

SSARS 2012

6th Summer Safety and Reliability Seminars
September 2-8, 2012, 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

Secretariat

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Website

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Location

Dwór Prawdzica Hotel
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Invited Professors & Thematic Days, Plenary Lectures (Topics)

Heinz-Peter Berg, Bundesamt für Strahlenschutz, Germany (Application of Risk Analysis Methods in Transportation)

Mohamed Eid, Commissariat à l'Énergie Atomique, France (Reliability and Safety of Complex Systems and Networks)

Franciszek Grabski, Gdynia Naval Academy, Poland (Random failure rate)

Andrey Kostogryzov, Research Institute of Applied Mathematics and Certification, Moscow, Russia (Reliability and Safety of Complex Systems and Networks)

Kazimierz Kosmowski, Gdańsk University of Technology (Current Challenges and Methodological Issues of Functional Safety and Security Management in Hazardous Technical Systems)

Nikitas Nikitakos, University of Aegean, Greece (Risk Assessment on Maritime Piracy)

Leszek Smolarek, Maritime University, Gdynia, Poland (Risk Measures and Safety Improvement Methods)

Christian Tanguy, Orange Labs, France (Availability and Quality of Experience of Voice over IP Services)

Wojciech Zamojski, Wrocław University of Technology, Poland (Modeling, Simulation and Analysis for Complex Systems Dependability)

Educational & Training Course Lecturers (Topics)

Heinz-Peter Berg, Bundesamt für Strahlenschutz, Germany (Safety Integrity Levels – Approach, Methods, Examples)

Krzysztof Kołowrocki, Joanna Soszyńska-Budny, Gdynia Maritime University, Poland (Identification of Complex Technical Systems Operation Processes)

Krzysztof Kołowrocki, Joanna Soszyńska-Budny, Gdynia Maritime University, Poland (Identification of Complex Technical System Components Safety Models)

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, 02.09.2012

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

Monday, 03.09.2012

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)
	Thematic Day organized by Dr. Eid Mohamed & Prof. Kostogryzov Andrey Reliability and Safety of Complex Systems and Networks
	<i>Chair: Eid Mohamed, Kostogryzov Andrey</i>
9 ⁰⁰ – 10 ³⁰	Title: Applicable technologies to forecast, analyze and optimize reliability and risks for complex systems <i>Speaker: Kostogryzov Andrey, Nistratov George, Nistratov Andrey</i> Title: Operational failure prevention methodology for offshore systems using multiple criteria decision-making process <i>Speaker: Dagkinis Ioannis, Lilas Theodoros, Nikitakos Nikitas</i> Title: Towards the development of a topological Model to assess networks performance: connectivity, robustness and reliability <i>Speaker: Eid Mohamed</i>
10 ³⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Thematic Day organized by Dr. Eid Mohamed & Prof. Kostogryzov Andrey Reliability and Safety of Complex Systems and Networks
	<i>Chair: Eid Mohamed, Kostogryzov Andrey</i>
11 ⁰⁰ – 12 ³⁰	Title: Current challenges and methodological issues of functional safety and security management in hazardous technical systems <i>Kosmowski Kazimierz T.</i> Title: Analysis and comparison of reliability measures of critical points <i>Speaker: Woch Marta</i> Title: Preliminary Monte Carlo approach to complex technical system reliability analysis <i>Speaker: Kuligowska Ewa</i>
12 ³⁰ – 14 ⁰⁰	Lunch (Hotel Restaurant)
	Plenary Lectures (Presentations including 10 minutes for discussions)
	<i>Chair: Kosmowski Kazimierz</i>
14 ⁰⁰ – 15 ³⁰	Title: Risk assessment on maritime piracy

	<i>Speaker: Nikitakos Nikitas</i>
	Title: Preliminary approach to safety analysis of critical infrastructures
	<i>Speaker: Kołowrocki Krzysztof, Soszyńska-Budny Joanna</i>
15 ³⁰ – 16 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
16 ⁰⁰ – 18 ⁰⁰	Educational & Training Course 1 Safety Integrity Levels – Approach, Methods, Examples
	<i>Lecturer: Berg Heinz Peter</i>
18 ⁰⁰ - 19 ⁰⁰	Participants Individual Meetings and Discussions Free Time
19 ⁰⁰ - 23 ⁰⁰	Welcome Party (“White House” Restaurant, Sopot, Powstańców Warszawy 6 street)

Tuesday, 04.09.2012

Time	Seminar Events
7 ⁰⁰ – 8 ⁴⁰	Breakfast (Hotel Restaurant)
8 ⁴⁰ - 9 ⁰⁰	Organizational details and advertisements
9 ⁰⁰ – 23 ⁰⁰	<p style="text-align: center;">Visit to Kashubia Region</p> <p>Going by bus, Departure time: 9.00 Visiting Ostrzyce Village: Water walk on the board of a lake ship “Stolen” (11.00-12.00), Lunch at the lake beach (12.00-13.00) Visiting Kartuzy: Coffee/Tea break in “Perełka” Restaurant (13.30-14.30), Kashubian Museum (14.30-16.00), Kolegiata-Church (16.00-16.30) Picnic-Kashubian Feast at “Water World” in Ostrzyce (17.00-21.00). Coming back to the Hotel (21.00-23.00)</p>

Wednesday, 05.09.2012

Time	Seminar Events
7 ⁰⁰ – 8 ⁴⁰	Breakfast (Hotel Restaurant)
8 ⁴⁰ - 9 ⁰⁰	Organizational details and advertisements (Hunter's Room)
	Thematic Day organized by Prof. Berg Heinz Peter Application of Risk Analysis Methods in Transportation
	<i>Chair: Berg Heinz Peter</i>
9 ⁰⁰ – 10 ³⁰	Title: Assessing the risk of the transport of radioactive material <i>Speaker: Berg Heinz Peter</i> Title: Advances in risk analysis in railway signalling <i>Speaker: Braband Jens, Griebel Stephan</i> Title: Road safety analysis in Poland using time-series modeling techniques <i>Speaker: Zukowska Joanna</i>
10 ³⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Thematic Day organized by Berg Heinz Peter Application of Risk Analysis Methods in Transportation
	<i>Chair: Berg Heinz Peter</i>
11 ⁰⁰ – 12 ⁰⁰	Title: Risk modelling and management in large-scale, distributed transportation systems <i>Speaker: Montewka Jakub</i> Title: Quantitative assessment of risk to ship traffic in the Fehmarnbelt Fixed Link project <i>Speaker: Rasmussen Finn Mølsted, Glibbery Karis Anneke Kürstein, Melchild Kristina, Hansen Martin Gamborg, Jensen Toke Koldborg, Lehn-Schiøler Tue, Randrup-Thomsen Søren</i>
	Seminar Sessions (Presentations including 5 minutes for discussions)
	<i>Chair: Nikitakos Nikitas</i>
12 ⁰⁰ – 12 ⁴⁰	Title: Approach to assess fire risk for nuclear power plants <i>Speaker: Berg Heinz Peter, Röwekamp Marina</i> Title: An importance measure for multi-component systems with semi-markov dynamics <i>Speaker: Hellmich Mario, Berg Heinz-Peter</i>
12 ³⁰ – 14 ⁰⁰	Lunch (Hotel Restaurant)

	Plenary Lectures (Presentations including 10 minutes for discussions)
	<i>Chair: Kołowrocki Krzysztof</i>
14 ⁰⁰ – 15 ³⁰	Title: Safety management of coastal fishing system <i>Speaker: Dziula Przemysław</i>
	Title: Safety of complex technical systems: An overall approach <i>Speaker: Kołowrocki Krzysztof, Soszyńska-Budny Joanna</i>
15 ³⁰ – 16 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
16 ⁰⁰ – 18 ⁰⁰	Educational & Training Course 2 Identification of Complex Technical Systems Operation Processes
	<i>Lecturer: Kołowrocki Krzysztof, Joanna Soszyńska-Budny</i>
18 ⁰⁰ - 19 ⁰⁰	Going by bus to Rekowo Górne, Departure from the Hotel at 18 ⁰⁰
19 ⁰⁰ - 23 ⁰⁰	Seminar Dinner (“Wieniawa” Palace, Rekowo Górne)

Thursday, 06.09.2012

Time	Seminar Events (Hunter's Room)
7 ⁰⁰ – 8 ⁴⁰	Breakfast (Hotel Restaurant)
8 ⁴⁰ - 9 ⁰⁰	Organizational details and advertisements
	Thematic Day organized by Prof. Wojciech Zamojski Modeling, Simulation and Analysis for Complex Systems Dependability
	<i>Chair: Zamojski Wojciech</i>
9 ⁰⁰ – 10 ³⁰	Title: Dependability of a discrete transport system <i>Speaker: Zamojski Wojciech</i> Title: Fuzzy approach to complex system analysis <i>Speaker: Mazurkiewicz Jacek, Nowak Katarzyna, Walkowiak Tomasz</i> Title: Implementation of symmetric block ciphers in popular-grade FPGA devices <i>Speaker: Sugier Jarosław</i>
10 ³⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Thematic Day organized by Prof. Wojciech Zamojski Modeling, Simulation and Analysis for Complex Systems Dependability
	<i>Chair: Zamojski Wojciech</i>
11 ⁰⁰ – 12 ³⁰	Title: Web server performance and availability model for simulation <i>Speaker: Walkowiak Tomasz</i> Title: Fuzzy method in the conformity criteria of concrete in the quality control and safety <i>Speaker: Skrzypczak Izabela</i> Title: Risk analysis of water supply interruptions in collective water supply systems <i>Speaker: Tchórzewska-Cieślak Barbara, Rak Janusz Ryszard, Mitek Izabela</i>
12 ³⁰ – 14 ⁰⁰	Lunch (Hotel Restaurant)
	Plenary Lectures (Presentations including 10 minutes for discussion)
	<i>Chair: Berg Heinez Peter</i>
14 ⁰⁰ – 15 ³⁰	Title: Random failure rate <i>Speaker: Grabski Franciszek</i> Title: Availability and quality of experience of voice over IP services: Application of renewal theory <i>Speaker: Tanguy Christian</i>

15 ³⁰ – 16 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
16 ⁰⁰ – 18 ⁰⁰	Educational & Training Course 3
	Identification of Complex Technical System Components Safety Models
	<i>Lecturer: Kołowrotki Krzysztof, Joanna Soszyńska-Budny</i>
18 ⁰⁰ - 19 ⁰⁰	Participants Individual Meetings and Discussions Free Time
19 ⁰⁰ - 23 ⁰⁰	Fish Feast (“Laguna Smaku” Restaurant, Sopot, Molo)

Friday, 07.09.2012

Time	Seminar Events (Hunter's Room)
7 ⁰⁰ – 8 ⁴⁰	Breakfast (Hotel Restaurant)
8 ⁴⁰ - 9 ⁰⁰	Organizational details and advertisements
	Thematic Day organized by Prof. Smolarek Leszek Risk Mesures and Safety Improvement Methods
	<i>Chair: Smolarek Leszek</i>
9 ⁰⁰ – 10 ³⁰	Title: Framework for RIDM within functional safety management process <i>Speaker: Barnert Tomasz, Kosmowski Kazimierz, Śliwiński Marcin</i> Title: Bayesian approach to shipping reliability and safety <i>Speaker: Smolarek Leszek</i> Title: Modelling the accident probability in large-scale, maritime transportation system <i>Speaker: Blokus Roszkowska Agnieszka, Montewka Jakub, Smolarek Leszek</i>
10 ³⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Thematic Day organized by Prof. Smolarek Leszek Risk Mesures and Safety Improvement Methods
	<i>Chair: Smolarek Leszek</i>
11 ⁰⁰ – 12 ³⁰	Title: Estimation of surrounding the spillage time <i>Speaker: Mazurek Jolanta, Smolarek Leszek</i> Title: Modelling selected road safety measures at the regional level in Europe <i>Speaker: Wachnicka Joanna</i> Title: Operating characteristic curves in monitoring of strength in ready mixed concrete <i>Speaker: Bajorek Grzegorz, Kiernia-Hnat Marta, Skrzypczak Izabela</i>
12 ³⁰ – 14 ⁰⁰	Lunch (Hotel Restaurant)
	Plenary Lectures (Presentations including 10 minutes for discussions)
	<i>Chair: Tanguy Christian</i>
14 ⁰⁰ – 15 ³⁰	Title: Risk analysis of chemical spills at sea <i>Speaker: Bogalecka Magdalena</i> Title: Reliability prediction and optimization of complex technical systems with applications to port transport <i>Speaker: Kołowrocki Krzysztof, Soszyńska-Budny Joanna</i>

15 ³⁰ – 16 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
16 ⁰⁰ - 19 ⁰⁰	Participants Individual Meetings and Discussions Free Time
19 ⁰⁰ - 23 ⁰⁰	Farewell Dinner (“Galeria 63” Restaurant, Sopot, Bohaterów Monte Cassino 63/2)

Meeting of Polish Safety and Reliability Association Management Board (16⁰⁰ – 18⁰⁰, Knight’s Room)

Saturday, 08.09.2012

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, 02.09.2012.