



DIPARTIMENTO DI SCIENZE CHIMICHE,
BIOLOGICHE, FARMACEUTICHE
ED AMBIENTALI



Bridging Geophysics and Industrial Safety: Assessing Seismo-Induced Chemical Risk with RAPID-N

An International Webinar Series (1st and 5th December 2025)

Professor G. Giorgianni, on behalf of the **Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences (MIFT)** and the **Department of Chemical, Biological, Pharmaceutical and Environmental Sciences (ChiBioFarAm)**, is pleased to invite you to an international webinar series in collaboration with the **European Commission's Joint Research Centre (JRC)** in Ispra, Varese.

This event, part of the “**Seismo-induced Chemical Risk**” course part of the Master Degree course in “**GEOPHYSICAL SCIENCES FOR SEISMIC RISK**”, coordinated by Prof. Pasquale Castagno, hosts leading experts from the JRC to explore cutting-edge methodologies in Natech (Natural Hazard Triggering Technological Accidents) risk management using the **RAPID-N software tool**.

Join us to connect with practical industrial risk analysis.

Distinguished Guest Speakers



Dr. Elisabeth Krausmann,

Principal Scientist

European Commission, Joint Research Centre (JRC), Ispra



Dr. Kyriaki Gkoktsi

Natech Risk Researcher,

European Commission, Joint Research Centre (JRC), Ispra

Dates & Venue (Hybrid Event)

Speakers will connect remotely. In-person attendance is scheduled for students, faculty, and guests. To attend the event, you need only to **book your seat for free by compiling the online form available [online](#)**.



SESSION 1: Fundamentals and Theory

- **Date:** Monday, 1 December 2025
- **Time:** 09:15 – 13:30
- **Room:** A-1-6 (Polo Papardo)

SESSION 2: Tools and Practical Applications

- **Date:** Friday, 5 December 2025
- **Time:** 09:15 – 13:30
- **Room:** A-1-8 (Polo Papardo)

Why Attend?

- **Expert Training:** Learn directly from the leading JRC scientists who develop European standards for Natech risk management.
- **Discover RAPID-N:** Witness a live demonstration of **RAPID-N (Rapid Natech Risk Assessment Tool)**, a key software tool for assessing seismic risk at industrial plants.
- **Academic Credits:** Students enrolled in the M.Sc. in “**Geophysical Sciences for Seismic Risk**” will receive **1 CFU**. Participation is also highly recommended for students in **Chemistry** and **Engineering**.
- **Networking:** An opportunity to meet faculty, industry professionals, and explore future research opportunities with the JRC.

Webinar Program & Learning Objectives

Learning Objectives

Upon completing the webinar, participants will be able to:

- Understand the fundamental concepts of Natech risk and its management framework.
- Describe the theoretical framework for earthquake-triggered Natech risk analysis.
- Become familiar with the functionalities and applications of the JRC’s RAPID-N tool.

- Analyze and interpret the results of risk scenarios applied to real-world case studies (e.g., 1999 Kocaeli earthquake).
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Detailed Agenda

SESSION 1: Monday, 1 December 2025 (Room A-1-6)

- **09:30 | Registration and Welcome**
 - Dr. Gianfranco Giorgianni (Lecturer, UniMe)
 - Prof. Debora Presti (Coordinator of the M.Sc. Program, UniMe)
- **10:00 | Introduction to Natech Risk Concepts and Risk Management**
 - Dr. Elisabeth Krausmann (JRC)
- **11:00 | Theoretical Framework for Earthquake-Triggered Natech Risk Analysis**
 - Kyriaki Gkoktsi (JRC)
- **13:00 | Q&A Session and Open Discussion**
 - Moderator: Dr. G. Giorgianni

SESSION 2: Friday, 5 December 2025 (Room A-1-8)

- **09:30 | Welcome and Introduction to the Session**
 - **09:45 | The RAPID-N Tool: Description and Practical Demonstration**
 - Kyriaki Gkoktsi (JRC)
 - *This session will feature a live software demo, showcasing the analysis of seismic risk scenarios on chemical plants.*
 - **12:45 | Q&A Session and Future Opportunities**
 - **13:30 | Concluding Remarks**
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Target Audience

This event is open to:

- Students of the M.Sc. in "Geophysical Sciences for Seismic Risk"
- Students from the Chemistry and Industrial Engineering degree programs
- Faculty and Researchers (MIFT & ChiBioFarAm Departments)
- Industry professionals and guests

Event Organization

Dr. Gianfranco Giorgianni *Lecturer, "Seismo-induced Chemical Risk" MIFT & ChiBioFarAm Departments*

Prof. Pasquale Castagno & Debora Presti *Coordinator and Vice-coordinator of the M.Sc. in "Geophysical Sciences for Seismic Risk" MIFT Department*

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