Fusion Safety and Regulation Course

Course Goal

Through a blend of lectures, real-world case studies, and interactive discussions with other fusion professionals, participants will gain the practical knowledge needed to meaningfully engage with the topics of fusion safety and regulation. The course will include key safety considerations for fusion devices, the regulations that apply to planned fusion facilities, and how other industries develop safety cultures.

Course Organizers and Hosts

The course is organized by Clean Air Task Force (CATF) in partnership with the Xcitech School on Science and Technology (jointly organized by IFMIF/DONES and the University of Granada). The course is hosted by Fusion For Energy (F4E).

Course Location

Fusion for Energy, Torres Diagonal Litoral, Edificio B3, C/ Josep Pla 2, 08019 Barcelona, Spain. Link to Google Maps

Course Dates and Times

Tuesday, Day 1 | Introduction to Fusion Energy and Fusion Safety | February 17, 2026

Course Activities: 9 am – 5:15 pm

Reception: 5:15 pm – 7:30 pm

Wednesday, Day 2 | Case Studies on Radioactive Material, Accelerator, and Fusion Machine Safety | February 18, 2026

Course Activities: 9 am – 5:30 pm

Thursday, Day 3 | Considerations for Creating and Implementing Fusion Regulation | February 19, 2026

Course Activities: 9 am – 5:30 pm

Course Timetable (Draft January 23, 2026)

Subject to change

Tuesday, Day 1 | Introduction to Fusion Energy and Fusion Safety | February 17, 2026

Time	Lecture	Speaker, Affiliation
8:15 – 9:00am	*Refreshments available; registration*	-
9:00 – 9:30am	Introduction to Fusion Energy Technology Safety and Regulation Course	Sehila Gonzalez de Vicente, CATF Marc Lachaise, F4E
9:30 am – 10:00am	Opportunities and Challenges for Fusion Energy Safety and Regulation (Talk TBC)	Juan Carlos Lentijo, CSN
10:00 – 10:45am	Introduction to fusion energy technology and commercial fusion power plants	Stuart Muldrew, UK Industrial Fusion Solutions
10:45 – 11:15am	*Break*	-
11:15am – 12:30pm	Overview of different fusion energy concepts and technologies currently under development	Alfredo Portone, F4E
12:30 – 1:30pm	*Lunch break*	-
1:30 – 2:15pm	Radiation safety principles and applicability to fusion	Raul Pampin, F4E
2:15 pm – 3:15pm	Overview of radiation related fusion energy safety considerations for research and power plants	Corinne Mitchell, Commonwealth Fusion Systems
3:15 – 3:45 pm	*Break*	-
3:45 -4:15 pm	Overview of industrial and chemical fusion energy safety considerations for research and power plants	To be confirmed
4:15 – 4:45 pm	Importance of appropriate certainty and regulatory efficiency for commercial fusion energy deployment at scale	Sebastian Marx, European Fusion Association
4:45 – 5:15pm	Closing discussion on fusion safety considerations	Moderated by CATF
5:15 – 7:30pm	*Welcome reception*	-

Wednesday, Day 2 | Case Studies on Radioactive Material, Accelerator, and Fusion Machine Safety | February 18, 2026

Time	Lecture	Speaker, Affiliation
8:15 – 9:00am	*Refreshments available*	-
9:00 – 9:45am	Research institute experience with technical scale tritium experimental and processing facilities.	Robin Größle, KIT
9:45 – 10:15am	Experience with lab-scale fusion facilities and major accelerator facilities	Ross Radel, SHINE Technologies
10:15 – 10:45am	*Break*	-
10:45 – 11:30am	Industry experience with tritium safety and management	To be confirmed
11:30am – 12:15pm	UK national lab experience with tritium safety and management	Sarah Bickerton, UKAEA
12:15 – 1:00pm	US national lab experience with tritium safety and management	Alex Somers, SRNL
1:00 – 2:00pm	*Lunch break*	-
2:00 – 2:30pm	CERN experience with activated material safety and activated waste management	Luca Bruno, CERN
2:30 – 3:00pm	Eurofusion experience with activated material safety and activated waste management	Sandrine Rosanvallon, CEA Eurofusion
3:00 – 3:30pm	Case study: IFMIF DONES progress with safety case and licensing	Claudio Torregrosa, IFMIF DONES
3:30 – 4:00pm	*Break*	-
4:00 – 4:30pm	Case study: Lessons learned with ITER safety case and licensing	Gilles Perrier, ITER
4:30 – 5:00pm	Case study: Lessons learned with JET safety case and licensing	Omar Afify, UKAEA
5:00 – 5:30pm	Summary of lessons learned towards commercialization	Joëlle Elbez-Uzan, CEA Eurofusion

Thursday, Day 3 | Considerations for Creating and Implementing Fusion Regulation | February 19, 2026

Time	Lecture	Speaker, Affiliation
8:15 – 9:00am	*Refreshments available*	-
9:00 – 9:30am	Connecting fusion energy safety and fusion energy regulation	Patrick White, CATF
9:30 – 10:00am	Overview of fusion energy safety and regulatory considerations for private fusion energy designs	Pascal Dumont, Type One Energy
10:00 – 10:45am	Export control and non-proliferation considerations for fusion energy	Laura Rockwood, FELEX Member and VCDNP Quentin Michel, FELEX Member and University of Liege
10:45 – 11:15am	*Break*	-
11:15am – 12:00pm	Panel: United States Experience with Commercial Fusion Regulation Development and Licensing	Beth Shelton, OAS Corinne Mitchell, CFS Pascal Dumont, Type One Energy Ed Harvey, U.S. NRC (Invited)
12:00 – 1:00pm	Panel: United Kingdom Experience with Commercial Fusion Regulation Development	Bethany Colling, UKAEA Malcolm Peters, EA Clare Lee, HSE Other(s) to be confirmed
1:00 – 2:00pm	*Lunch break*	-
2:00 – 2:30pm	Integration of fusion energy into existing legal framework in the Euratom Framework for Radiation Protection	Philipp Sauter, Max Planck Institute (IPP)
2:30 – 3:30pm	Panel: Germany Experience with Fusion Regulation Development Process	Dirk Radloff, KIT Joachim Herb, GRS Johannes Schwemmer, Proxima Fusion
3:30 – 4:00pm	*Break*	-
4:00 – 5:00pm	European Regulatory Roundtable	Philipp Sauter, Max Planck Institute Francisco Castejón, CSN Anders Österberg, Novatron
5:00 – 5:30pm	Wrap-up discussions with participants and speakers	Moderated by CATF

Speaker Biographies

Omar Afify
Head of Safety Case Engineering and Technical Authority owner for UKAEA (United Kingdom Atomic Energy Authority).

Omar is the Head of Safety Case Engineering and Technical Authority owner for UKAEA. Under this role, Omar is responsible for the leadership and management of all UKAEA Safety Cases, and is accountable to the UKAEA Chief Engineer and UKAEA Chief Operating Officer for setting the strategic direction of safety case production and for the safety management processes of UKAEA's high hazard activities. He is degree qualified Chemical and Process Engineer and has spent over 10 years in various safety engineering and consultancy roles in the Oil & Gas and Nuclear Fusion industries. He is experienced in safety case authorship, technical safety, hazard and risk management, and has carried out projects for a variety of major hazard facilities both in the UK and internationally. He joined UKAEA in 2020, where he is responsible for managing the delivery of complex safety case programmes for the Joint European Torus (JET), STEP and other high hazard facilities across multiple UKAEA sites.

Sara Bickerton
Technical Lead for the UKAEA-Eni Hydrogen-3 Advanced Technology (H3AT) Tritium Loop at UKAEA

Sarah Bickerton is the Technical Lead for the UKAEA-Eni Hydrogen-3 Advanced Technology (H3AT) Tritium Loop at UKAEA. She is a Chartered Engineer with 13 years' experience in Process Engineering, with the last 7 years specialising in Tritium Fuel Cycle design, modification, operation and maintenance. This has ranged from managing subsystem upgrades on the JET Active Gas Handling System, to leading operational shift teams in DTE2, to working as Technical Lead to the H3AT Tritium Loop Project. In this role she provides engineering experience, tritium operational knowledge, technical expertise and guidance to the project and technical teams, and works with stakeholders to maximise the future potential for the exploitation of the facility

Luca Bruno
Project leader for radioactive waste treatment and interim storage. CERN (Conseil Européen pour la Recherche Nucléaire).

Luca BRUNO studied nuclear engineering at the University of Palermo (Italy). After graduating, he moved to Germany to work on the ITER nuclear fusion project. He later joined CERN, the European Organization for Nuclear Research based in Switzerland, where he has been active in the field of particle accelerator engineering since 1998.

He currently serves as the project leader for the development of CERN's new facility for radioactive waste treatment and interim storage.

Francisco Castejón
Commissioner of the Nuclear Safety Council (CSN, Spain)

Francisco Castejón is a commissioner of the Nuclear Safety Council (CSN in Spanish) since 2019. During his job of commissioner, he is the president of the Link Committee between CSN and IFMIF-DONES (International Fusion Materials Irradiation Facility-Demo Neutron Early Source), a facilitY for material qualification for fusion reactors. He is the president of the Link Committee between CSN and ENSA (Nuclear Equipments). ENSA has some projects devoted to fusion, among other nuclear equipment projects. He is in charge of relations with ASNR, the French regulator, and belongs to the CSNI of NEA.

He has participated in a number of IAEA conferences. In particular he has acted as chairman of Country Group-7 during 7th Convention on Spent Fuel and Radioactive Waste Management and also of Country Group-1 during the 8th 7th Convention on Spent Fuel and Radioactive Waste Management. As a commissioner he has had relevant participations in the two first Technical Meetings on Fusion Regulation organized by IAEA in 2023 and 2025. He has also contributed to the elaboration of the 1st Safety Report on Fusion to be published by IAEA. He is a member of the Executive Committee of Spanish Fusion Strategy.

Before being a Commissioner he has been the Head of fusion Theory Unit of the Spanish Fusion National Laboratory (FNL). He has been Project Leader of Stellarator Theory in Eurofusion Consortium.

He has published more than 250 papers on peer-reviewed scientific journals. His h index is 24. He has supervised 14 PhD works on plasma physics and controlled fusion, and he has leaded more than 25 national and international research projects, including EUFORIA (EU for ITER applications, funded by H-2020 Programme)

Bethany Colling
Fusion Safety Advisor UKAEA (United Kingdom Atomic Energy Authority).

Bethany joined UK Atomic Energy Authority in 2013, initially part of the neutronics team and now part of the fusion safety advisor group. A chartered engineer with over 15 years of experience in fusion energy research, including a PhD from Lancaster University, Bethany's role at UKAEA includes providing technical expertise to the UK Government on fusion safety, supporting fusion regulatory developments. Bethany contributes to international and domestic engagement activities in support of a proportionate regulatory framework for fusion power plants.

Pascal Dumont
Senior Director of Global Regulatory Affairs and Licensing. Type One Energy.

Senior Director of Global Regulatory Affairs and Licensing at Type One Energy since summer 2023, Mr. Dumont has close to 25 years' experience in radiation protection, nuclear safety and regulatory affairs. He has held positions as Associate Director of the Radiation Protection Bureau of the Government of Canada's Department of Health in Ottawa (2011 -2014); Canadian expert in nuclear safety analysis and assessment at the International Atomic Energy Agency (IAEA) in Vienna, where he led more than 20 international missions in Europe and the Middle East (2014 – 2016); and Senior Regulatory Officer at the Canadian Nuclear Safety Commission (2016 – 2022) where he led analyses enabling the modernization of regulatory document (Deterministic Safety Analysis, Probabilistic Safety Assessment, Severe Accident Management, etc.) to include Advanced Nuclear Reactors (ANRs) considerations. He joined General Fusion in Vancouver in 2022 as the VP of Regulatory Affairs before moving to Type One Energy where he is leading the global licensing efforts for Infinity One and Two. Mr. Dumont holds a B.Sc. and M.Sc. (Earth Sciences) from the University of Ottawa, Canada.

Joëlle Elbez Uzan.
Head of the Fusion Power Plant Innovation Department. EUROfusion

Joëlle Elbez Uzan is the Head of the Fusion Power Plant Innovation Department at EUROfusion, where she oversees cross-disciplinary efforts to advance the design and realization of future fusion power plants, with a focus on engineering integration, nuclear safety, licensing, and large-scale project coordination. Her work contributes directly to the development of DEMO, the European demonstration fusion power plant intended to produce net electricity and bridge the gap between ITER and commercial fusion energy.

Before joining EUROfusion, Joëlle held a pivotal leadership role at ITER, serving as Head of the Nuclear Safety and Licensing Division. In this capacity, she was responsible for navigating one of the most complex international nuclear licensing frameworks, ensuring ITER's compliance with French nuclear regulations and supporting the project's safety case development from early design stages to licensing milestones.

With a solid background in nuclear engineering, safety governance, and high-impact project management, Joëlle has more than two decades of experience in the fusion energy domain. She is particularly engaged in fostering innovation pathways that make fusion a viable, regulated, and societally accepted energy source for the future.

Her career reflects a deep commitment to the success of European fusion programs and to building the foundations of a safe, sustainable, and regulated fusion industry.

Sehila M. Gonzalez de Vicente
Global Director, Fusion Energy. Clean Air Task Force

Sehila M. Gonzalez de Vicente joined Clean Air Task Force in 2023 as the Global Director for Fusion Energy. She holds a BSc and MSc in Physics and a PhD in Materials Physics from University Complutense de Madrid as well as a MBA from the EOI Business School. She has more than 18 years of experience in fusion technologies and materials.

Previously, she was the senior expert in fusion as a nuclear fusion physicist at the International Atomic Energy Agency (IAEA). Before joining IAEA, she was responsible for the fusion materials development program at European Fusion Development Agreement/Eurofusion in Garching bei Munchen, Germany.

Sehila was appointed European Technical Coordinator of the International Fusion Energy Research Centre (IFERC) project between Europe and Japan as well as member of the Karlsruhe Institute of Technology (KIT) scientific advisory board in the research field of energy. She has been chair of the 9th Annual Assessment of Fusion for Energy and member of the Review Committee for the European Spallation Source Re-baseline Review. She is also member of the UK Fusion Technical Advisory Group and the IFMIF-DONES España Technical Advisory Committee. She is co-editor and contributing author of the book Fundamentals of Magnetic Fusion Technology. She is also chair of the Women in Fusion Group.

Robin Größle
Group Leader Tritium and Hydrogen Analytics · Karlsruher Institut für Technologie (KIT)
Biography to follow.

Joachim Herb
Research Associate, Reactor Safety Research Division. Gesellschaft für Anlagen- und Reaktorsicherhei (GRS) gGmbH
Biography to follow.

Marc Lachaise
Director, Fusion for Energy (F4E).

Marc Lachaise holds a double degree in Engineering from Ecole Centrale de Lyon in partnership with the Polytechnic University of Catalonia (ETSEIB), and an MBA from ESADE. He spent 27 years of his career working in the EDF Group (Électricité de France) where he held different leadership positions, equipping him with a broad set of skills. He started in 1996 in the Maintenance Network Department of EDF until he moved in 2000 to the International Project Division as Project Manager. Three years later, he took the duties of Executive Assistant to the Senior Vice-President in the Corporate Finance Department. In 2008, he became Group Procurement Co-ordinator and Global Sourcing, enhancing collaboration between the main EDF subsidiaries in procurement. After four years performing these duties, he became Head of Procurement at Hinkley Point C, leading the team placing the contracts. In 2015, he was named Deputy Head of Department for Nuclear Procurement. Later, in 2018, he took duties as Contract Manager Director of the EDF Group, developing and instilling a culture of contract management and delivery in the organisation. Since 2021, he held the position of Supply Chain Control Director in the newly formed assurance function for the EDF New Build nuclear projects under the Excell Performance Plan.

Clare Lee
Health and Safety Executive
Biography to follow.

Juan Carlos Lentijo
President of the Nuclear Safety Council (CSN, Spain)

Juan Carlos Lentijo (Pedrosa del Rey, Valladolid, 1959) is an industrial engineer from *La Universidad Politécnica de Madrid*. He completed his training in nuclear safety and radiological protection at international and national institutions, such as the Massachusetts Institute of Technology (MIT), the Belgian Nuclear Applications Research

Center (SCK-CEN), the Center for Energy and Environmental Research (CIEMAT) and TECNATOM; and in the field of business administration at the *Instituto de Empresa* (IE).

In 1982, he began his professional activity as a nuclear project engineer at *Empresarios Agrupados*. In 1984 he joined the Spanish Nuclear Safety Council (CSN), where he held the positions of Nuclear Power Plant Project Manager, Resident Inspector, Deputy Director General of Emergencies, Deputy Director General of Environmental Radiological Protection and Technical Director of Radiological Protection. After a career spanning 28 years at the CSN, he joined the International Atomic Energy Agency (IAEA) in Vienna in 2012, first as Director of the Waste Cycle Facilities and Technology Division and, since October 2015, as the IAEA Deputy Director General and head of its Department of Nuclear Safety. After completing the usual period of his position at the IAEA, he returned to the Spanish Nuclear Safety Council in June 2021, where he served as Technical Director of Nuclear Safety from December 2021 to April 2022, before being appointed as president of the regulatory body.

Sebastian Marx
Senior Advisor, European Fusion Association
Biography to follow.

Quentin Michel
Full Professor. University of Liège.

Quentin Michel is Full Professor of European Studies at the Department of Political Science at the University of Liège. In addition to his academic role, he regularly provides expertise in the field of strategic trade control to national, European and international organisations and fora. His current research covers several key areas, including: sanctions and export controls; EU economic governance; decision-making process of EU institutions, with a particular focus on the role of informal governance; EU sustainable development policies, exploring their connections with other policies through in-depth impact assessment studies; and nuclear regulation policies. He has been an active contributor to the EU P2P Programme since 2007 and is a founding member of the European Export Control Association for Research Organisations (EECARO) and other European Union initiatives in dual-use item trade control (e.g. EU P2P Summer University, 'Chaundfontaine Group').

Corinne Mitchell
VP Environment, Health, Safety and Security, Commonwealth Fusion Systems Inc.
Biography to follow.

Stuart Muldrew
Whole Plant Analysis Manager, UK Industrial Fusion Systems, Ltd

Dr Stuart Muldrew is a Principal Fusion Technologist at the UK Atomic Energy Authority (UKAEA), specialising in fusion power plant design, modelling and integration. He is the Whole Plant Performance lead for STEP (Spherical Tokamak for Energy Production; a programme to deliver a UK prototype fusion energy plant, targeting 2040, and a path to commercial viability of fusion).

In addition to spherical tokamaks, Stuart has worked on alternative fusion power plant concepts, including conventional aspect ratio tokamaks (EUROfusion-DEMO, SST-2), stellarators (HELIAS 5-B) and inertial fusion. His work also includes the socioeconomics of fusion energy.

Prior to joining UKAEA, Stuart obtained an MPhys Physics and Astronomy from Durham University and a PhD from the University of Nottingham. He subsequently held research positions in physics at the University of Nottingham and University of Leicester. Stuart has authored 31 peer-reviewed publications, with 2,287 citations and an h-index of 21. His teaching experience includes lecturing on the Culham Plasma Physics Summer School, Karlsruhe Institute of Technology International School on Fusion Technologies, University of Oxford Materials Application Fusion CDT and Imperial College London Fusion and Advanced Reactors Masters course

Anders Österberg
Development Director, Novatron Fusion
Biography to follow.

Raul Pampin
Nuclear Safety Engineer, Fusion for Energy (F4E)

1. Currently: nuclear safety engineer at F4E.
2. Previously: senior engineering analyst at UKAEA Fusion (UK), post-doc at University of Birmingham (UK).
3. MSc and PhD in nuclear engineering.
4. Technical specialist in computational science (neutronics & CFD), nuclear safety, radiation protection and shielding for engineering design.
5. Manager & technical leader for engineering analysis & nuclear safety projects.

Gilles Perrier
Head of Safety and Quality, ITER Organization

Gilles Perrier is Head of the Safety & Quality Department at ITER Organization, where he oversees regulatory compliance and safety assurance for one of the world's most complex energy projects.
With 30 years of experience in the nuclear industry, Gilles began his career after earning an engineering degree from Centrale Paris and a PhD in Fluid Mechanics.
He has held senior leadership roles at AREVA, Sellafield, and Framatome, driving major initiatives in nuclear operations and projects, nuclear safety, quality and operational excellence.
Since joining ITER in 2019, Gilles has been instrumental in developing the licensing framework for ITER and shaping safety strategies for fusion energy, and he regularly contributes to international forums on nuclear safety and regulation.

Malcolm Peters
Senior Specialist, Nuclear Regulation Group, Environment Agency (UK)

Malcolm is a Senior Specialist Regulator at the Environment Agency in England with over 25 years' experience in environmental protection activities, stakeholder engagement and policy development with the Environment Agency. He has supported effective and proportionate regulation across of a range of functions from contaminated land, water resources and waste management to high hazard industries and radioactive substances. Malcolm currently regulates waste generating and disposal activities on a number of nuclear licenced sites in England; he also regulates the keeping and use of radioactive substances at UKAEA's Culham Campus and is supporting the development of the UK's approach to fusion regulation.

Alfredo Portone
Head of Engineering Analysis Team, Fusion for Energy (F4E)

1987: MSc with Honours in nuclear engineering from University of Bologna (I)
1994: PhD in Electrical Engineering University of London, Imperial College (UK)
1993-2000: Member of the central design team for the ITER Project in Naka (Japan)
2000-2006: R&D Responsible Officer for Plasma Engineering tasks at EFDA, Garching, (FRG)
2006-2008: Project leader for the European Dipole (EDIPO) superconducting magnet at EFDA, Barcelona (Spain)
2008-present: Head of engineering analysis team, Fusion for Energy (F4E), Barcelona (Spain)

Ross Radel
Chief Technology Officer, Shine Technologies, Inc.

Dr. Radel has served as SHINE's Chief Technology Officer since April 2021. He has over 20 years of R&D experience on a variety of fusion, fission, and particle accelerator technologies that are directly applicable to SHINE's

core technologies and is licensed as a Professional Engineer. From 2011 to 2021, Dr. Radel served as the CEO and Board Member of Phoenix Nuclear Labs where he led dozens of technical projects related to neutron generation and neutron-based detection methods. Prior to joining Phoenix, he served as a Senior Member of the Technical Staff at Sandia National Laboratories where he worked to develop space nuclear power systems. Dr. Radel holds a Ph.D. in nuclear engineering from the University of Wisconsin-Madison, where his research focused on high-flux fusion neutron generation for detecting clandestine materials such as HEU.

Dirk Radloff
Senior Programme manager, KIT FUSION Programme

Dr. Dirk Radloff joined the Fusion Programme at the Research Centre Karlsruhe in January 2008 as Programme Manager, responsible for public-relations, third-party funding acquisition, and strategic development of the programme's research portfolio (including Safety and regulations).
From January 2025 he is also a member of the ReFus project (https://www.grs.de/de/aktuelles/zukunft-der-fusion-wie-koennte-ein-regelwerk-deutschland-aussehen), a BMFTR-funded pilot initiative running until the end of June 2026 that explores how a regulatory framework for fusion could be shaped in Germany.
He studied chemistry at the University of Karlsruhe and received his Ph.D. in organic chemistry in October 1993. From November 1993 to May 1999, he worked as a scientific staff member at FZK, including a one-year visiting-scientist appointment at the National Institute for Materials Science in Tsukuba, Japan. In June 1999 he moved inside FZK as a senior staff officer in the executive-board office, a position he held until December 2007. Since January 2008 Dr. Radloff has overseen the Fusion Programme's public-relations, acquisition and coordination of third-party funding (BMBF, EU), and the strategic advancement of key research areas such as fusion materials, safety, regulation, neutronics, the IFMIF-DONES neutron source, and logistics/remote handling.

Laura Rockwood
Senior Fellow at the Vienna Center for Disarmanent and Non-Proliferation (VCDNP).

Laura Rockwood is a Senior Fellow at the Vienna Center for Disarmament and Non-Proliferation (VCDNP). She retired from the International Atomic Energy Agency (IAEA) in November 2013 as the Section Head for Non-Proliferation and Policy Making in the Office of Legal Affairs after 28 years of service. During her time with the IAEA, she was the senior legal advisor on all aspects of the negotiation, interpretation, and implementation of IAEA safeguards. Prior to her current position at the VCDNP, Laura served as the Executive Director of the Open Nuclear Network (ONN) (2019-2022) and as the VCDNP's Executive Director (2015-2019). She is currently a member of ONN's Advisory Council and the Board of Trustees of VERTIC.

Sandrine Rosanvallon
Nuclear Safety Expert, CEA Fundamental Research Division

Sandrine Rosanvallon began her career as an engineer specializing in fast breeder reactor materials at the French Alternative Energies and Atomic Energy Commission (CEA). In the early 2000s, she was involved in the site studies for the construction of ITER in France, dealing with waste, decommissioning and tritium processes. Her experience in tokamaks has been strengthened by working at JET (Culham UK) on fusion technology and machine operation and at Tore Supra (Cadarache France) on the development of diagnostics to support the safety studies for ITER. She has worked for the ITER Organization for more than 13 years in the Nuclear Safety and Environment Division dealing with remote handling systems, radioactive waste treatment and storage, hot cell and radwaste building design and decommissioning. She was involved in the licensing process and later in the coordination of the construction activities from a safety and environmental point of view.

Since 2022 Sandrine has been working for EU DEMO Safety Office involved in the definition of the safety baseline, definition and propagation of high level safety requirements, development of the waste management strategy and management of the EUROfusion work package on safety and environment. She is a nuclear safety expert for the CEA Fundamental Research Division.

Philipp Sauter
Senior Researcher, Max-Planck-Institute for Comparative Public Law and International Law

Dr Philipp Sauter is a Senior Researcher at the Max-Planck-Institute for Comparative Public Law and International Law in Heidelberg, Germany. Having a background in both law and physics, he has been working on regulatory questions of fusion for almost four years and is part of the German Government's project on developing regulatory approaches for fusion (ReFus).

Johannes Schwemmer
Executive Advisor, Proxima Fusion
Biography to follow.

Beth Shelton
Director, Tennessee Division of Radiological Health.

Beth Shelton is the current Director for the Tennessee Division of Radiological Health. She has been with the State of Tennessee for 25 years working in all sections of the Division, including oversight of regulation compatibility and development, inspection of Division licensees and managing the Division's radioactive material licensing program.

Beth has served as an Integrated Materials Performance Evaluation Program (IMPEP) team member and is currently an IMPEP team leader in training. She has also served on the Executive Board of the Organization of Agreement States as Treasurer for two terms and is currently the Chair.

Beth served as an advisor to the Tennessee Nuclear Energy Advisory Council and has represented Tennessee at various national conferences and on panels presenting on fusion topics. She is passionate about the advancement of clean energy sources and is working hand in hand with government agencies and industry to make this a reality for Tennesseans.

Beth holds a Bachelor of Science Degree in Biology and Chemistry from Middle Tennessee State University. She also holds a Master of Professional Studies Degree in Strategic Leadership as well as a certification in Lean Management from Middle Tennessee State University. Beth is a member of both OAS and CRCPD.

Alex Somers
Researcher, Savannah River National Laboratory (SRNL)

Alex Somers joined Savannah River National Laboratory (SRNL) in 2023 as a senior scientist and is currently the technical lead for nonproliferation-related fusion energy projects in the Tritium Technology Division. He holds a BS in Nuclear Engineering from North Carolina State University and a PhD in Nuclear Engineering from Pennsylvania State University. During graduate school, Alex completed his dissertation work on the development of a particle-in-cell plasma-material interactions model at SRNL as a Department of Energy – Office of Science Graduate Student Research Assistant awardee. Prior to attending graduate school, he worked as a shift technical engineer and process systems engineer at the Savannah River Tritium Enterprise from 2016 – 2019. Alex's current research topics include fusion fuel cycle modeling and design, cryogenic distillation design optimization, light isotope separation, and nonproliferation topics related to fusion energy.

Claudio Torregrosa
Nuclear Engineer, IFMIF-DONES

Claudio Torregrosa is Nuclear Engineer experienced in particle accelerators technology, holding a PhD in mechanical engineering. He started his career at the Royal Institute of Technology (Stockholm) as R&D engineer in the Nuclear Safety Department. From 2013 to 2021 he worked at the CERN's engineering department, within the Targets, Collimators & Dumps Section. In 2021 he joined the IFMIF-DONES project for its implementation in Granada, Spain. From 2025 he is the Safety Department Head of IFMIF-DONES, where he is leading the activities towards the detailed safety design, construction, and licencing of this one-of-a-kind facility

Patrick White

Group Lead, Fusion Energy Safety and Regulation. Clean Air Task Force

Patrick White joined Clean Air Task Force (CATF) in 2025 as the Group Lead for fusion energy safety and regulation. He leads the CATF International Working Group on fusion energy safety, waste, and non-proliferation, focused on creating globally harmonized regulatory policy and frameworks for commercial fusion energy.

His work includes detailed technical and policy analysis of fusion technology to help develop proportional regulatory frameworks that enable the effective, efficient, and predictable licensing and deployment of commercial fusion energy. He also contributes to CATF's work on advanced fission energy with a focus on regulatory issues, and stakeholder outreach and education.

He holds a B.S. and M.S. in Mechanical Engineering from Carnegie Mellon University and an M.S. and PhD in Nuclear Science and Engineering from the Massachusetts Institute of Technology (MIT). His PhD research focused on developing new licensing methods and regulatory frameworks for commercial fusion technology and his M.S. research focused on new advanced fission reactor licensing pathways. He also was coauthor of the 2018 MIT "Future of Nuclear Energy in a Carbon-Constrained World" study and he led report research on new nuclear power plant licensing.

Previously, he was the Research Director at the Nuclear Innovation Alliance, leading technical analysis and stakeholder engagement on advanced nuclear energy, and worked with the commercial nuclear industry at MPR Associates.