

Dr. Eng. Antonio Guglielmelli

Curriculum Vitae

Email: antonio.guglielmelli@enea.it | anguglie@bo.infn.it | antonio.guglielmelli@cern.ch

LinkedIn: <https://www.linkedin.com/in/antonio-guglielmelli-5b883824/>

Personal information: Sex: Male | Date of birth: 26/05/1975 | Nationality: Italian

WORK FILED

Chemical and Nuclear Engineering

WORK EXPERIENCE

Enea Researcher (Level III – F2) and Associated Researcher INFN-UNIBO

16/10/2025 – Present | ENEA, FSN-SICNUC-SIN, Bologna Research Centre, Mille 21 street, 40121 Bologna (BO), IT

- **Main duties:** Research activities for the rapid evaluation of nuclear severe accidents consequences and atmospheric radionuclide dispersion modelling. Criticality safety studies and neutronics analysis on LWR systems, and sensitivity & uncertainty analysis on nuclear data. Collaboration on research activities regarding experimental cross-section measurements at the CERN n_TOF experimental facility.
- **Activity:** Research in the field of nuclear safety and neutronics of LWR systems.
- **Contract type:** Permanent position.

Contractual Agent (FG IV - Step 2) – Joint Research Centre (JRC)

15/10/2022 – 15/10/2025 (on leave from ENEA) | Joint Research Centre Centro, Enrico Fermi Street, 2749 Ispra (VA), IT

- **Main duties:** Scientific support to European Commission policies in the field of environmental radioactivity and Emergency Preparedness & Response.
- **Activity:** Research in the field of environmental radioactivity, atmospheric radioactivity dispersion codes, and Nuclear Emergency Preparedness and Response.
- **Contract type:** Fixed-term contract.

Researcher (Level III – F2) – ENEA

01/02/2019 – 30/09/2022 | ENEA, FSN-SICNUC-SIN, Bologna Research Centre, Mille 21 Street, 40121 Bologna (BO), IT

- **Main duties:** Research activities on the rapid assessment of source term due to severe nuclear accident, on the methodology and modelling of radioactive atmospheric transport, on criticality safety, on neutronic of reactor systems and on the measurement and validation of nuclear cross section.
- **Activity:** Research on nuclear safety, neutronic of LWR systems and nuclear data.
- **Contract type:** Permanent position.

Scholarship – ENEA

03/11/2017 – 31/01/2019 | ENEA, FSN-SICNUC-SIN, Research Centre Bologna

- **Main duties:** Collaborator in research activities carried out within the European project "FASTNET"
- **Activity:** Research in the field of rapid consequence assessment of severe accidents
- **Contract type:** Research Fellowship

Research Contract – (CIRTEN – UNIPI/ENEA)

June 2017 – August 2027 | University of Pisa, Dip. of Civil and Industrial Engineering, Lazzarino Square 2, 56126 Pisa, IT

- **Main duties:** Collaborator in research activities regarding the structural-dynamic behaviour of a PWR containment.

- **Activity:** Research within the PWR Containment Design Project.
- **Contract type:** Professional Collaboration Contract

Research Contract – (Hydromine, Inc.)

November 2016 – February 2017 | Hydromine Nuclear Energy S.a.r.l., 19, Rue de Bitburg, L-1273 Luxembourg

- **Main duties:** Development and implementation of an MCNP6.1 input model for neutron displacement damage (DPA) analysis of the reactor vessel for the innovative lead-cooled reactor LFR-AS-200.
- **Activity:** Research on accurate evaluation methods for neutron damage using Monte Carlo codes.
- **Contract type:** Professional Collaboration Contract.

Research Contract – (CIRTEN – ENEA)

October 2015 – June 2016 | ENEA, Bologna Research Centre, Martiri di Monte Sole Street 42, Bologna, IT

- **Main duties:** Development and implementation of an MCNPX/MCNP6 input file for evaluating the gamma dose generated by a 15x15 PWR assembly at end-of-cycle conditions.
- **Activity:** Research on accurate dose assessment methodologies using Monte Carlo codes.
- **Contract type:** Professional Collaboration Contract.

Research Contract – (CIRTEN – UNIBO/ENEA)

May 2015 – September 2015 | ENEA, Bologna Research Centre, Martiri di Monte Sole Street 42, Bologna, IT

- **Main duties:** Evaluation of core inventory for a UOX/MOX loaded PWR and development of a methodology for Source Term evaluation using open-source regulatory guides (NUREG).
- **Activity:** Research on UOX/MOX fuel inventory and Source Term evaluation.
- **Contract type:** Professional Collaboration Contract

Research Fellow – UNIBO

April 2014 – May 2015 | University of Bologna "Alma Mater Studiorum", Dep. of Industrial Engineering (DIN)

- **Main duties:** Neutronic core calculations using deterministic and Monte Carlo codes.
- **Activity:** Research on the neutronic design of PWR reactors.
- **Contract type:** Research Fellowship

Research Fellow – UNIBO

March 2013 – February 2014 | University of Bologna "Alma Mater Studiorum", Dep. of Industrial Engineering (DIN)

- Main duties:** Analysis and application of deterministic and Monte Carlo codes for nuclear core neutronic design.
- **Activity:** Research on the neutronic design of PWR reactor cores.
 - **Contract type:** Research Fellowship

Trainee – ENEA

Settembre 2011 – Maggio 2012 | ENEA, Bologna Research Centre, Martiri di Monte Sole Street 42, Bologna, IT

- **Main duties:** Acquisition of skills in neutronic design methods for lead-cooled fast reactors.
- **Activity:** Internship training within the "Neutronic Design of Generation IV Advanced Reactors (GEN IV)" project.
- **Contract type:** Internship / Traineeship

EDUCATION AND TRAINING

Level II Master's Degree in "Radiation Protection"

15/01/2023 – 14/04/2024 | University of Pavia, Applied Nuclear Energy laboratory (LENA), Pavia, IT

Thesis: "Analysis and application of atmospheric dispersion codes in support of nuclear emergency management"

Training Course – European Media Monitor (EMM)

06 – 27 Giugno 2024 | Joint Research Centre, Bruxelles, Bruxelles, BE

Training course on the EMM system to search and filter specific information according to Boolean procedures on the global internet news network.

Training Course – Severe Accident Phenomenology

25 – 29 Ottobre 2021 | Bologna, IT

Training course on physical modelling and simulation methods for severe accidents.

Training Course – Progetto Project

28 – 30 Maggio 2018 | Fontenay-aux-Roses, Parigi, FR

Training course on 3D/3P methodology and PERSAN and RASTEP codes.

IT Course on C Programming Language

25 – 27 October 2017 | CINECA – Manganelli street 6/3, Casalecchio di Reno (BO), IT

Training course "Introduction to Scientific and Technical Computing in C"

IT Course on Fortran Programming Language

17 – 20 Ottobre 2016 | CINECA – Manganelli street 6/3, Casalecchio di Reno (BO), IT

Training course "Introduction to Modern Fortran"

International School on Nuclear Decommissioning and Radioactive Waste Management

12 – 16 Ottobre 2016 | Joint Research Centre (JRC), Ispra, IT

8th International School on Nuclear Decommissioning and Radioactive Waste Management.

IT Course on Python Programming Language

16 – 18 Maggio 2016 | CINECA – Manganelli street 6/3, Casalecchio di Reno (BO), IT

Training course "Python for Computational Science"

Ph.D. in Energy, Nuclear and Environmental Control Engineering

January 2012 – December 2014 | University of Bologna "Alma Mater Studiorum", Dip. di Industrial Engineering (DIN)

Thesis: "Evaluation of reflector cross-sections in Generation III (GENIII) PWR systems"

Level II Master's Degree in "Design and Management of Advanced Nuclear Systems"

November 2009 – May 2011 | University of Bologna "Alma Mater Studiorum", Dip. di Industrial Engineering (DIN)

Thesis: "Sensitivity & Uncertainty Analysis in the evaluation of integral parameters for core neutronic design"

Professional Qualification / State Exam for Professional Engineers "Section A"

September 2009 – October 2009 | University of Calabria – State Examination Board

Subjects examined: Chemical Plants, Construction Site Safety Legislation, Design Regulations & Procedures.

Master's Degree (M.Sc.) in Chemical Engineering

Ottobre 2000 – Maggio 2009 | Università della Calabria, Dip. Of Chemical Engineering, Arcavacata di Rende (CS), IT

Thesis: "Factorial analysis for quantifying the parameter effects on cheese whey bioethanol fermentation: experiments and criticalities analysis"

Final Grade: 110/110

Chemical-Biological Laboratory Technician Diploma

May 1999 – July 1999 | State Professional Institute for Social Services "L. Da Vinci", Cosenza, IT

Subjects of study: Chemical technologies, physical chemistry, microbiology, food/bromatological analysis.

Scientific High School Diploma

September 1993 – July 1998 | Scientific high school "E. Fermi", Cosenza, IT

Subjects of study: Italian and Latin literature, mathematics, physics, chemistry, English, history, and philosophy.

PERSONAL SKILLS

Mother tongue: Italian

Other Language: English

Listening: B2 | Reading: B2 | Spoken Interaction: B2 | Spoken Production: B2 | Writing: B2

Common European Framework of Reference Languages: A1/A2: Basic – B1/B2: Independent – C1/C2: Proficient

COMPUTER SKILLS

- **Cell Codes:** SCALE 6.1.3 & 6.2.4 (NEWT, KENO V & VI)
- **Burnup codes:** SCALE 6.1.3 & 6.2.4 (ORIGEN-ARP), MCNPX, MCNP6, SERPENT 2.2.3
- **Sensitivity & Uncertainty Analysis:** SCALE 6.1.3 & 6.2.4 (SAMPLER, TSUNAMI)
- **Source Term Codes:** RASCAL 4.2 & 4.3, PERSAN, RASTEP
- **Source Term Codes:** RASCAL 4.2 & 4.3, PERSAN, RASTEP
- **Radionuclides Transport Codes:** HotSpot, GENII, LdX, Consx, MACCS5.1.0, JRODOS
- **Monte Carlo Codes:** MCNP5, MCNPX, MCNP6, SERPENT 2.2.3
- **Programming Languages:** MATLAB, FORTRAN, C, C++, Python, ROOT
- **Operation Systems:** Windows & Linux

PUBLICATIONS

Enea & European Joint Research Centre technical Reports:

- A. Guglielmelli, F. Rocchi, "Metodologia per la determinazione e la sistematizzazione di inventari di combustibile: messa a punto dei metodi ed applicazione ad alcune tipologie di LWR", ENEA Rapporto Tecnico ADPFISS – LP2-068, 2012.
- R. Pergreffi, F. Rocchi, M. Sumini, F. Teodori, A. Guglielmelli, "Calcoli per la determinazione della composizione isotopica del combustibile di un PWR da 900 MWe al variare del bruciamento", ENEA Rapporto Tecnico NNFISS – LP2 – 082, 2012.
- F. Rocchi, A. Guglielmelli, M. Sumini, F. Teodori, "Calcoli di inventario di Nocciolo: Affinamento della Metodologia ed Applicazione ai Reattori Frontalieri.", ENEA Technical Report ADPFISS –LP1 – 007, 2013.
- F. Padoani, G. Glinatsis, A. Luce, A. Rizzo, R. Levizzari, F. Rocchi, C. Petrovich, F. Rossi, A. Guglielmelli, "Metodi per valutazioni di sostenibilità legati a resistenza alla proliferazione, ciclo del combustibile, interfaccia safety/security e scenari energetici", ENEA Technical Report ADPFISS –LP1 – 010, 2013.
- F. Rocchi, A. Guglielmelli, M. Sumini, "Raccolta di coefficienti e parametri integrali per il calcolo rapido del termine sorgente a partire da inventari di nocciolo", ADPFISS – LP1 – 034, 2014.
- A. Guglielmelli, F. Rocchi, "FAST-1: Evaluation of the Fukushima Accident Source Term through the fast-running code RASCAL 4.2: Methods & Results", ENEA Technical Report UTFISSM – P00 – 017, 2014.
- A. Guglielmelli, G. Grasso, F. Lodi, R. Lo Frano, D. Mattioli, C. Petrovich, M. Sumini, "Studi preliminari di Tecniche di Monitoraggio del Nocciolo di ALFRED", ENEA Rapporto Tecnico ADPFISS – LP2 – 051, 2014.
- F. Padoani, G. Glinatsis, C. Petrovich, F. Rocchi, A. Guglielmelli, F. Rossi, "Resistenza alla Proliferazione, Nuclear Security e Sostenibilità del Ciclo del Combustibile", ENEA Rapporto Tecnico, ADPFISS-LP1-028, 2014.
- F. Rocchi, A. Guglielmelli, M. Sumini, "Calcoli di inventari di nocciolo per le centrali frontaliere a combustibile misto UOX-MOX e valutazione del termine sorgente in condizioni incidentali severe per alcune sequenze di particolare interesse", ENEA Rapporto Tecnico, ADPFISS-LP1-053, Sep. 2015.
- A. Guglielmelli, R. Pergreffi, F. Rocchi, "Sicurezza Intrinseca di elementi di combustibile irraggiati", Settembre 2016.
- A. Guglielmelli, D.M. Castelluccio, F. Rocchi, "Methodological aspects for the evaluation of the radiological impact of severe nuclear accidents: codes, numerical example and countermeasures", ADPFISS-LP1-078, September 2016.
- A. Guglielmelli, S. Lo Meo, F. Rocchi, "Implementation of a cross sections evaluation methodology for safety margin analysis: application to gadolinium odd isotopes", ADPFISS-LP1-083, September 2016.
- A. Guglielmelli, F. Rocchi, "Analisi statistica delle conseguenze sul territorio nazionale di un ipotetico incidente alla centrale nucleare slovena di Krško", ADPFISS-LP1-102, Novembre 2017.
- R. Pergreffi, F. Rocchi, A. Guglielmelli, "Caratteristiche di sicurezza intrinseca di elementi di combustibile", Dicembre 2017.
- D. M. Castelluccio, A. Mengoni, A. Guglielmelli, "Implementation of a cross sections evaluation methodology for safety margin analysis: Post processing and data analysis for the capture cross section measurements of odd Gadolinium isotopes", ADPFISS-LP1-108, November 2018.
- R. Pergreffi, F. Rocchi, A. Guglielmelli, "WPFC/AFCS Expert Group Benchmark on Dose Rate Calculation", Gennaio 2019.
- P. Console Camprini, F. Rocchi, A. Guglielmelli, D. M. Castelluccio, A. Mengoni, M. Frisoni, "Analysis of the ZED-2 reactor for the benchmarking of newly measured Gadolinium capture cross-sections", ADPFISS-LP1-129, Gennaio 2019.
- A. Cervone, A. Guglielmelli, C. Lombardo, "Attività di interconfronto tra codici di trasporto atmosferico per la preparazione e la risposta alle emergenze nucleari", ADPFISS-LP1-127, Febbraio 2019.
- R. Pergreffi, F. Rocchi, A. Guglielmelli, "WPFC/AFCS Expert Group Benchmark on Dose Rate Calculations", Luglio 2020.
- A. Cervone, A. Guglielmelli, "Analysis of anomalous measurements of radionuclides in northern and eastern Europe in June 2020", SICNUC-P0000-035_rev1, 30/07/2020.
- B. M. Rood, S. Martino, A. Guglielmelli, J. C. De La Rosa Blul, M. De Cort, et al., EUR 31768, "Environmental Radioactivity in the European Community 2015-2020".

- B. M. Rood, S. Martino, A. Guglielmelli, J. C. De La Rosa Blul, M. De Cort, et al., "Environmental Radioactivity in the European Community 2021-2022" (submitted to PUBSY).
- Suarez Moreno M., Ferrari D., Roglia E., Scionti N., Broglia M., Hrast Essenfelder A., Toreti A., Salamon P., D'angelo C., Dworak T., Berglund M., Santini M., Proietti C., Tsionis G., Wood M., Guagnini E., Pla Freixa P., Magrotti G., De la Rosa Blul J. C., Guglielmelli A., et al., "Cross-border and emerging risks in Europe", Pub. Office of the European Union, Luxembourg, 2024.
- De la Rosa Blul J.C., Guglielmelli A., Parera Villacampa O., "Follow-up of WENRA experts group modeling of specific accident with regards to the consequences of the war in Ukraine", 2024.
- Cihlar M., Guglielmelli A., Manna G., Peinador Veira M., Pla P., "Quarterly report on Nuclear Power Plant events, April-June 2023", European Commission, Petten, JRC134569.
- Cihlar M., Guglielmelli A., Manna G., Peinador Veira M., Pla P., "Quarterly report on Nuclear Power Plant events, July – September 2023", European Commission, Petten, JRC135984.
- Cihlar M., Guglielmelli A., Manna G., Peinador Veira M., Pla P., "Quarterly report on Nuclear Power Plant events, October – December 2023", European Commission, Petten, JRC137092.
- Cihlar M., Guglielmelli A., Manna G., Peinador Veira M., Pla P., "Quarterly report on Nuclear Power Plant events, January – March 2024", European Commission, Petten, JRC137856.
- Cihlar M., Guglielmelli A., Manna G., Peinador Veira M., Pla P., "Quarterly report on Nuclear Power Plant events, April – June 2024", European Commission, Petten, JRC138941.
- Cihlar M., Guglielmelli A., Manna G., Peinador Veira M., Pla P., "Quarterly report on Nuclear Power Plant events, July – September 2024", European Commission, Petten, JRC139966.
- Cihlar M., Guglielmelli A., Manna G., Peinador Veira M., Pla P., "Quarterly report on Nuclear Power Plant events, October – December 2024", European Commission, Petten, JRC141634.
- De la Rosa Blul J. C., Guglielmelli A., Parera Villacampa O., "Follow-up of WENRA experts group modelling of specific accident scenario with regard to the consequences of the war in Ukraine", JRC137480, 2024.

Peer-reviewed International Journal Articles:

- F. Rossi, A. Guglielmelli, F. Rocchi, "Impact of a Security Event on a TRIGA Reactor", Annals of Nuclear Engineering, vol 76, February 2015, pp. 125-136.
- F. Rocchi, A. Guglielmelli, D. M. Castelluccio, C. Massimi, "Reassessment of gadolinium odd isotopes nuclear data: scientific motivation and uncertainty-sensitivity analysis on LWR fuel assembly criticality calculation", EPJ-N, Nuclear Sciences & Technologies journal, 3 (21) 2017.
- F. Rocchi, A. Guglielmelli, P. Console Camprini, C. Massimi, L. Leal, "Sensitivity uncertainty analysis and new neutron capture cross-sections for gadolinium odd isotopes to support nuclear safety", Ann. of Nuc. Energy, vol 132, October 2019, 537-543.
- M. Mastromarco, A. Manna, O. Aberle, A. Guglielmelli, et al., "Cross section measurements of 155, 157Gd(n, γ) induced by thermal and epithermal neutrons", Eur. Phys. J. A (2019) 55: 9.
- R. Pergreffi, F. Rocchi, A. Guglielmelli, "Gamma Dose Rate from a Spent fuel UO₂ Fuel Assembly: Calculations vs measurements", Measurement, Vol. 165, January 2022, 108755.
- R. Pergreffi, F. Rocchi, A. Guglielmelli, P. C. Camprini, "Comparison between APOLLO2 and MCNP6 on depletion calculations for an Er-SHB PWR fuel assembly", Annals of Nuclear Energy, Vol. 165, January 2022, 108759.
- A. Guglielmelli, F. Rocchi, C. Massimi, D. M. Castelluccio, A. Manna, R. Mucciola, "Scientific motivations for a reassessment of the neutron capture cross sections of erbium isotopes in the high-sensitivity thermal energy range for LWR systems", Annals of Nuclear Energy, Vol. 178, 1 December 2022, 109337.
- A. Guglielmelli, S. Ederli, F. Mascari, F. Rocchi, P. Maccari, "Coupling of ASTEC V2.1 and RASCAL 4.3 codes to evaluate the Source Term and the Radiological Consequences of a Loss-of-Cooling Accident at a Spent Fuel Pool", ASME Journal of Nuclear Engineering and Radiation Science, October 2022, NERS-21.1018.
- J.C. de la Rosa Blul, A. Guglielmelli, O. Parera Villacampa, S. Arndt, et al., "Benchmarking exercise on the radiological consequences calculation due to a potential SA in Zaporizhzhia NPP", Nuc. Eng. and Design, Vol. 44, October 2025, 114268.

- De la Rosa Blul J. C., Hernández Ceballos M.Á., Parera Villacampa O., Magrotti G., [Guglielmelli A.](#), "Integrated Latent Risk of Radiological Damage under Conflict Situation-Part I: concept and approach", Nuc. Eng. and Design, 450, 114716, 2026.
- De la Rosa Blul J. C., Hernández Ceballos M.Á., Parera Villacampa O., Magrotti G., [Guglielmelli A.](#), "Integrated Latent Risk of Radiological Damage under Conflict Situation-Part II: application and result", Nuc. Eng. and Design, 451, 114715, 2026.

International Conference Papers:

- F. Rossi, [A. Guglielmelli](#), F. Rocchi, F. Padoani, "Impact of a security event on a TRIGA Reactor", International Conference of Nuclear Security: Enhancing Global Effort, July 2015, Vienna, Austria.
- F. Rocchi, [A. Guglielmelli](#), F. Rossi, F. Bertozzi, "ENEA Activities in the Field of Emergency Preparedness and Response in the Aftermath of the Fukushima Accident", IAEA Int. Experts Meeting on Strengthening Research and Development Effectiveness in the light of the Accident at the Fukushima Daiichi Nuclear Power Plant, February 2015, Vienna, Austria.
- F. Rocchi, [A. Guglielmelli](#), F. Padoani, P. Meloni, "Application of RASCAL 4.2 to estimate the Fukushima Accident Source Term", International Conference on Challenges Faced by Technical Support Organizations in Enhancing Nuclear Safety and Security: Strengthening Cooperation and Improving Capabilities, Beijing, CPR, 27-31 Oct. 2014.
- S. Lo Meo, C. Massimi, F. Rocchi, N. Colonna, M. Barbagallo, E. Berthoumieux, D.M. Castelluccio, L. Cosentino, M. Diakaki, R. Dressler, E. Dupont, P. Finocchiaro, [A. Guglielmelli](#), F. Gunsing, N. Kivel, P.F. Mastinu, M. Mastromarco, P.M. Milazzo, F. Mingrone, A. Musumarra, D. Schumann, G. Tagliente, G. Vannini, V. Variale, "Proposal to the ISOLDE and Neutron Time-of-Flight Committee Measurement of the neutron capture cross section for Gd and Gd for Nuclear Technology", European Organization for Nuclear Research (CERN), June 1, 2015.
- [A. Guglielmelli](#), F. Rocchi, M. Sumini, "SCALE 6.1 Evaluation of the Effective Cross Sections of a LWR Assembly-Reflector Model with Application to the NEA TMI-1 PWR Benchmark", Int. Conf. Nuclear Energy for New Europe, Sept. 2014, Portoroz, (SLO).
- [A. Guglielmelli](#), F. Rocchi, M. Sumini, "SCALE 6.1.3 evaluation of the heavy reflector effective cross sections for a GENIII PWR system and a SERPENT 2.1.23 model comparison", Int. Conf. Nuclear Energy for New Europe, Sept. 2015, Portoroz, Slovenia.
- [A. Guglielmelli](#), F. Rocchi, M. Sumini, "SCALE 6.1.3 effective reflector cross sections sensitivity analysis for a GENIII assembly/reflector system", Int. Conf. Nuclear Energy for New Europe (NENE-2015), September 2015, Portoroz, (SLO).
- [A. Guglielmelli](#), F. Rocchi, "SCALE 6.1.3 and Serpent 2.1.24 criticality safety analysis of a Fukushima Daiichi-like Spent Fuel Pool", International Conf. Nuclear Energy for New Europe (NENE-2016), September 2016, Portoroz (SLO).
- F. Rocchi, [A. Guglielmelli](#), D. M. Castelluccio, G. Ottaviano, F. Padoani, A. Rizzo, "ORIGEN-S evaluation of radioxenon isotopes signature from Molybdenum production facilities for long irradiation time", Workshop on Signatures of Medical and Industrial Isotopes Production (WOSMIP VI), 28 November – 2 December 2016, Bariloche, Argentina.
- [A. Guglielmelli](#), R. Pergreffi, F. Rocchi, "SCALE 6.1.3 evaluation of the erbia effect on the control rod worth of an Er-SHB PWR assembly", International Conference Nuclear Energy for New Europe, Sept. 2017, Bled, (SLO).
- [A. Guglielmelli](#), F. Rocchi, "Evaluation of the radiological impact on the Italian territory of a severe nuclear accident at Krško NPP by means of a statistical methodology", Int. Conf. Nuclear Energy for New Europe, Sept. 2017, Bled, (SLO).
- [A. Guglielmelli](#), F. Rocchi, "Statistical methodology for the evaluation of the radiological impact over the Italian territory of a severe accident at Krško NPP", EUROSAFE-2017, Paris, France.
- F. Mascari, J. C. De La Rosa Blub, [A. Guglielmelli](#), "Analysis of a postulated 2-inch CL LOCA unmitigated transient progression in a PWR-like 900 MWe with MELCOR code", Int. Conf. Nuc. Energy for New Europe, Sept. 2018, Portoroz, (SLO).
- [A. Guglielmelli](#), A. Cervone, F. Rocchi, "MACCS2 Statistical Analysis to evaluate the Off-sites consequences of a Severe Accident at the Krško NPP for Emergency Preparedness and Response Purposes", International Conference Nuclear Energy for New Europe (NENE-2019), September 2019, Portoroz, Slovenia.
- A. Cervone, [A. Guglielmelli](#), F. Rocchi, "Forward and backward analysis of the 2017 release of RU-106 over Europe using Lagrangian dispersion model and monitoring station data", EUROSAFE-2019, Cologne, Germany.
- [A. Guglielmelli](#), A. Cervone, F. Rocchi, V. Creach, G. Ortega Nicaise, "Intercomparison of PERSAN 4 and RASCAL 4.3 Source Term evaluation for a PWR LOCA scenario", EUROSAFE-2019, Cologne, Germany.

- A. Guglielmelli, S. Ederli, F. Mascari, F. Rocchi, "Coupling of ASTC 2.1.1.6 and RASCAL 4.3 Codes to Evaluate the Source Term and the Radiological Consequences of Loss-of-Cooling Accident at a Spent Fuel Pool", 29th International Conference Nuclear Energy for New Europe (NENE-2020), September 7-10, 2020, Portoroz, Slovenia.
- A. Guglielmelli, A. Cervone, F. Rocchi, "Intercomparison of RASCAL 4.3 and IdX Radiological Consequences for a Severe Accident at the Spent Fuel Pool of the Krsko NPP", EUROSARE-2021, Paris, France.
- A. Guglielmelli, S. Ederli, F. Mascari, F. Rocchi, P. Maccari, "Coupling of ASTEC V2.1 and RASCAL 4.3 Codes to Evaluate the Source Term and the Radiological Consequences of a Loss-of-Cooling Accident at a Spent Fuel Pool", ASME Journal of Nuclear Radiological Science, Oct 2022, 041602, NERS-21-1018.
- V. Alcayne, S. Amaducci, J. Andrzejewski, D. Cano Ott, A. Casanovas, D. Castelluccio, S. Cristallo, F. Garcia Infantes, A. Gawlik-Ramiega, G. Gervino, G. Grasso, E. Gonzalez Romero, A. Guglielmelli, et al., "Measurement of the $^{166,167}\text{natEr}(n, \gamma)$ cross-section at n_TOF EAR1", EURO-LABS 3rd Annual Meeting, 27-30 October 2024, CERN.
- D.M. Castelluccio, A. Berardi, P. Console Camprini, G. Grasso, A. Guglielmelli, C. Massimi, N. Pieretti, A. Talamazzini, "Enhancing copper nuclear data quality for fast spectrum reactor applications", IAEA FR26 International Conference on Fast Reactors and Related Fuel Cycles, 18-21 May 2026, Beijing, China.

PERSONAL DATA

I authorize the processing of my personal data in accordance with the Italian Legislative Decree No. 196 of 30 June 2003 (Personal Data Protection Code) and the General Data Protection Regulation (GDPR – Regulation (EU) 2016/679).

Bologna, 31/07/2026

Signature

