

# **SSARS 2016**

*10<sup>th</sup> Jubilee*

*Summer Safety and Reliability Seminars*

**June 19-25, 2016, 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**

*<http://ssars.am.gdynia.pl>*

### **Location**

*„Golden Tulip Gdansk Residence”  
<http://www.goldentulipgdanskresidence.com/en>  
ul. Piastowska 160  
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## **Invited Professors & Thematic Days, Plenary Lectures (Topics)**

Heinz-Peter Berg, How to Investigate and Assess Combinations of Hazards

Mohamed Eid, Critical Infrastructure Preparedness: Cascading of Disruptions Considering Vulnerability and Dependency

Franciszek Grabski, Reliability and Maintainability Characteristics in Semi-Markov Models

Kazimierz Kosmowski, Organizational Culture as Prerequisite of Proactive Safety and Security Management in Critical Infrastructure Systems Including Hazardous Plants and Seaports

Jacek Mazurkiewicz, A Repair Time Model of a Web Based System Including Administrator Working Hours

Lauri Ojala, HAZARD Project – Mitigating the Effects of Emergencies in Baltic Sea Region Ports

Athanasios Sfetsos, EU-CIRCLE Project - Strengthening Critical Infrastructure Resilience to Climate Change

Barbara Tchórzewska-Cieślak, Analysis and Assessment Methods of Water Network Failure in Critical Infrastructure Methodology

## **Training Courses - TC**

Joanna Soszyńska Budny, EU-CIRCLE TC 1. Safety of Multistate Ageing Systems

Joanna Soszyńska Budny, EU-CIRCLE TC 2. Modelling Critical Infrastructure Operation Process

Joanna Soszyńska Budny, EU-CIRCLE TC 3. Prediction of Critical Infrastructure Operation Process

Mateusz Torbicki, EU-CIRCLE TC 4. Modelling Climate-Weather Change Process

Ewa Kuligowska, EU-CIRCLE TC 5. Identification of Climate-Weather Change Process

Magdalena Bogalecka, EU-CIRCLE TC 6. Modelling Critical Infrastructure Accident Consequences

## **Thematic Workshops - TW**

Joanna Soszyńska-Budny, Athanasios Sfetsos, EU-CIRCLE TW 1. Baltic Sea Region Critical Infrastructure Networks

Agnieszka Blokus-Roszkowska, Athanasios Sfetsos, EU-CIRCLE TW 2. General Methodology on Critical Infrastructure Safety Aspects

Krzysztof Kołowrocki, EU-CIRCLE TW 3. Modelling, Identification and Prediction of Operation Processes and Safety of Complex Systems

Krzysztof Kołowrocki, Lauri Ojala, HAZARD TW 1. Risk Assessment and Analysis

## **Organising Board**

Sambor Guze

Ewa Kuligowska

Joanna Soszyńska-Budny - Chairman

Mateusz Torbicki

## **Seminar Room [Responsible Persons]**

Ewa Kuligowska

Mateusz Torbicki

# SEMINAR PROGRAMME

Sunday, 19.06.2016

<b>Time</b>	<b>Seminar Events</b>
12 <sup>00</sup> - 18 <sup>00</sup>	Participants' Arrival (Golden Tulip Residence)
18 <sup>00</sup> - 19 <sup>00</sup>	Participants' Registration (Seminar Desk)

Monday, 20.06.2016

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
	<b>Opening Ceremony</b>
7 <sup>00</sup> – 8 <sup>10</sup>	<b>Breakfast (Hotel Restaurant)</b>
8 <sup>10</sup> – 8 <sup>30</sup>	Welcome ( <i>Kołowrocki Krzysztof</i> – Chairman) Technical Information ( <i>Soszyńska-Budny Joanna</i> – Organising Chairman)
8 <sup>30</sup> – 9 <sup>00</sup>	<b>Plenary Session</b>
	<i>Chair: Eid Mohamed</i>
	<i>Title: Organizational culture as prerequisite of proactive safety and security management in critical infrastructure systems including hazardous plants and seaports</i>
	<i>Speaker: Kosmowski Kazimierz T., Śliwiński Marcin</i>
9 <sup>00</sup> – 10 <sup>30</sup>	<b>Seminar Session</b>
	<i>Chair: Berg Heinz-Peter</i>
	<i>Title: Hazard assessment in case of external flooding</i>
	<i>Speaker: Iancu Alexandra, Berg Heinz-Peter, Krauß Matias</i>
	<i>Title: Legal implications of critical infrastructure protection, the experience of the Cyprus Cybercrime Center</i>
	<i>Speakers: Tsadiras Alexandros, Bachtzetis Christos-Sergios, Georgiou Michalis, Mylona Vasiliki, Boustras George</i>
	<i>Title: WARSYS: An Efficient Data Warehouse to support Decision Support Components of Health Services in Major Crises</i>
	<i>Speakers: Efstathiou Nectarios, Psaroudakis Chrysostomos, Skitsas Michael, Koutras Nikolaos</i>
	<i>Title: Towards the protection of Critical Information Infrastructures using a lightweight, non-intrusive embedded system</i>
	<i>Speaker: Skitsas Michael, Efstathiou Nectarios, Charalambous Elisavet, Efthymiou Costas, Koutras Nikolaos</i>
10 <sup>30</sup> - 11 <sup>00</sup>	<b>Coffee/Tea Break (Seminar Room)</b>
11 <sup>00</sup> – 12 <sup>30</sup>	<b>Seminar Session</b>
	<i>Chair: Mazurkiewicz Jacek</i>
	<i>Title: Video Detection Data as Important Factor for Transport Systems Safety Improvement</i>
	<i>Speaker: Mazurkiewicz Jacek</i>
	<i>Title: A repair time model of a web based system including administrator working hours</i>
	<i>Speaker: Walkowiak Tomasz</i>
	<i>Title: Implementing SHA-3 candidate BLAKE algorithm in Field Programmable Gate Arrays</i>
	<i>Speaker: Sugier Jarosław</i>
	<i>Title: Monte Carlo method for reliability of parallel system with dependent failures of component</i>
	<i>Speaker: Grabski Franciszek</i>
12 <sup>30</sup> – 14 <sup>00</sup>	<b>Lunch (Hotel Restaurant)</b>



Monday, 20.06.2016

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
14 <sup>00</sup> – 15 <sup>30</sup>	<p align="center"><b>EU-CIRCLE Workshop 1 – Part 1</b>  <b>Baltic Sea Region Critical Infrastructure Networks</b></p> <p><i>Moderators: Soszyńska-Budny Joanna, Sfetsos Athanasios</i></p> <p><i>Title: EU-CIRCLE Project - Strengthening Critical Infrastructure Resilience to Climate Change</i>  <i>Speaker: Sfetsos Athanasios</i></p> <p><i>Title: The Baltic Sea circumstances significant for its critical infrastructure networks</i>  <i>Speakers: <u>Bogalecka Magda</u>, <u>Kolowrocki Krzysztof</u></i></p> <p><i>Title: Critical infrastructure networks at Baltic Sea and its seaside</i>  <i>Speakers: <u>Blokus-Roszkowska Agnieszka</u>, <u>Bogalecka Magda</u>, <u>Kolowrocki Krzysztof</u></i></p> <p><i>Title: Port critical infrastructure network</i>  <i>Speakers: <u>Blokus-Roszkowska Agnieszka</u>, <u>Guze Sambor</u>, <u>Kolowrocki Krzysztof</u>, <u>Soszyńska-Budny Joanna</u></i></p> <p><i>Title: Shipping critical infrastructure network (poster)</i>  <i>Speakers: <u>Bogalecka Magda</u>, <u>Kolowrocki Krzysztof</u>, <u>Soszyńska-Budny Joanna</u>, <u>Ledóchowski Marek</u>, <u>Reszko Marek</u></i></p> <p><i>Title: Oil rig critical infrastructure network</i>  <i>Speakers: <u>Kolowrocki Krzysztof</u>, <u>Reszko Marek</u></i></p>
15 <sup>30</sup> – 16 <sup>00</sup>	<p align="center"><b>Coffee/Tea Break (Seminar Room)</b></p>
16 <sup>00</sup> – 18 <sup>00</sup>	<p align="center"><b>Seminar Session</b></p> <p><i>Chair: <u>Kosmowski Kazimierz</u></i></p> <p><i>Title: Port oil piping transportation critical infrastructure assets and interconnections</i>  <i>Speaker: <u>Drzazga Michal</u>, <u>Kolowrocki Krzysztof</u>, <u>Soszyńska-Budny Joanna</u>, <u>Torbicki Mateusz</u></i></p> <p><i>Title: Identification of climate related hazards at the Baltic Sea area and their critical/extreme event parameters', the port oil piping transportation critical infrastructure is exposed to</i>  <i>Speaker: <u>Drzazga Michal</u>, <u>Kolowrocki Krzysztof</u>, <u>Soszyńska-Budny Joanna</u>, <u>Torbicki Mateusz</u></i></p> <p><i>Title: Maritime ferry critical infrastructure assets and interconnections</i>  <i>Speaker: <u>Kolowrocki Krzysztof</u>, <u>Kuligowska Ewa</u>, <u>Joanna Soszyńska-Budny</u></i></p> <p><i>Title: Climate related hazards and their critical/extreme event parameters, the maritime ferry critical infrastructure is exposed to</i>  <i>Speaker: <u>Krzysztof Kolowrocki</u>, <u>Ewa Kuligowska</u>, <u>Soszyńska-Budny Joanna</u></i></p>





Monday, 20.06.2016

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
	<p><i>Title: Identification of climate related hazards at the Baltic Sea area</i> <i>Speakers: Jakusik Ewa, Kolowrocki Krzysztof, Kuligowska Ewa, Soszyńska-Budny Joanna (poster)</i></p> <p><i>Title: Port of Gdańsk and Port of Gdynia's exposure to threats resulting from storm extremes (poster)</i> <i>Speakers: Cieślakiewicz Witold, Dudkowska Aleksandra, Gic-Grusza Gabriela</i></p> <p><i>Title: General approach to Baltic Electric Cable Critical Infrastructure Network operation process modelling (poster)</i> <i>Speakers: Kolowrocki Krzysztof, Kwiatkowska-Sarnecka Bożena</i></p>
18 <sup>00</sup> - 19 <sup>00</sup>	Free Time
19 <sup>00</sup> - 23 <sup>00</sup>	Welcome Party ("Golden Tulip Residence" Restaurant)



**Tuesday, 21.06.2016**

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
7 <sup>00</sup> – 8 <sup>30</sup>	Breakfast (Hotel Restaurant)
8 <sup>30</sup> - 9 <sup>00</sup>	<b>Plenary Session</b>
	<i>Chair: Kosmowski Kazimierz</i>
	<i>Title: How to investigate and assess combination of hazards</i>
	<i>Speaker: Berg Heinz-Peter</i>
9 <sup>00</sup> – 10 <sup>30</sup>	<b>HAZARD Workshop 1– Part 1 Risk Assessment and Analysis</b>
	<i>Moderators: Kolowrocki Krzysztof, Ojala Lauri</i>
	<i>Title: Mitigating the effects of emergencies in Baltic Sea region ports - HAZARD project outline</i>
	<i>Speakers: Ojala Lauri</i>
	<i>Title: Prevention of oil spills during oil transfer between tankers and port oil terminal</i>
	<i>Speakers: Blokus-Roszkowska Agnieszka, Kwiatkowska-Sarecka Bożena, Wilczyński Przemysław, Wolny Paweł</i>
	<i>Title: Constructing stochastic models for investigation of dangerous events and accidents number in Baltic Sea region ports</i>
	<i>Speaker: <u>Franciszek Grabski</u></i>
	<i>Title: Investigating and mitigating accidents consequences of maritime ferry operating at the Baltic Sea waters.</i>
	<i>Speaker: <u>Kamiński Piotr</u>, Kolowrocki Krzysztof, Kuligowska Ewa, Soszyńska-Budny Joanna,</i>
	<i>Title: Developing procedures for hazard identification</i>
	<i>Speakers: <u>Tchórzewska-Cieślak Barbara</u>, Pietrucha-Urbanik Katarzyna, Szpak Dawid</i>
10 <sup>30</sup> - 11 <sup>00</sup>	Coffee/Tea Break (Seminar Room)
11 <sup>00</sup> – 12 <sup>30</sup>	<b>HAZARD Workshop 1– Part 2 Risk Assessment And Analysis</b>
	<i>Moderators: Kolowrocki Krzysztof, Ojala Lauri</i>
	<i>Title: Procedure based proactive functional safety management for the risk mitigation of hazardous events in the oil seaport installations including insurance aspects</i>
	<i>Speakers: <u>Kosmowski Kazimierz T.</u>, Gołębiewski Dariusz, Śliwiński Marcin, Piesik Emilian</i>
	<i>Title: Modeling hazard related interactions between various processes in and around the Baltic Sea ports (with application to interactions between an oil terminal and a container terminal operation processes)</i>
	<i>Speaker: <u>Malinowski Jacek</u>, Wilczyński Przemysław, Wolny Paweł</i>



**Tuesday, 21.06.2016**

Time	Seminar Events (Seminar Room)
	<p><i>Title: Trajectory planning during emergency ship to ship transfer to mitigate oil spill at the Baltic Sea</i>  <i>Speakers: Śmierchalski Roman, Wilczyński Przemysław, <u>Witkowska Anna</u></i></p> <p><i>Title: Mitigating potential major accidents and emergencies close to the Swinoujscie harbour based on LNG carrier emergency towing exercise</i>  <i>Speakers: Kołowrocki Krzysztof, <u>Reszko Marek</u>, Soszyńska-Budny Joanna</i></p> <p><i>Title: Mitigating consequences of oil spills at sea restricted areas based on their dynamic domains modelling, identification and prediction</i>  <i>Speaker: <u>Kołowrocki Krzysztof</u></i></p> <p><i>Title: Conception of decision support system for resilience management of seaport supply chains (poster)</i>  <i>Speakers: Nowakowski Tomasz, Młynczak Marek, Tubis Agnieszka, Werbińska-Wojciechowska Sylwia</i></p>
12 <sup>30</sup> – 14 <sup>00</sup>	Lunch (Hotel Restaurant)
14 <sup>00</sup> – 15 <sup>30</sup>	<p align="center"><b>EU-CIRCLE Workshop 1 – Part 2</b>  <b>Baltic Sea Region Critical Infrastructure Networks</b></p>
	<p><i>Moderators: Soszyńska-Budny Joanna, Sfetsos Athanasios</i></p> <p><i>Title: Baltic electric cable critical infrastructure network</i>  <i>Speakers: <u>Blokus-Roszkowska Agnieszka</u>, Kołowrocki Krzysztof, Soszyńska-Budny Joanna</i></p> <p><i>Title: Gas pipelines critical infrastructure network (poster)</i>  <i>Speakers: Blokus-Roszkowska Agnieszka, Bogalecka Magda, Dziula Przemysław, Kołowrocki Krzysztof</i></p> <p><i>Title: Oil pipeline critical infrastructure network (poster)</i>  <i>Speakers: Drzazga Michał, Kołowrocki Krzysztof, Soszyńska-Budny Joanna</i></p> <p><i>Title: Ship traffic and port operation information critical infrastructure network</i>  <i>Speakers: <u>Guze Sambor</u>, Ledóchowski Marek</i></p> <p><i>Title: Joint network of port, shipping, ship traffic and port operation information critical infrastructure network (poster)</i>  <i>Speakers: Guze Sambor, Kołowrocki Krzysztof</i></p> <p><i>Title: Global Baltic network of critical infrastructure networks</i>  <i>Speakers: <u>Dziula Przemysław</u>, Kołowrocki Krzysztof</i></p> <p><i>Title: Conclusions from the workshop on Baltic Sea region critical infrastructure networks and next steps in EU-CIRCLE project research</i>  <i>Speakers: <u>Kołowrocki Krzysztof</u></i></p>



Tuesday, 21.06.2016

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
15 <sup>30</sup> – 16 <sup>00</sup>	Coffee/Tea Break (Seminar Room)
16 <sup>00</sup> – 18 <sup>00</sup>	<b>EU-CIRCLE Training Course 1</b> <b>Safety of Multistate Ageing Systems</b>
	<i>Speaker: Soszyńska-Budny Joanna</i>
18 <sup>00</sup> - 19 <sup>00</sup>	<b>Free Time</b>
19 <sup>00</sup> - 23 <sup>00</sup>	Dinner ("Monte Vino Restaurant", Sopot, Bohaterów Monte Cassino 63/9 street)





**Wednesday, 22.06.2016**

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>	
7 <sup>00</sup> – 8 <sup>30</sup>	Breakfast (Hotel Restaurant)	
8 <sup>30</sup> - 9 <sup>00</sup>	<b>Plenary Session</b>	
	<i>Chair: Berg Heinz-Peter</i>	
	<i>Title: Reliability and maintainability characteristics in semi-Markov models</i> <i>Speaker: Grabski Franciszek</i>	
9 <sup>00</sup> – 10 <sup>30</sup>	<b>Seminar Session</b>	
	<i>Chair: Kolowrocki Krzysztof</i>	
	<i>Title: A Degradation-Threshold-Shock model for a system. The case of dependent causes of failure in finite-time</i> <i>Speakers: Caballé Nuria C., Castro Inma T.</i>	
	<i>Title: Email Forensic Tools: A roadmap to email header analysis through a cybercrime use case</i> <i>Speaker: Charalambous Elisavet, Karkas George, Anastasiades Andreas, Bratskas Romaios, Koutras Nikolaos</i>	
	<i>Title: Probabilistic safety assessment of fire hazards</i> <i>Speaker: Türschmann Michael, Röwekamp, Marina</i>	
	<i>Title: Risk and reliability analysis of the selected Boeing types</i> <i>Speaker: Woch Marta, Kamiński Grzegorz, Matyjewski Marek</i>	
	<i>Title: Analytical modelling operation processes of composed and integrated information systems on the principles of system engineering (poster)</i> <i>Speaker: Kostogryzov Andrey, Stepanov Pavel, Nistratov Andrey, Nistratov George, Zubarev Igor, Grigoriev Leonid</i>	
	10 <sup>30</sup> - 11 <sup>00</sup>	Coffee/Tea Break (Seminar Room)
	11 <sup>00</sup> – 12 <sup>30</sup>	<b>EU-CIRCLE Workshop 2– Part 1</b>
		<b>General Methodology on Critical Infrastructure Safety Aspects</b> <i>Moderators: Blokus-Roszkowska Agnieszka, Sfetsos Athanasios</i>
	<i>Title: Methodology for Baltic Sea region critical infrastructures safety and resilience to climate change analysis (poster)</i> <i>Speakers: Blokus-Roszkowska Agnieszka, Bogalecka Magda, Kolowrocki Krzysztof</i>	
	<i>Title: Methodology for port critical infrastructures safety and resilience to climate change analysis</i> <i>Speakers: Blokus-Roszkowska Agnieszka, <u>Guze Sambor</u>, Kolowrocki Krzysztof, Soszyńska-Budny Joanna</i>	
	<i>Title: Methodology for shipping critical infrastructure network safety and resilience to climate change analysis</i> <i>Speakers: <u>Bogalecka Magda</u>, Kolowrocki Krzysztof, Ledóchowski Marek, Reszko Marek, Soszyńska-Budny Joanna</i>	



Wednesday, 22.06.2016

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
	<p><i>Title: Methodology for oil rigs critical infrastructure network safety and resilience to climate change analysis</i>  <i>Speakers: Kołowrocki Krzysztof, Kuligowska Ewa, Reszko Marek</i></p> <p><i>Title: Methodology for wind farms critical infrastructure network safety and resilience to climate change analysis (poster)</i>  <i>Speakers: Kołowrocki Krzysztof, Kuligowska Ewa, Reszko Marek</i></p> <p><i>Title: Methodology for electric cables critical infrastructure network safety and resilience to climate change analysis</i>  <i>Speakers: <u>Blokus-Roszkowska Agnieszka</u>, Kołowrocki Krzysztof, Soszyńska-Budny Joanna</i></p>
12 <sup>30</sup> – 14 <sup>00</sup>	Lunch (Hotel Restaurant)
14 <sup>00</sup> – 15 <sup>30</sup>	<p style="text-align: center;"><b>EU-CIRCLE Workshop 2– Part 2</b></p> <p style="text-align: center;"><b>General Methodology on Critical Infrastructure Safety Aspects</b></p> <p><i>Moderators: <u>Blokus-Roszkowska Agnieszka</u>, Sfetsos Athanasios</i></p> <p><i>Title: Methodology for gas pipelines critical infrastructure network safety and resilience to climate change analysis</i>  <i>Speakers: <u>Blokus-Roszkowska Agnieszka</u>, <u>Bogalecka Magda</u>, Dziula Przemyslaw, Kołowrocki Krzysztof</i></p> <p><i>Title: Methodology for oil pipeline critical infrastructures safety and resilience to climate change analysis (poster)</i>  <i>Speakers: Drzazga Michał, Kołowrocki Krzysztof, Soszyńska-Budny Joanna</i></p> <p><i>Title: Methodology for ship traffic and port operation information critical infrastructures safety and resilience to climate change analysis (poster)</i>  <i>Speakers: <u>Blokus-Roszkowska Agnieszka</u>, Guze Sambor, Kołowrocki Krzysztof, Ledóchowski Marek, Soszyńska-Budny Joanna</i></p> <p><i>Title: Methodology for joint network of port, shipping and ship traffic and operation information critical infrastructure networks safety and resilience to climate change analysis</i>  <i>Speakers: <u>Guze Sambor</u>, Kołowrocki Krzysztof</i></p> <p><i>Title: General methodology on the Baltic Sea critical infrastructure safety aspects – Dictionary</i>  <i>Speakers: <u>Blokus-Roszkowska Agnieszka</u>, <u>Bogalecka Magda</u>, <u>Kołowrocki Krzysztof</u></i></p>
15 <sup>30</sup> – 16 <sup>00</sup>	Coffee/Tea Break (Seminar Room)
16 <sup>00</sup> – 18 <sup>00</sup>	<p style="text-align: center;"><b>EU-CIRCLE Training Course 2</b></p> <p style="text-align: center;"><b>Modelling Critical Infrastructure Operation Process</b></p>
	<i>Speaker: Soszyńska-Budny Joanna</i>



Wednesday, 22.06.2016

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
18 <sup>00</sup> - 19 <sup>00</sup>	Free Time
19 <sup>00</sup> - 23 <sup>00</sup>	Seminar Dinner ("Grand Hotel Restaurant", Sopot, Powstańców Warszawy 12/14 street)



**Thursday, 23.06.2016**

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
7 <sup>00</sup> – 8 <sup>30</sup>	Breakfast (Hotel Restaurant)
8 <sup>30</sup> - 9 <sup>00</sup>	<b>Plenary Session</b>
	<i>Chair: Kołowrocki Krzysztof</i> <i>Title: Analysis and Assessment Methods of Water Network Failure in Critical Infrastructure Methodology</i> <i>Speakers: Tchórzewska-Cieślak Barbara, Pietrucha-Urbanik Katarzyna</i>
9 <sup>00</sup> - 10 <sup>30</sup>	<b>EU-CIRCLE Workshop 3 – Part 1</b> <b>Modelling, Identification and Prediction of Operation Processes and Safety of Complex Systems</b>
	<i>Moderator: Kołowrocki Krzysztof</i>
	<i>Title: Modelling critical infrastructure operation process including operating environment threats</i> <i>Speakers: <u>Kołowrocki Krzysztof</u>, Soszyńska-Budny Joanna</i> <i>Title: Modelling port oil piping transport and shipping critical infrastructures operation processes including operating environment threats</i> <i>Speakers: Kołowrocki Krzysztof, <u>Soszyńska-Budny Joanna</u></i> <i>Title: Modelling climate-weather change process including extreme weather hazards for critical infrastructure operating area</i> <i>Speakers: <u>Kołowrocki Krzysztof</u>, Soszyńska-Budny Joanna</i> <i>Title: Modelling climate-weather change process including extreme weather hazards for port oil piping transportation system</i> <i>Speakers: Jakusik Ewa, Kołowrocki Krzysztof, Kuligowska Ewa, Soszyńska-Budny Joanna, <u>Torbicki Mateusz</u></i> <i>Title: Modelling climate-weather change process including extreme weather hazards for maritime ferry</i> <i>Speakers: Jakusik Ewa, Kołowrocki Krzysztof, <u>Kuligowska Ewa</u>, Soszyńska-Budny Joanna, Torbicki Mateusz</i>
10 <sup>30</sup> - 11 <sup>00</sup>	Coffee/Tea Break (Seminar Room)
11 <sup>00</sup> - 12 <sup>30</sup>	<b>EU-CIRCLE Workshop 3 – Part 2</b> <b>Modelling, Identification and Prediction of Operation Processes and Safety of Complex Systems</b>
	<i>Moderator: Kołowrocki Krzysztof</i> <i>Title: Identification methods and procedures of critical infrastructure operation process including operating environment threats (poster)</i> <i>Speakers: Kołowrocki Krzysztof, Soszyńska-Budny Joanna</i> <i>Title: Identification of port oil piping transportation system operation process including operating environment threats</i> <i>Speakers: Kołowrocki Krzysztof, <u>Soszyńska-Budny Joanna</u></i>





**Thursday, 23.06.2016**

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
	<p><i>Title: Identification of maritime ferry operation process including operating environment threats</i>  <i>Speakers: <u>Kolowrocki Krzysztof</u>, <u>Soszyńska-Budny Joanna</u></i></p> <p><i>Title: Prediction of port oil piping transportation system operation process including operating environment threats</i>  <i>Speakers: <u>Kolowrocki Krzysztof</u>, <u>Soszyńska-Budny Joanna</u></i></p> <p><i>Title: Prediction of maritime ferry operation process including operating environment threats</i>  <i>Speakers: <u>Kolowrocki Krzysztof</u>, <u>Soszyńska-Budny Joanna</u></i></p>
12 <sup>30</sup> – 14 <sup>00</sup>	Lunch (Hotel Restaurant)
14 <sup>00</sup> – 15 <sup>30</sup>	<p style="text-align: center;"><b>EU-CIRCLE Workshop 3 – Part 3</b>  <b>Modelling, Identification and Prediction of Operation Processes and Safety of Complex Systems</b></p> <p><i>Moderator: <u>Kolowrocki Krzysztof</u></i></p> <p><i>Title: Identification methods and procedures of climate-weather change process including extreme weather hazards for port oil piping transportation system operating at under water Baltic Sea area</i>  <i>Speakers: <u>Jakusik Ewa</u>, <u>Kolowrocki Krzysztof</u>, <u>Kuligowska Ewa</u>, <u>Soszyńska-Budny Joanna</u>, <u>Torbicki Mateusz</u></i></p> <p><i>Title: Identification methods and procedures of climate-weather change process including extreme weather hazards of port oil piping transportation system operating at land Baltic seaside area</i>  <i>Speakers: <u>Jakusik Ewa</u>, <u>Kolowrocki Krzysztof</u>, <u>Kuligowska Ewa</u>, <u>Soszyńska-Budny Joanna</u>, <u>Torbicki Mateusz</u></i></p> <p><i>Title: Identification methods and procedures of climate-weather change process including extreme weather hazards for the maritime ferry operating at Gdynia port area</i>  <i>Speakers: <u>Jakusik Ewa</u>, <u>Kolowrocki Krzysztof</u>, <u>Kuligowska Ewa</u>, <u>Soszyńska-Budny Joanna</u>, <u>Torbicki Mateusz</u></i></p> <p><i>Title: Identification methods and procedures of climate-weather change process including extreme weather hazards for maritime ferry operating at Baltic Sea open waters (poster)</i>  <i>Speakers: <u>Jakusik Ewa</u>, <u>Kolowrocki Krzysztof</u>, <u>Kuligowska Ewa</u>, <u>Soszyńska-Budny Joanna</u>, <u>Torbicki Mateusz</u></i></p> <p><i>Title: Prediction of climate-weather change process including extreme weather hazards for port oil piping transportation system and maritime ferry operating at Baltic Sea area</i>  <i>Speakers: <u>Kolowrocki Krzysztof</u>, <u>Soszyńska-Budny Joanna</u></i></p>



Thursday, 23.06.2016

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
15 <sup>30</sup> – 16 <sup>00</sup>	Coffee/Tea Break (Seminar Room)
16 <sup>00</sup> – 17 <sup>00</sup>	<b>EU-CIRCLE Training Course 3</b> <b>Prediction on Critical Infrastructure Operation Process</b>
	<i>Speaker: Soszyńska-Budny Joanna</i>
17 <sup>00</sup> – 18 <sup>00</sup>	<b>EU-CIRCLE Training Course 4</b> <b>Modelling Climate-Weather Change Process</b>
	<i>Speaker: Torbicki Mateusz</i>
18 <sup>00</sup> - 19 <sup>00</sup>	Free Time
19 <sup>00</sup> - 23 <sup>00</sup>	Dinner ("Harnaś Restaurant", Sopot, Stanisława Moniuszki 9 street)



**Friday, 24.06.2016**

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>	
7 <sup>00</sup> – 8 <sup>30</sup>	Breakfast (Hotel Restaurant)	
8 <sup>30</sup> - 9 <sup>00</sup>	<b>Plenary Session</b>	
	<i>Chair: Tchórzewska-Cieślak Barbara</i>	
	<i>Title: Critical Infrastructure Preparedness: Cascading of Disruptions Considering Vulnerability and Dependency Speaker: Eid Mohamed, Hakkarainen Tuula, Terhi Kling, Souza de Corsi Eduardo, El-Hami Abdelkhalak</i>	
9 <sup>00</sup> – 10 <sup>30</sup>	<b>EU-CIRCLE Workshop 3 – Part 4 Modelling Operation Processes and Safety of Complex Systems</b>	
	<i>Moderator: Kołowrocki Krzysztof</i>	
	<i>Title: Modelling operation process of Baltic port, shipping, ship traffic and operation information critical infrastructure network Speakers: Guze Sambor, Kołowrocki Krzysztof</i>	
	<i>Title: Modelling operation process of global Baltic network of critical infrastructure networks Speakers: Dziula Przemysław, Kołowrocki Krzysztof</i>	
	<i>Title: Safety of multistate ageing systems (poster) Speakers: Kołowrocki Krzysztof, Soszyńska-Budny Joanna</i>	
	<i>Title: Modelling safety of multistate ageing systems with dependent components and subsystems Speakers: Blokus-Roszkowska Agnieszka, Kołowrocki Krzysztof</i>	
	<i>Title: Modelling critical infrastructure accident consequences – designing the general model of critical infrastructure accident consequences Speakers: Bogalecka Magda, Kołowrocki Krzysztof</i>	
	10 <sup>30</sup> - 11 <sup>00</sup>	Coffee/Tea Break (Seminar Room)
	11 <sup>00</sup> – 12 <sup>30</sup>	<b>EU-CIRCLE Training Course 5 Identification of Climate-Weather Change Process</b>
		<i>Speaker: Kuligowska Ewa</i>
12 <sup>30</sup> – 14 <sup>00</sup>	Lunch (Hotel Restaurant)	
14 <sup>00</sup> – 15 <sup>30</sup>	<b>EU-CIRCLE Training Course 6 Modelling Critical Infrastructure Accident Consequences</b>	
	<i>Speaker: Bogalecka Magdalena</i>	
15 <sup>30</sup> – 16 <sup>00</sup>	Coffee/Tea Break (Seminar Room)	
16 <sup>00</sup> – 19 <sup>00</sup>	<b>General Assembly of Polish Safety and Reliability Association, Election of PSRA Management Board for Tenure 2016-2019</b>	
19 <sup>00</sup> - 23 <sup>00</sup>	Farewell Dinner (“Golden Tulip Residence” Restaurant)	



Saturday, 25.06.2016

<b>Time</b>	<b>Seminar Events (Seminar Room)</b>
7 <sup>00</sup> – 8 <sup>30</sup>	Breakfast (Hotel Restaurant)
8 <sup>30</sup> – 9 <sup>30</sup>	<i>Discussion on the subject and organization of the next SSARS Seminars</i>
	<i>Chair: Soszyńska-Budny Joanna</i>
9 <sup>30</sup> – 10 <sup>00</sup>	<i>Title: Closing words</i> <i>Speaker: Kołowrocki Krzysztof</i>
10 <sup>00</sup> – 12 <sup>00</sup>	<b>Participants Departure</b>

*Krzysztof Kołowrocki & Joanna Soszyńska-Budny*

*Gdynia, 17.06.2016.*