

SSARS 2022

16th Summer Safety and Reliability Seminar and Workshop
September 4–11, 2022, Ciechocinek, Poland

PROGRAMME



Organizers and Sponsors

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



Secretariat

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Website

<https://ssars.umg.edu.pl>

Location

„Pod Teżniami” Hotel Conference & Spa
<https://www.podtezniami.pl/en/contact/>
Warzelniana 7 Street
87-720 Ciechocinek, Poland
e-mail: rezerwacja@podtezniami.pl

Seminar Scientific Board

General Chair

Kołowrocki Krzysztof, Gdynia Maritime University, Poland

Executive Chairs

Bogalecka Magdalena, Dąbrowska Ewa, Magryta-Mut Beata, Gdynia Maritime University, Poland

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Popek Marzenna, Poland
Tanguy Christian, France
Tchórzewska-Cieślak Barbara, Poland
Woch Marta, Poland
Zaitseva Elena, Slovakia

Technical Team

Cichocka Oliwia, Poland
Dąbrowski Maciej, Poland

Sunday, 4.09.2022

| Time | Seminar Events |
|--|---|
| 14 ⁰⁰ - 17 ⁰⁰ | <i>Participants' Arrival</i> ("Pod Těžniami" Hotel) |
| 17 ⁰⁰ - 18 ⁰⁰ | <i>Participants' Registration</i> (Seminar Desk) |
| 18⁰⁰ - 19⁰⁰ | Dinner (Hotel Restaurant) |

Monday, 5.09.2022

| Time | Seminar Events (Seminar Room) |
|--|--|
| 7⁴⁵ – 10⁰⁰ | Breakfast (Hotel Restaurant) |
| 10 ⁰⁰ – 10 ³⁰ | Opening Ceremony |
| | Welcome (<i>Kołowrocki Krzysztof</i> – General Chair) Technical Information (<i>Dąbrowska Ewa</i> – Executive Chair) |
| 10 ³⁰ – 11 ⁰⁰ | Plenary Session 1 |
| | <i>Chair: Bogalecka Magdalena</i> |
| | <i>Title:</i> European Union Global Critical Infrastructure Safety Management System – EUSAFEGLOBE. Research project proposition <i>Speaker: Kołowrocki Krzysztof</i> |
| 11⁰⁰ – 11³⁰ | Coffee/Tea Break (Seminar Room) |
| 11 ³⁰ – 12 ⁰⁰ | Plenary Session 2 |
| | <i>Chair: Woch Marta</i> |
| | <i>Title:</i> Estimation of Weibull distribution parameters using sequences of minimal repair times <i>Speaker: Malinowski Jacek</i> |
| 12⁰⁰ - 13⁰⁰ | Free Time |
| 13⁰⁰ – 15⁰⁰ | Lunch (Hotel Restaurant) |
| 14 ⁰⁰ – 18 ⁰⁰ | Polish Safety and Reliability Association Management Board General Meeting |
| 18⁰⁰ - 22⁰⁰ | Laudation Evening and Seminar Dinner (Hotel Restaurant) People of Polish Safety and Reliability Association and Summer Safety and Reliability Seminars – Professors’ biographical notes: Mohamed Eid, Franciszek Grabski, Wojciech Zamojski, Józef Żurek <i>Moderator: Kołowrocki Krzysztof</i> |

Tuesday, 6.09.2022

| Time | Seminar Events (Seminar Room) |
|---|---|
| 7⁴⁵ – 10⁰⁰ | Breakfast (Hotel Restaurant) |
| 10 ⁰⁰ – 10 ³⁰ | Plenary Session 3 |
| Beijing (China) time: 16 ⁰⁰ – 16 ³⁰ | <i>Chair: Kołowrocki Krzysztof</i> |
| | <i>Title: Approximate method for redundancy allocation problem in multi-state series-parallel system</i> |
| | <i>Speaker: Zhang Hanxiao, <u>Li Yan-Fu</u></i> |
| 10 ³⁰ – 11 ⁰⁰ | Seminar Session 1 |
| | <i>Chair: Magryta-Mut Beata</i> |
| | <i>Title: Operation process of training aircraft diamond DA 20-C1</i> |
| | <i>Speaker: <u>Woch Marta</u>, Tomaszewska Justyna, Kościak Kinga, Zieja Mariusz</i> |
| | <i>Title: Sequence of events and probability of sinking of German battleship <i>Bismarck</i></i> |
| | <i>Speaker: <u>Opyrchal Leszek</u>, Bąk Aleksandra</i> |
| | <i>Title: Preliminary approach to ecological risk assessment of microplastics in the selected coastal regions of the Baltic Sea</i> |
| | <i>Speaker: <u>Krasowska Katarzyna</u>, Dereszewska Alina, Popek Marzenna</i> |
| 11⁰⁰ – 11³⁰ | Coffee/Tea Break (Seminar Room) |
| 11 ³⁰ – 12 ⁰⁰ | Plenary Session 4 |
| | <i>Chair: <u>Opyrchal Leszek</u></i> |
| | <i>Title: Performance analysis of intelligent agents in complex event processing systems</i> |
| | <i>Speaker: Walkowiak Tomasz, <u>Mazurkiewicz Jacek</u>, Sugier Jarosław, Śliwiński Przemysław</i> |
| 12 ⁰⁰ – 12 ³⁰ | Seminar Session 2 |
| | <i>Chair: Popek Marzenna</i> |
| | <i>Title: Modelling oil spill layer thickness and hydro-meteorological conditions impacts on its domain movement at sea area</i> |
| | <i>Speaker: <u>Dąbrowska Ewa</u></i> |
| | <i>Title: Maritime transportation system safety and operation cost joint optimization</i> |
| | <i>Speaker: Kołowrocki Krzysztof, <u>Magryta-Mut Beata</u></i> |
| | <i>Title: Port oil terminal operation cost and system safety joint optimization</i> |
| | <i>Speaker: <u>Magryta-Mut Beata</u></i> |
| 13⁰⁰ – 15⁰⁰ | Lunch (Hotel Restaurant) |
| 15³⁰ - 18⁰⁰ | Free Time |
| 18⁰⁰ - 19⁰⁰ | Dinner (Hotel Restaurant) |

Wednesday, 7.09.2022

| Time | Seminar Events (Seminar Room) |
|--|--|
| 7⁴⁵ – 10⁰⁰ | Breakfast (Hotel Restaurant) |
| | Plenary Session 5 |
| 10 ⁰⁰ – 10 ³⁰ | <i>Chair: Malinowski Jacek</i> |
| | <i>Title: Transient behaviour of instantaneous and average availabilities in non-Markovian configuration</i> |
| | <i>Speaker: Tanguy Christian</i> |
| | Seminar Session 3 |
| 10 ³⁰ – 11 ⁰⁰ | <i>Chair: Mazurkiewicz Jacek</i> |
| | <i>Title: Degradation model for system incorporating heterogeneities</i> |
| | <i>Speaker: <u>Bautista Lucía</u>, Castro Inma T., Landesa Luis</i> |
| | <i>Title: Collecting and processing data of network devices in terms of monitoring and warning system implementation</i> |
| | <i>Speaker: Dąbrowski Maciej</i> |
| | <i>Title: General stochastic models for series multicomponent system reliability</i> |
| | <i>Speaker: Filus Jerzy, <u>Filus Lidia</u></i> |
| 11⁰⁰ – 11³⁰ | Coffee/Tea Break (Seminar Room) |
| | Plenary Session 6 |
| 11 ³⁰ – 12 ⁰⁰ | <i>Chair: Dąbrowski Maciej</i> |
| | <i>Title: Water distribution systems failure risk assessment</i> |
| | <i>Speaker: <u>Pietrucha-Urbanik Katarzyna</u>, Tchórzewska-Cieślak Barbara, Eid Mohamed</i> |
| | Seminar Session 4 |
| 12 ⁰⁰ – 12 ²⁰ | <i>Chair: Krasowska Katarzyna</i> |
| | <i>Title: Modelling process of municipal wastewater quality – backgrounds and preliminary application</i> |
| | <i>Speaker: <u>Bogalecka Magdalena</u>, Dereszewska Alina</i> |
| | <i>Title: Multistate approach to food packaging material quality and consumption safety analysis</i> |
| | <i>Speaker: <u>Bogalecka Magdalena</u>, Morawska Magda</i> |
| 13⁰⁰ – 15⁰⁰ | Lunch (Hotel Restaurant) |
| 15³⁰ - 18⁰⁰ | Free Time |
| 18⁰⁰ - 19⁰⁰ | Dinner (Hotel Restaurant) |

Thursday, 8.09.2022

| Time | Seminar/Workshop Events (Seminar Room) |
|--|---|
| 7⁴⁵ – 10⁰⁰ | Breakfast (Hotel Restaurant) |
| 10 ⁰⁰ – 10 ³⁰ | Plenary Session 7 |
| | <i>Chair: Dereszewska Alina</i> |
| | <i>Title: Towards strategic resilience of process plants and critical infrastructure regarding the functional safety and cybersecurity requirements</i> <i>Speaker: Kosmowski Kazimierz T.</i> |
| 10 ³⁰ – 10 ⁵⁰ | Discussion on the subject and organization of SSARS 2023 |
| | <i>Moderator: Bogalecka Magdalena</i> |
| 10 ⁵⁰ – 11 ⁰⁰ | SSARS Closing Ceremony |
| | Closing words |
| | <i>Speaker: Kolowrocki Krzysztof – General Chair</i> |
| 11 ⁰⁰ – 11 ³⁰ | SSARS Participants Departure |
| 11⁰⁰ – 11³⁰ | Coffee/Tea Break (Seminar Room) |
| 11 ³⁰ – 12 ³⁰ | Post-SSARS Workshop System of Critical Infrastructure Safety Training Courses – SCISTC Training Course 1 |
| | <i>Moderator: Kolowrocki Krzysztof</i> |
| | <i>Title: General approach to critical infrastructure safety modelling</i> <i>Speaker: Kolowrocki Krzysztof</i> |
| 12 ⁰⁰ – 12 ³⁰ | Post-SSARS Workshop System of Critical Infrastructure Safety Training Courses – SCISTC Training Course 2 |
| | <i>Moderator: Kolowrocki Krzysztof</i> |
| | <i>Title: Two-state approach to critical infrastructure reliability modelling</i> <i>Speakers: Bogalecka Magdalena, Kolowrocki Krzysztof, Magryta-Mut Beata</i> |
| 13⁰⁰ – 15⁰⁰ | Lunch (Hotel Restaurant) |
| 15³⁰ - 18⁰⁰ | Free Time |
| 18⁰⁰ - 19⁰⁰ | Dinner (Hotel Restaurant) |

Friday, 9.09.2022

| Time | Workshop Events (Seminar Room) |
|--|--|
| 7⁴⁵ – 10⁰⁰ | Breakfast (Hotel Restaurant) |
| 10 ⁰⁰ – 10 ³⁰ | Post-SSARS Workshop System of Critical Infrastructure Safety Training Courses – SCISTC Training Course 3 |
| | <i>Moderator: Kolowrocki Krzysztof</i> |
| | <i>Title: Multi-state approach to critical infrastructure reliability modelling Speakers: Bogalecka Magdalena, Kolowrocki Krzysztof, Magryta-Mut Beata</i> |
| 10 ³⁰ – 11 ⁰⁰ | Post-SSARS Workshop System of Critical Infrastructure Safety Training Courses – SCISTC Training Course 4 |
| | <i>Moderator: Kolowrocki Krzysztof</i> |
| | <i>Title: Two-state approach to critical infrastructure safety modelling Speakers: Bogalecka Magdalena, Kolowrocki Krzysztof, Magryta-Mut Beata</i> |
| 11⁰⁰ – 11³⁰ | Coffee/Tea Break (Seminar Room) |
| 11 ³⁰ – 12 ⁰⁰ | Post-SSARS Workshop System of Critical Infrastructure Safety Training Courses – SCISTC Training Course 5 |
| | <i>Moderator: Kolowrocki Krzysztof</i> |
| | <i>Title: Multi-state approach to critical infrastructure safety modelling Speakers: Bogalecka Magdalena, Kolowrocki Krzysztof, Magryta-Mut Beata</i> |
| 12 ⁰⁰ – 12 ³⁰ | Post-SSARS Workshop System of Critical Infrastructure Safety Training Courses – SCISTC Training Course 6 |
| | <i>Moderator: Kolowrocki Krzysztof</i> |
| | <i>Title: Safety of critical infrastructure without outside impacts Speakers: Kolowrocki Krzysztof, Magryta-Mut Beata</i> |
| 13⁰⁰ – 15⁰⁰ | Lunch (Hotel Restaurant) |
| 15³⁰ - 18⁰⁰ | Free Time |
| 18⁰⁰ - 19⁰⁰ | Dinner (Hotel Restaurant) |

Saturday, 10.09.2022

| Time | Workshop Events (Seminar Room) |
|--|--|
| 7⁴⁵ – 10⁰⁰ | Breakfast (Hotel Restaurant) |
| 10 ⁰⁰ – 10 ³⁰ | Post-SSARS Workshop System of Critical Infrastructure Safety Training Courses – SCISTC Training Course 7 |
| | <i>Moderator: Kołowrocki Krzysztof</i> |
| | <i>Title: Critical infrastructure operation process modelling Speakers: Kołowrocki Krzysztof, Magryta-Mut Beata</i> |
| 10³⁰ – 11⁰⁰ | Coffee/Tea Break (Seminar Room) |
| 11 ⁰⁰ – 11 ³⁰ | Post-SSARS Workshop System of Critical Infrastructure Safety Training Courses – SCISTC Training Course 8 |
| | <i>Moderator: Kołowrocki Krzysztof</i> |
| | <i>Title: Safety of critical infrastructure impacted by its operation process Speakers: Dąbrowska Ewa, Kołowrocki Krzysztof, Magryta-Mut Beata</i> |
| 13⁰⁰ – 15⁰⁰ | Lunch (Hotel Restaurant) |
| 15³⁰ - 18⁰⁰ | Free Time |
| 18⁰⁰ - 19⁰⁰ | Dinner (Hotel Restaurant) |

Sunday, 11.09.2022

| Time | Workshop Events (Seminar Room) |
|-------------------------------------|--|
| 7 ⁴⁵ – 10 ⁰⁰ | Breakfast (Hotel Restaurant) |
| 10 ⁰⁰ – 10 ³⁰ | <i>Title: Closing words Speaker: Bogalecka Magdalena</i> |
| 10 ³⁰ – 11 ⁰⁰ | Post-SSARS Workshop Participants Departure |

Gdynia, 28.08.2022