

SSARS 2008

2nd Summer Safety and Reliability Seminars
June 22-28, 2008, Gdańsk/Sopot-Jelitkowo, Poland

PROGRAMME

Organisers and Sponsors

European Safety and Reliability Association (ESRA)
Polish Safety and Reliability Association (PSRA)
Gdynia Maritime University (GMU)
Politecnico di Milano (PM)
Poland's Ministry of Science and Higher Education (PMSHE)

Secretariat

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Location

Dwór Prawdzica Hotel
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Guoping P. Liu, International Journal of Automation and Computing

Christian N. Madu, International Journal of Quality and Reliability Management

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Krishna B. Misra, International Journal of Performability Engineering

Ioannis Papazoglou, European Safety and Reliability Association

Hoang Pham, International Journal of Reliability, Quality and Safety Engineering

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Invited Professors & Seminar Session Chairmen (Topics)

Tunc Aldemir, Ohio State University, USA, (Modelling Safety and Reliability of Complex Systems and Processes, Modern Methods of Risk Analysis)
Terje Aven, University of Stavanger, Norway, (Modern Methods of Risk Analysis)
Christophe Berenguer, Universite de Technologie de Troyes, France, (Maintenance Modelling and Optimisation)
Heinz-Peter Berg, Bundesamt für Strahlenschutz, Germany, (Modern Methods of Risk Analysis)
Lucjan Gućma, Szczecin Maritime University, Poland, (Modern Methods of Risk Analysis)
Krzysztof Kołowrocki, Gdynia Maritime University, Poland, (Multi-State Safety and Reliability Models)
Tomasz Nowakowski, Wrocław University of Technology, Poland, (Maintenance Modelling and Optimisation)
Hoang Pham, Rutgers University, USA, (Modelling Safety and Reliability of Complex Systems and Processes)
Min Xie, National University of Singapore, Singapore, (Modelling Safety and Reliability of Complex Systems and Processes)

Educational & Training Courses Lecturers (Topics)

Franciszek Grabski, Gdynia Naval University, Poland, (Markov Processes Applications in System Safety and Reliability Modelling – Course I)
Enrico Zio, Politecnico di Milano, Italy, (Monte Carlo Simulation for System Safety and Reliability Modelling – Course II)

Organising Board

Sambor Guze
Joanna Soszyńska - Chairman

Seminar Rooms [Responsible Persons]

Knight's Room [Sambor Guze]
Hunter's Room [Sambor Guze]

SEMINAR PROGRAMME

Sunday, 22.06.2008

Time	Seminar Events
12 ⁰⁰ - 17 ⁰⁰	Arrival (Hotel "Dwór Prawdzica")
17 ⁰⁰ - 19 ⁰⁰	Registration (Conference Desk)
19 ⁰⁰ - 21 ⁰⁰	Welcome Dinner (Hotel Restaurant)

Monday, 23.06.2008

Time	Seminar Events
	Opening Ceremony (Hunter's Room)
8 ⁴⁰ - 9 ⁰⁰	Welcome (<i>Kołowrocki Krzysztof</i> – Chairman, <i>Bérenguer Christophe</i> – ESRA, <i>Zio Enrico</i> – Chairman) Technical Information (<i>Soszyńska Joanna</i> – Organising Chairman)
	Keynote Speech (Hunter's Room) (Lecture Presentations including 10 minutes for Discussion)
9 ⁰⁰ - 9 ⁵⁰	Title: Surprises: the warranty, the reliability, and the systemability <i>Speaker: Pham Hoang</i> <i>Chair: Kołowrocki Krzysztof</i>
	Plenary Sessions (Hunter's Room) (Lecture Presentations including 10 minutes for Discussion)
9 ⁵⁰ - 10 ⁴⁰	Title: Dynamic methodologies for reliability and probabilistic risk assessment <i>Speaker: Aldemir Tunc</i> <i>Chair: Zio Enrico</i>
10 ⁴⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Hunter's Room) (Paper Presentations including 5 minutes for Discussion)
	<i>Chair: Aven Terje, Gucma Lucjan</i>
11 ⁰⁰ - 11 ²⁰	Title: Safety oriented bubble diagrams in project risk management <i>Speaker: Abrahamsen Eirik Bjorheim, Aven Terje</i>
11 ²⁰ - 11 ⁴⁰	Title: Quantitative safety goals as a basis for decision making <i>Speaker: Berg Heinz-Peter</i>
11 ⁴⁰ - 12 ⁰⁰	Title: Maintenance Policy for deteriorating system with explanatory variables <i>Speaker: Zhao Xuejing, Fouladirad Mitra, Bérenguer Christophe, Bordes Laurent</i>
12 ⁰⁰ - 12 ²⁰	Title: Expressing and communicating uncertainty in relation to quantitative risk analysis <i>Speaker: Flage Roger, Aven Terje</i>
12 ²⁰ - 12 ⁴⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Hunter's Room) (Paper Presentations including 5 minutes for Discussion)
	<i>Chair: Berg Heinz-Peter, Nikitakos Nikitas</i>
12 ⁴⁰ - 13 ⁰⁰	Title: Risk based model of information optimization in maritime electronic chart application <i>Speaker: Gucma Maciej</i>
13 ⁰⁰ - 13 ²⁰	Title: Monte Carlo method of ship's underkeel clearance evaluation for safety of ferry approaching to Ystad Port determination <i>Speaker: Gucma Lucjan, Schoeneich Marta</i>

	Polish Safety and Reliability Association Plenary Convention (Hotel Restaurant)
	<i>Chair: Kołowrocki Krzysztof</i>
13 ²⁰ - 13 ⁴⁰	<i>Walny Zjazd Polskiego Towarzystwa Bezpieczeństwa i niezawodności</i>
13 ⁴⁰ - 14 ⁰⁰	<i>Walny Zjazd Polskiego Towarzystwa Bezpieczeństwa i niezawodności</i>
14 ⁰⁰ - 15 ⁰⁰	Lunch (Hotel Restaurant)
	Educational & Training Course I (Hunter's Room)
15 ⁰⁰ - 16 ⁰⁰	Title: Markov processes applications in system safety and reliability modelling <i>Speaker: Grabski Franciszek</i>
16 ⁰⁰ - 17 ⁰⁰	Free Time
17 ⁰⁰ - 23 ⁰⁰	Visit to Kaszuby Region (by bus) & Picnic in "Zajazd Ostrzycki" or Picnic in "Wróblówka"

Tuesday, 24.06.2008

Time	Seminar Events
8 ⁴⁰ - 9 ⁰⁰	Organizational Details and Advertisements (Hunter's Room)
	Plenary Sessions (Hunter's Room) (Lecture Presentations including 10 minutes for Discussion)
9 ⁰⁰ - 9 ⁵⁰	Title: Risk analysis and risk management. Basic concepts and principles <i>Speaker: Aven Terje</i> <i>Chair: Berg Heinz-Peter</i>
9 ⁵⁰ - 10 ⁴⁰	Title: On the mathematical condition-based maintenance modelling for continuously deteriorating systems <i>Speaker: Bérenguer Christophe</i> <i>Chair: Nowakowski Tomasz</i>
10 ⁴⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Hunter's Room) (Paper Presentations including 5 minutes for Discussion) <i>Chair: Kwiatkowska-Sarnecka Bożena, Aldemir Tunc</i>
11 ⁰⁰ - 11 ²⁰	Title: Contribution to failure description <i>Speaker: Valis David</i>
11 ²⁰ - 11 ⁴⁰	Title: Risk Analysis by Threshold Evaluation (RATE): a new approach to OHS in small and medium enterprises <i>Speaker: Pantanali Claudio, Gioacchino Nardin, Meneghetti Antonella, Bianco Cristina, Lirussi Marco</i>
11 ⁴⁰ - 12 ⁰⁰	Title: Review of an insurance policy of a directive Seveso III industrial activity by using risk analysis. An example <i>Speaker: Romano Alfredo, Perrone Francesco</i>
12 ⁰⁰ - 12 ²⁰	Title: Reliability analysis of two-state consecutive "m out of k: F"-series systems <i>Speaker: Guze Sambor</i>
12 ²⁰ - 12 ⁴⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Hunter's Room) (Paper Presentations including 5 minutes for Discussion) <i>Chair: Guo Renkuan, Pham Hoang,</i>
12 ⁴⁰ - 13 ⁰⁰	Title: Frequencies assessment of loss containment including the effects of measures of risk prevention and mitigation <i>Speaker: Milazzo Maria Francesco, Maschio Giuseppe, Uguccioni Giovanni</i>
13 ⁰⁰ - 13 ²⁰	Title: Contribution to availability assessment of complex systems <i>Speaker: Valis David, Koucky Miroslav</i>
13 ²⁰ - 13 ⁴⁰	Title: New aspects about territorial planning <i>Speaker: Romano Alfredo, Perrone Francesco, Vincenzo Torretta</i>
13 ⁴⁰ - 14 ⁰⁰	Title: Reliability analysis of two-state series-consecutive "m out of k: F" systems <i>Speaker: Guze Sambor</i>

14 ⁰⁰ - 15 ⁰⁰	Lunch (Hotel Restaurant)
	Educational & Training Course II (Hunter's Room)
15 ⁰⁰ - 16 ⁰⁰	Title: Monte Carlo simulation for system safety and reliability modelling <i>Speaker: Zio Enrico</i>
16 ⁰⁰ - 23 ⁰⁰	Participants Individual Meetings and Discussions Free Time

Wednesday, 25.06.2008

Time	Seminar Events
8 ⁴⁰ - 9 ⁰⁰	Organizational Details and Advertisements (Hunter's Room)
	Plenary Sessions (Hunter's Room) (Lecture Presentations including 10 minutes for Discussion)
9 ⁰⁰ - 9 ⁵⁰	Title: Risk and safety management – procedures, methods, experiences <i>Speaker: Berg Heinz-Peter</i> <i>Chair: Aven Terje</i>
9 ⁵⁰ - 10 ⁴⁰	Title: Models and methods of ship-bridge collisions risk assessment <i>Speaker: Gucma Lucjan</i> <i>Chair: Nikitakos Nikitas</i>
10 ⁴⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Hunter's Room) (Paper Presentations including 5 minutes for Discussion)
	<i>Chair: Gucma Lucjan, Guo Renkuan</i>
11 ⁰⁰ - 11 ²⁰	Title: Operational reliability of heat supply systems <i>Babiarz Bożena</i>
11 ²⁰ - 11 ⁴⁰	Title: Importance measures in presence of uncertainties <i>Speaker: Baraldi Piero, Zio Enrico, Compare Michele</i>
11 ⁴⁰ - 12 ⁰⁰	Title: Modelling ship's diesel electrical system using Markov theory <i>Speaker: Mennis Evangelos, Dagkinis Ioannis, Nikitas Nikitakos, Platis Agapios</i>
12 ⁰⁰ - 12 ²⁰	Title: Not fixed yet <i>Speaker: Nikitas Nikitakos</i>
12 ²⁰ - 12 ⁴⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Hunter's Room) (Paper Presentations including 5 minutes for Discussion)
	<i>Chair: Jodejko Anna, Zio Enrico</i>
12 ⁴⁰ - 13 ⁰⁰	Title: Assessment of products' reliability influence on remanufacturing processes <i>Speaker: Plewa Marcin</i>
	Poland-Singapore Joint Project Workshop (Hunter's Room) (Paper Presentations including 5 minutes for Discussion)
	<i>Chair: Kołowrocki Krzysztof, Xie Min</i>
13 ⁰⁰ - 13 ²⁰	Title: Safety and reliability of complex industrial systems and process, Poland-Singapore Joint Project <i>Speaker: Kołowrocki Krzysztof, Soszyńska Joann, Xie Min, Kien Ming Ng, Salahuddin Mohamed</i>
13 ²⁰ - 13 ⁴⁰	Title: A general model of industrial systems operation processes related to their environment and infrastructure

	<i>Speaker: Kołowrocki Krzysztof, Soszyńska Joanna</i>
13 ⁴⁰ – 14 ³⁰	Lunch (Hotel Restaurant)
	Educational & Training Course I (Hunter's Room)
14 ³⁰ – 15 ³⁰	Title: Markov processes applications in system safety and reliability modeling <i>Speaker: Grabski Franciszek</i>
15 ³⁰ - 23 ⁰⁰	Visit to Malbork Castle (by bus) & Dinner in Castle Restaurant

Thursday, 26.06.2008

Time	Seminar Events
8 ⁴⁰ - 9 ⁰⁰	Organizational Details and Advertisements (Hunter's Room)
	Plenary Sessions (Hunter's Room) (Lecture Presentations including 10 minutes for Discussion)
9 ⁰⁰ - 9 ⁵⁰	Title: Statistical monitoring of near zero-defect processes <i>Speaker: Xie Min</i> <i>Chair: Zio Enrico</i>
9 ⁵⁰ - 10 ⁴⁰	Title: Maintenance modelling concepts – state of art <i>Speaker: Nowakowski Tomasz, Werbińska Sylwia</i> <i>Chair: Bérenguer Christophe</i>
10 ⁴⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Hunter's Room) (Paper Presentations including 5 minutes for Discussion) <i>Chair: Bérenguer Christophe, Pham Hoang</i>
11 ⁰⁰ - 11 ²⁰	Title: Maintenance cost study for deteriorating systems: age-replacement policy vs. condition-based maintenance policy <i>Speaker: Bouvard Keomany, Artus Samuel, Bérenguer Christophe, Cocquempot Vincent</i>
11 ²⁰ - 11 ⁴⁰	Title: Shock models under policy N <i>Speaker: Pérez-Ocón R., Montoro-Cazorla D., Segovia M.C.</i>
11 ⁴⁰ - 12 ⁰⁰	Title: Maintenance problems of technical systems composed of heterogeneous elements <i>Speaker: Jodejko Anna</i>
12 ⁰⁰ - 12 ²⁰	Title: Preventive maintenance with imperfect repairs of a system with redundant objects <i>Speaker: Okulewicz Józef, Salamonowicz Tadeusz</i>
12 ²⁰ - 12 ⁴⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Hunter's Room) (Paper Presentations including 5 minutes for Discussion) <i>Chair: Judziński Mirosław, Załęska-Fornal Agata</i>
12 ⁴⁰ - 13 ⁰⁰	Title: On determinations of some characteristics of semi – Markov process for different distributions of transient probabilities <i>Speaker: Zając Mateusz, Budny Tymoteusz</i>
13 ⁰⁰ - 13 ²⁰	Title: DEAR theory and applicability in system dynamics analysis <i>Speaker: Guo Renkuan, Guo Danni</i>
	Poland-Singapore Joint Project Workshop (Hunter's Room) (Paper Presentations including 5 minutes for Discussion) <i>Chair: Kołowrotki Krzysztof, Xie Min</i>
13 ²⁰ - 13 ⁴⁰	Title: Modelling of operational processes of port bulk cargo transportation system

	<i>Speaker: Kołowrocki Krzysztof, Kwiatkowska-Sarnecka Bożena, Soszyńska Joanna</i>
13 ⁴⁰ - 14 ⁰⁰	Title: Modelling environment and infrastructure influence on reliability and operation processes of port oil transportation system <i>Speaker: Guze Sambor, Kołowrocki Krzysztof, Soszyńska Joanna</i>
14 ⁰⁰ - 15 ⁰⁰	Lunch (Hotel Restaurant)
	Educational & Training Course II (Hunter's Room)
15 ⁰⁰ - 16 ⁰⁰	Title: Monte Carlo simulation for system safety and reliability modelling <i>Speaker: Zio Enrico</i>
16 ⁰⁰ - 23 ⁰⁰	Participants Individual Meetings and Discussions Free Time

Friday, 27.06.2008

Time	Seminar Events
8 ⁴⁰ - 9 ⁰⁰	Organizational Details and Advertisements (Hunter's Room)
	Plenary Sessions (Hunter's Room) (Lecture Presentations including 10 minutes for Discussion)
9 ⁰⁰ - 9 ⁵⁰	Title: Some extended Weibull distributions and their applications in reliability <i>Speaker: Xie Min</i> <i>Chair: Aldemir Tunc</i>
9 ⁵⁰ - 10 ⁴⁰	Title: Reliability and risk analysis of multi-state systems with degrading components <i>Speaker: Kołowrocki Krzysztof</i> <i>Chair: Pham Hoang</i>
10 ⁴⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Hunter's Room) (Paper Presentations including 5 minutes for Discussion)
	<i>Chair: Aven Terje, Soszyńska Joanna</i>
11 ⁰⁰ - 11 ²⁰	Title: Fuzzy Regression – A scalar variable formation <i>Speaker: Guo Renkuan, Guo Danni</i>
11 ²⁰ - 11 ⁴⁰	Title: Agent system in control of ship movement <i>Speaker: Lebkowski Andrzej, Dziedzicki Krzysztof</i>
11 ⁴⁰ - 12 ⁰⁰	Title: Neural networks for function approximation in dynamic modeling <i>Speaker: Nedbálek Jakub</i>
12 ⁰⁰ - 12 ²⁰	Title: Applications of bootstrap and resampling methods in empirical Bayes estimation of reliability parameters <i>Speaker: Grabski Franciszek, Załęska-Fornal Agata</i>
12 ²⁰ - 12 ⁴⁰	Coffee/Tea Break (Hotel Restaurant)
	Seminar Sessions (Hunter's Room) (Paper Presentations including 5 minutes for Discussion)
	<i>Chair: Berg Heinz-Peter, Blokus-Roszkowska Agnieszka</i>
12 ⁴⁰ - 13 ⁰⁰	Title: Asymptotic approach to reliability evaluation of large “ <i>m</i> out of <i>l</i> ”- series system in variable operation conditions <i>Speaker: Soszyńska Joanna</i>
13 ⁰⁰ - 13 ²⁰	Title: Asymptotic dependence of average failure rate and MTTF for a recursive, meshed network architecture <i>Speaker: Tanguy Christian</i>
	Poland-Singapore Joint Project Workshop (Hunter's Room) (Paper Presentations including 5 minutes for Discussion)
	<i>Chair: Kołowrocki Krzysztof, Xie Min</i>
13 ²⁰ - 13 ⁴⁰	Title: Modelling environment and infrastructure of shipyard transportation systems and processes

	<i>Speaker: Blokus-Roszkowska Agnieszka, Kołowrocki Krzysztof</i>
13 ⁴⁰ - 14 ⁰⁰	Title: An approach to ship operation analysis with primary application to “Stena Baltica” ferry operating at Baltic Sea <i>Speaker: Jurdzinski Mirosław, Kołowrocki Krzysztof, Soszyńska Joanna</i>
14 ⁰⁰ - 15 ⁰⁰	Lunch (Hotel Restaurant)
	Educational & Training Course I – Exam (Hunter’s Room)
15 ⁰⁰ – 15 ³⁰	Title: Markov processes applications in system safety and reliability modelling <i>Examiner: Grabski Franciszek</i>
	Educational & Training Course II – Exam (Hunter’s Room)
15 ³⁰ – 16 ⁰⁰	Title: Monte Carlo simulation for system safety and reliability modeling <i>Examiner: Zio Enrico</i>
16 ⁰⁰ - 20 ⁰⁰	Sightseeing Gdańsk Old Town (individually, by train)
20 ⁰⁰ - 23 ⁰⁰	Farewell Dinner in “Zielony Dwór” in Sopot (near to Sopot Main Train Station)

Saturday, 28.06.2008

Time	Seminar Events
8 ⁴⁰ - 9 ⁰⁰	Organizational Details and Advertisements (Hunter's Room)
	Seminar Summary Sessions (Hunter's Room)
9 ⁰⁰ - 9 ⁵⁰	Lectures and papers preliminary selection for possible publication in selected scientific journals <i>Chair: Enrico Zio</i>
9 ⁵⁰ - 10 ⁴⁰	Lectures and papers preliminary selection for possible publication in selected scientific journals <i>Chair: Krzysztof Kowrocki</i>
10 ⁴⁰ - 11 ⁰⁰	Coffee/Tea Break (Hotel Restaurant)
11 ⁰⁰ - 12 ⁴⁰	SSARS 2008 Participants Departure

Gdynia, 22.06.2008.