay <i>Speaker: Jodejko-Pietruczuk Anna, Nowakowski Tomasz, Werbińska-Wojciechowska Sylwia</i> Title: Monte Carlo simulation application to reliability evaluation of port grain transportation system operating at variable conditions <i>Speaker: Kołowrocki Krzysztof, Kuligowska Ewa</i> Title: An assessment of reliability of a blast wall using limited statistical information on blast loading <i>Speaker: Vaidogas Egidijus Rytas, Kisezauskiene Lina, JuoceviciusVirmantas</i>
12 ³⁰ – 14 ⁰⁰	Lunch (Hotel Restaurant)
14 ⁰⁰ – 15 ³⁰	Workshop 2 Safety of critical infrastructures
	<i>Chairman/Lecturer: Kołowrocki Krzysztof</i>
15 ³⁰ – 16 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)

16 ⁰⁰ – 18 ⁰⁰	Participants Individual Meetings and Discussions
18 ⁰⁰ - 19 ⁰⁰	Free Time
19 ⁰⁰ - 23 ⁰⁰	Farewell Dinner (“Wave” Restaurant in Sheraton Hotel, Sopot, Powstancow Warszawy 10 street)

Saturday, 29.06.2013

Time	Seminar Events (Hunter's Room)
7 ⁰⁰ – 8 ⁴⁰	Breakfast (Hotel Restaurant)
8 ⁴⁰ - 9 ⁰⁰	Organizational details and advertisements
	Seminar Sessions (Hunter's Room) (Paper presentations including 10 minutes for discussion)
	<i>Chair: Soszyńska Joanna</i>
9 ⁰⁰ – 9 ³⁰	Discussion on the subject and organization of the next SSARS Seminars <i>Speaker: Kołowrocki Krzysztof</i>
9 ³⁰ – 10 ⁰⁰	Title: Closing words <i>Speaker: Kołowrocki Krzysztof</i>
10 ⁰⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
11 ⁰⁰ – 12 ⁰⁰	Participants Departure

Krzysztof Kołowrocki & Joanna Soszyńska-Budny

Gdynia, 29.05.2013.