SAVE THE NEW DATE

ICOND

15TH EDITION

International Conference on
Nuclear Decommissioning

JUNE,19. – 22. 2028

www.icond.de

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IMPRINT

AiNT
GNS-Gruppe

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iCOND
International Conference on
Nuclear Decommissioning
www.icond.de

HINTERGRUND

Die Stilllegung kerntechnischer Anlagen stellen alle Beteiligten vor hohe planerische und genehmigungstechnische Anforderungen. In der laufenden Dekade werden sowohl in Europa als auch weltweit zahlreiche Kernkraftwerke aufgrund ihrer Laufzeit und politischen Entscheidungen außer Betrieb genommen. Dieser Umstand erfordert optimierte bzw. zwischen allen Beteiligten abgestimmte Rückbaustrategien.

Die Fachveranstaltung vergleicht Stilllegungsstrategien und nimmt die verschiedenen Teilaufgaben des Rückbaus in den Blick. Neben den unterschiedlichen Genehmigungs- und Finanzierungsstrategien spielt das Personalmanagement beim Übergang vom Kernkraftwerksbetrieb zum Rückbauprojekt eine wichtige Rolle. Ebenfalls wird die Zwischenlagerung und Entsorgung radioaktiver Abfälle thematisiert, die für den Rückbau eine wesentliche Randbedingung darstellt.

BACKGROUND

The decommissioning of nuclear power plants, particularly power reactors, present high demands regarding planning and authorization to all parties involved. In the ongoing decade several nuclear power plants will be shut down due to their operating life and political decisions, not only in Europe, but also worldwide. As a result, optimized decommissioning strategies will need to be well-coordinated among all participants.

The ICOND compares decommissioning strategies worldwide. This includes roles of authorization, financial planning, and change management in the transition from nuclear power plant to decommissioned project. Furthermore the different options for interim storage and disposal of radioactive waste are discussed.

ZIELGRUPPE

Die Konferenz richtet sich an Betreiber von kerntechnischen Anlagen, die die Verantwortung für die Projektsteuerung und die Reststoffentsorgung von Rückbauprojekten haben. Weitere Zielgruppen sind Unternehmen, die mit der Planung und Durchführung von Rückbauprojekten beauftragt sind. Es werden Behörden und Sachverständigenorganisationen adressiert, die in Genehmigungs- sowie Aufsichtsverfahren und die Begutachtungen von Rückbauprojekten eingebunden sind. Ausgehend von Fachvorträgen diskutieren die Teilnehmer/-innen die Herausforderungen des Rückbaus sowie Planungsvarianten für individuelle Rückbauaufgaben. Alle Beiträge werden simultan übersetzt (Deutsch/Englisch).

AUDIENCE

ICOND addresses operators of nuclear plants and companies who are working on the planning, implementation and supervision of decommissioning projects; authorities and technical experts whose focus includes the approval and supervisions procedure of decommissioning projects; and research institutions which are responsible for the dismantling of research reactors and the storage and/or disposal of radioactive hazardous waste. ICOND will enable participants to proficiently discuss the challenges of the decommissioning of nuclear plants in a practical way, and to define optimal planning variants for decommissioning implementation. Simultaneous translation (German/English) will be available.

RÜCKBLICK ICOND 2024

Die 14. International Conference on Nuclear Decommissioning (ICOND) des Aachen Institute for Nuclear Training GmbH (AiNT) bestätigte 2024 erneut ihre Bedeutung als internationaler Branchentreff für Rückbau und Entsorgung radioaktiver Abfälle. Rund 330 Teilnehmende, davon etwa 40 % aus dem Ausland, diskutierten aktuelle Entwicklungen, Innovationen und Herausforderungen der Branche.

Mit rund 35 Expertinnen und Experten aus Behörden, Wissenschaft und Industrie bot die Konferenz ein vielseitiges Vortragsprogramm. Die Keynote „The Challenge of D&D – Efficient Cooperation between Authorities, Experts and Waste Producers?“ stellte die Zusammenarbeit der beteiligten Akteure in den Fokus und gab wichtige Impulse für den internationalen Dialog.

Ergänzend zum Konferenzprogramm präsentierten zahlreiche Unternehmen ihre Produkte und Dienstleistungen in der begleitenden Fachausstellung. Die ICOND 2024 verband damit erneut hohe fachliche Qualität mit intensivem Austausch und internationaler Vernetzung.

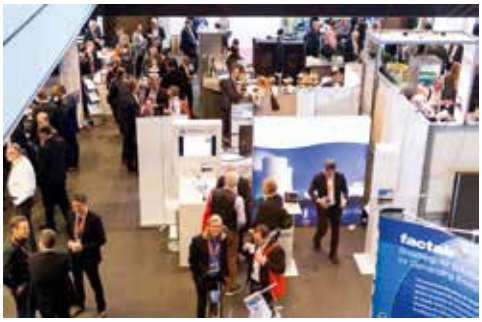
ICOND 2024 REVIEW

The 14th International Conference on Nuclear Decommissioning (ICOND), organized by Aachen Institute for Nuclear Training GmbH (AiNT), once again confirmed its role as a key international forum for nuclear decommissioning and radioactive waste management in 2024. Around 330 participants, approximately 40% of them from international organizations and institutions, came together to discuss current developments, innovations, and challenges within the sector.

With around 35 expert speakers from authorities, science, and industry, the conference offered a diverse and high-quality program. The keynote “The Challenge of D&D – Efficient Cooperation between Authorities, Experts and Waste Producers?” placed a strong focus on collaboration between the various stakeholders and provided valuable impulses for international dialogue.

In addition, numerous companies presented their products and services in the accompanying technical exhibition. Once again, ICOND 2024 successfully combined technical excellence with intensive exchange and international networking.

EXHIBITORS ICOND 2026 EXHIBITORS



ICOND PROGRAM

SPEAKER REFERENCE WALL

Kinside
EPRI
RWE
framatome
IFE Institute for Energy Technology
sck cen
KONDIA
ENERGY SOLUTIONS
Preussen Elektra
FRAZER-NASH CONSULTANCY
uniper
ENGIE Electrabel
NRG PALLAS Nuclear. For Life.
EWN Gruppe
GNS
REINWALD Beton- und Bau Monierbau
Fraunhofer IGD
POLITECNICO MILANO 1863
cyclife EDF GROUP
SAFETEC
GRS
VISATEC
vgbe ENERGY IS US
KIT Karlsruhe Institute of Technology
simopt
laizee.ai
SAFETEC ACADEMY
iUS GmbH consultants & advisors
RWTH AACHEN UNIVERSITY
FOCUSED
HINNEBURG GmbH
Wölfel

MONDAY – MAY 04TH, 2026

FOCUS DAY

(Presentations are held in English)

11:30 **CHECK-IN**

12:00 **QUICK LUNCH**

On the 1st floor

13:00 **WELCOME**

Dr. Luc Schlömer

AI IN DECOMMISSIONING

13:15 **An Introduction to the World of AI**

Rob Galler – KI Inside

13:40 **Advancing Nuclear Decommissioning through Global Knowledge Exchange & Innovation: EPRI Insights**

Darcy Campbell – EPRI

14:05 **Applying AI from an Operator's Perspective**

Carsten George – RWE Nuclear GmbH

14:30 **Artificial intelligence for Framatome services: activities and stakes**

Romain Bourrier – Framatome

14:55 **AI, Data and Robotics for Nuclear Decommissioning: Technology and the Norwegian Context**

Dr. István SZOKE – Institute for Energy Technology (IFE)

15:20 **Enhancing Total Gamma Clearance Monitors via Bayesian Inference: Integrating Spatial and Spectral Data**

Dr. MD Moudud Hasan – SCK CEN

15:45 **COFFEE BREAK**

16:15 **Elevator Pitch for Young Scientists on the Topic of AI in Decommissioning or Related Field**

17:30 **Closing Focus Day**

TUESDAY – MAY 05TH, 2026

11:30 **REGISTRATION**
In the reception area

12:00 **QUICK LUNCH**
On the 1st floor

13:00 **WELCOME**
Dr. Luc Schlömer

KEYNOTE – INTERNATIONAL DECOMMISSIONING EXCELLENCE

13:15 **Global Status of Decommissioning and Empowering Cost Benchmarking from International perspective**
Tetiana Kilochytska – IAEA & Shauryavardhan Sharma - OECD NEA

13:40 **Korea's Strategic Lens: Translating Global Best Practices into National Success**
Dr. Josef Kim – KONDIA

14:05 **Accelerating Decommissioning: The U.S. Risk Transfer Model, and the International Material Reuse Model**
Colin Austin – EnergySolutions

14:30 **PreussenElektra´s Formula for Progress in Decommissioning: Innovative Concepts and Cost Optimization**
Michael Bongartz – PreussenElektra

14:55 **COFFEE BREAK** sponsored by pedi ZURICH

15:45 **The UK Decommissioning Journey: Key Decisions, Challenges and Lessons Learned**
Stuart Newman – Frazer-Nash Consultancy Ltd.

16:10 **How to D&D the Swedish way**
Frank Wilmann - Uniper SE

16:35 **Driving Excellence Through Partnership: Lessons from Belgian Decommissioning Projects**
Peter Berben – ENGIE

17:00 **Panel discussion**
until 17:25

17:45 **Shuttle buses to the Conference Dinner**
until 18:45

18:15 **Conference Dinner** sponsored by HINNEBURG GmbH
Venue: Tivoli Aachen Krefelder Str. 205, 52070 Aachen

WEDNESDAY – MAY 06TH, 2026

PROJECT STATUS & BEST PRACTICE

09:30 **Project Status and Progress: Doodewaard NPP**
Patrick Haass – NRG PALLAS

09:50 **Current Status of Decommissioning Activities at the EWN Group's Research and Experimental Reactors**
Ralf Borchardt – EWN Gruppe

10:10 **COFFEE BREAK** sponsored by pedi ZÜRICH

11:00 **Cutting-Edge Excellence: Advanced Techniques for Reactor Pressure Vessel Dismantling**
Dr. Henning Keller & Tuncay Ertugrul – GNS mbH

11:20 **Modern Milling Techniques in Decommissioning**
Philipp Sommerer – Reinwald GmbH & Ingo Ossenbühl – BUM Beton- und Monierbau GmbH & Co. kG

11:40 **Discussion Round for Questions**

12:00 **LUNCH BREAK**

DECONTAMINATION, CLEARANCE & MATERIAL MANAGEMENT

01:15 **ARRIVE**
Pedro Santos – Fraunhofer

13:35 **iRE-SOLVE: The Italian Patent Solving the Spent Ion-Exchange Resin Puzzle**
Dr. Francesco Galluccio – Politecnico di Milano

13:55 **Rip'n'Ship of large components – advantages and perspektives**
Arne Larsson – Cyclife Sweden AB

14:15 **Clearance – Current Developments**
Dr. Dominik Krupp – Safetec

14:35 **COFFEE BREAK** sponsored by pedi ZÜRICH

INNOVATION

15:15 **From Ambition to Implementation – Supporting Innovation through Research Funding in a Change-Resistant Environment**
Dr. Helena Möller – Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH

15:35 **Innovation: Visatec Camera**
Marcus Jocham – VISATEC

15:55 **High-tech instead of wrecking balls: innovations in demolition—evolution or revolution?**
Dr. Lena Jentjens – VGBE Energy

16:15 **Discussion Round for Questions**

OUT OF THE BOX

16:30 **Society vs. Nuclear – Conflicts, Potentials, Acceptance?**
Sophie Kuppler & Armin Grunwald – ITAS

17:00 **GET TOGETHER** sponsored by SAFETEC

THURSDAY – MAY 07TH, 2026

COMPETENCE DEVELOPMENT & TRAINING
(15-minute presentation + 5-minute Q&A)

09:30 **Transforming Energy Education: Interactive 3D, E-Learning and VR for Modern Nuclear Training**
Michael Sovadina – Simopts

09:50 **AI-Based Training to Address Workforce Shortages and Enhance Professional Development – Nuclear Pro**
Dr. Michael Jentgens – Laizee.ai

10:10 **Systematisches Wissensmanagement in der Nuklearindustrie**
Dr. Lotte Lens – Safetec Academy

10:30 **COFFEE BREAK** sponsored by pedi ZÜRICH

SUSTAINABILITY – CIRCULAR ECONOMY

11:15 **Metal recycling from decomissioning and refurbishment – within and beyond clearance**
Franz Borrmann – iUS

11:35 **Circular Economy Explained: An Academic Viewpoint**
Prof. Dr. Peter Letmathe – RWTH Aachen

11:55 **Circular Economy in Nuclear Decommissioning**
Dr. Thomas Rösch – FocusedEnergy

12:15 **Second Life of NPPs "Building / Lifetime Extention / Aging and Recycling"**
Dr. Anton Anthofer – Hinneburg

12:35 **Discussion Round for Questions**

12:55 **Closing remarks and prospects**

13:10 **QUICK LUNCH**

We reserve the right to make changes to this program

SPEAKER ABSTRACTS
MONDAY

ROB GALLER

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13:15 **MONDAY**

„WHO NEEDS AI ANYWAY? – CREATING VALUE WITH EMERGENCE & AI-COMBINED DIDACTIC INTELLIGENCE IN BUSINESS: CHALLENGES & OPPORTUNITIES."

How does AI create real value in organizations? Rob Galler makes one thing clear: before optimizing any process, organizations must first value their people.

That means reducing fears, building motivation, and providing honest education about what AI truly is and can do.Companies don't need a collection of tools — they need a clear strategy and an AI platform as a genuine operating system: chatbot, assistant, agent, workflow, skills, knowledge folders, GDPR compliance, and hosting on European servers — combined with the right training for efficient, meaningful application. Rob Galler provides a compact overview: What was AI, what is it today, what will it become?

The technology has been researched scientifically since the 1950s — but it is through social media that AI now exerts an enormous and rapid influence on our society. What is generative AI? What is analytical AI? What does RPA (Robotic Process Automation) mean? Where should our focus lie — and in what form?

A brief journey through three epochs: learning knowledge, retrieving knowledge, orchestrating knowledge. Didactic Intelligence is the key to Artificial Intelligence. Alongside resilience, it is emergence that must be developed more strongly than ever as a core human capability. Risks, challenges, and opportunities — presented clearly, directly, and without sugarcoating.

Including live examples drawn directly from the field of nuclear science and the operation of nuclear facilities — real use cases, real impact, no simulation.

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13:40 **MONDAY**

ADVANCING NUCLEAR DECOMMISSIONING THROUGH GLOBAL KNOWLEDGE EXCHANGE & INNOVATION: EPRI INSIGHTS

This presentation introduces the Electric Power Research Institute's (EPRI) efforts to strengthen global knowledge transfer in nuclear decommissioning while advancing modern artificial intelligence (AI) enabled and digital methodologies. Building on more than three decades of decommissioning experience and extensive international engagement, EPRI is developing innovative approaches to transform dispersed, unstructured information into accessible, interoperable knowledge that supports utilities, regulators, and global partners. The presentation highlights lessons learned to standardize taxonomies and ontologies for consistent global knowledge exchange. It also showcases EPRI's ongoing research into semantic search tools, vector based retrieval systems, and emerging knowledge graph architectures—technologies designed to enhance the ability to rapidly access relevant insights across diverse document sources. These developments complement EPRI's broader initiatives, which emphasize structured guidance and strategies for efficient, safe decommissioning planning. EPRI is further exploring how AI can support the development of Decommissioning Plans and the design of Final Status Surveys. As part of this effort, EPRI is evaluating digital tools to improve access to historical data and streamline planning activities. Importantly, these AI enabled approaches are intended to augment, not replace, established deterministic methods. Traditional tools for waste characterization, neutron activation analysis, and radiological modeling remain foundational and are used in parallel to ensure technical rigor and regulatory credibility. Attendees will gain insight into how the combination of global experience, standardized knowledge frameworks, and emerging AI technologies can enhance efficiency, safety, and predictability in future decommissioning programs while ensuring critical expertise is preserved for the next generation of practitioners.

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14:05 **MONDAY**

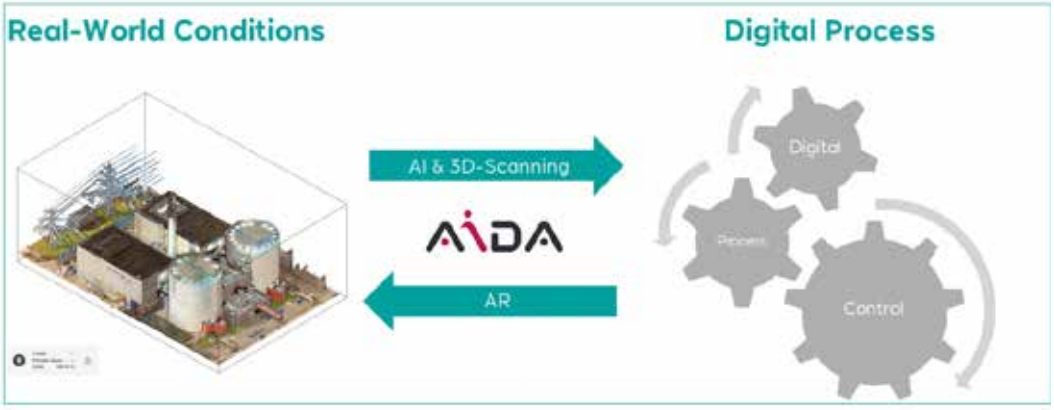
APPLYING AI FROM AN OPERATOR'S PERSPECTIVE

This presentation discusses the introduction of AIDA (AI for Dismantling Acceleration) at Gundremmingen from an operator's point of view and shows how AI-based 3D plant understanding can support nuclear decommissioning at scale.

The initial driver was the need for reliable quantity and mass estimation for broad-scope assessment, allowing longer planning horizons and reducing disruptive deviations during detailed planning. By integrating AIDA with existing IT systems and the ICP planning tool, the platform became part of a continuous digital workflow that links the real plant condition with planning and operational control. This created strong network effects across departments, as planning, radiation protection, and execution teams could work from the same digital basis.

The presentation further shows how AIDA has evolved beyond planning, including radiological mapping based on synchronized dose measurements and 3D scans, as well as AI-supported workflows for building decontamination with digital measurement planning, AR-assisted execution, tracked instrument handling, and automated documentation.

An outlook is given on scaling the infrastructure across sites, enabling future cloud use, opening the platform to external partners, and establishing digital life histories for rooms and components.



The real plant condition is integrated into digital decommissioning processes via 3D scanning and AI. Conversely, digital process results are made visible on-site in the real plant through Augmented Reality.

RWE

ROMAIN BOURRIER | **14:30** | **MONDAY**

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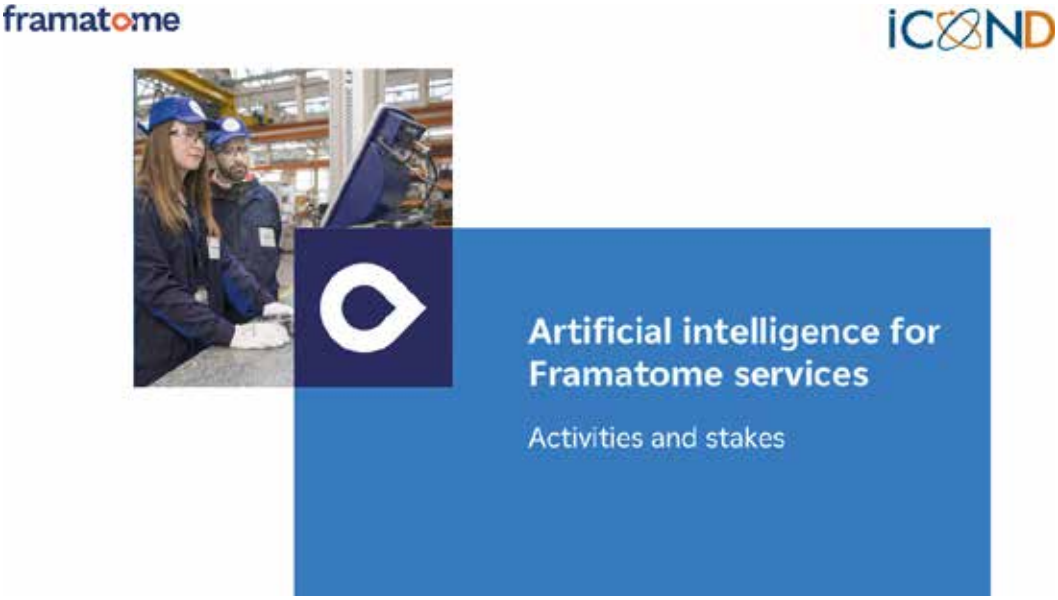
iCOND



Framatome provides a wide range of nuclear engineering, services, and technologies spanning reactor design, operation, maintenance, fuel management, and end of life dismantling activities. Increasingly, the company integrates artificial intelligence and advanced robotics to enhance safety and efficiency in its activities. AI enabled tools support remote inspection, precise dismantling, and radiation dose reduction through robotic systems deployed in hazardous environments such as legacy reactor cavities and contaminated structures. Complementing these systems, digital modelling and AI driven planning techniques strengthen situational awareness and operational decision making.

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14:55 **MONDAY**

AI, DATA AND ROBOTICS FOR NUCLEAR DECOMMISSIONING: TECHNOLOGY AND THE NORWEGIAN CONTEX

Nuclear decommissioning increasingly depends on combining advanced digital technologies with strong domain knowledge in radiation physics, materials, safety, and regulated operations. This presentation focuses on research and innovation at the Institute for Energy Technology (IFE), especially through the HADRON concept, Hazard Aware Digitalisation and Robotics in Nuclear and other domains. HADRON integrates AI, data analytics, robotics, and multi-physics modelling into Digital Twin based approaches for complex, safety-critical environments.

The work builds on the long Halden legacy in fuels, materials, radiation protection, and nuclear safety, now extended to AI-assisted modelling, sensor-integrated robotics, and simulation-supported decision-making. These approaches support safer and more efficient decommissioning, including radiological characterisation, dismantling planning, waste-related activities, and training. Digital Twins coupled with physics-informed models and operational data can improve situational awareness, risk assessment, and optimisation of complex tasks, while helping reduce worker exposure and strengthen transparency in regulated processes.
The presentation will also briefly outline the Norwegian nuclear context, including legacy decommissioning and growing interest in nuclear power and other future nuclear applications. In this setting, research organisations, authorities, and emerging industry actors are working to strengthen competence and analytical capacity across the nuclear lifecycle.

The overall message is that AI, data, and robotics are most valuable in the nuclear field when grounded in validated physics models and practical domain expertise. This enables more credible, transparent, and useful solutions for decommissioning, while also creating relevance for future nuclear systems and wider safety-critical sectors.

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15:20 MONDAY

ENHANCING TOTAL GAMMA CLEARANCE MONITORS VIA BAYESIAN INFERENCE: INTEGRATING SPATIAL AND SPECTRAL DATA

Total gamma monitors are essential for the high-throughput characterization of large-volume radioactive waste, such as 200 L drums, due to their 4π geometry and high-efficiency plastic scintillators. However, traditional methods struggle with non-uniform activity distributions and the mandatory identification of localized "hot spots". This work introduces a novel Bayesian framework that integrates spatial and spectral data with a surrogate efficiency model to reconstruct the activity distribution across 15 discrete sub volumes within a waste drum. A key advantage of this approach is its ability to jointly estimate the 60Co/137Cs ratio when it is not known a priori. Validation through virtual and physical mock-up experiments demonstrates that the method accurately identifies high-activity sub volumes and reconstructs relative spatial distributions.

With reliable background count estimates, the total drum activity is determined with a relative error below 10%. Furthermore, tests on real low-level waste drums, validated against HPGe-based gamma spectrometry, confirmed a maximum relative error of 10%. While the model correctly identifies drums containing only 137Cs, it currently tends to underestimate the 60Co fraction when present. Current practical limitations include a reliance on a near-100% drum filling level and assumed constant density. Future developments will focus on incorporating the filling degree into the surrogate efficiency model to enhance versatility. This Bayesian approach provides a robust, mathematically rigorous path for reducing conservatism in waste assay while meeting stringent regulatory requirements for hot spot detection.

SPEAKER ABSTRACTS
TUESDAY

13:15 TUESDAY

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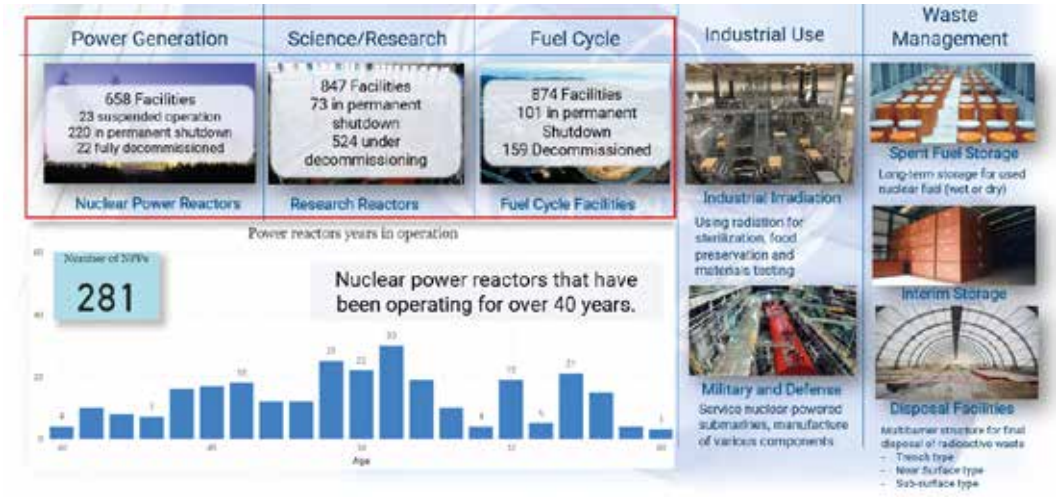
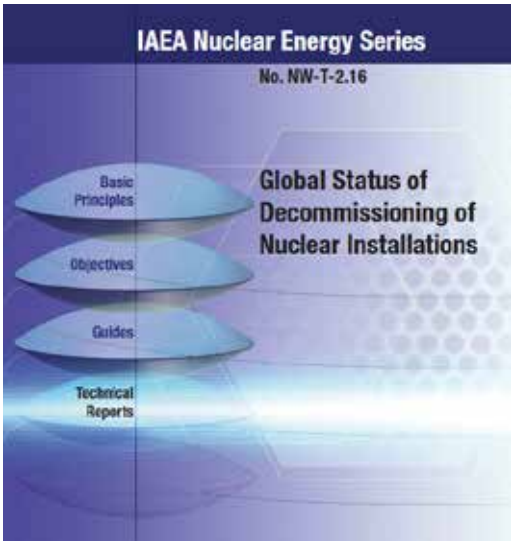
GLOBAL STATUS OF DECOMMISSIONING AND EMPOWERING COST BENCHMARKING FROM INTERNATIONAL PERSPECTIVE

Tetiana Kilochytska (IAEA)

The collaborative project on Global Status of Decommissioning of Nuclear Installations was introduced by the IAEA with the overall objective of collecting and analysing authoritative information on the current status and future evolution of nuclear decommissioning activities around the world. The project scope covered nuclear power plants, research reactors and fuel cycle facilities. Project implementation required the collection and evaluation of information on the current status and decommissioning plans for all facilities within the project scope, using an approach based on the collection and evaluation of information derived from a focused questionnaire and relevant IAEA databases – PRIS (Power Reactor Information System), RRDB (Research Reactor Database) and iNFCIS (Integrated Nuclear Fuel Cycle Information System). The project outcomes were presented in IAEA Nuclear Energy Series No. NW-T-2.16.An overview and analysis of current decommissioning strategies were undertaken, including drivers



for strategy selection and current major trends in strategy definition. The resources needed for decommissioning has been reviewed, including the size of the workforce together with the costs incurred to date, estimates of liabilities for future work and a summary analysis of technologies needed to deliver decommissioning projects, main current challenges. The main factors impacting the implementation of decommissioning projects were highlighted, including a SWOT analysis (strengths, weaknesses, opportunities, and threats) and an analysis of major current trends in programme implementation. Many nuclear facilities are likely be retired from service over the next 1-2 decades. Considering this and the Member States support, the IAEA initiated the next phase of this project to continue elaborating the global status of decommissioning of nuclear facilities.



Shauryavardhan Sharma (NEA)

It has generally been recognised that having accurate cost estimates for decommissioning nuclear facilities is an essential part of a decommissioning project. Globally there has been a sustained effort since the 1980's to improve the practices associated with enabling holistic cost estimates and promote greater harmonisation and transparency. Collaborative work undertaken by various committees of the NEA, IAEA and the EC, has largely followed three broad phases. From the late 1980s initial efforts identified the problems and risks faced when comparing cost estimates. The 2003 Decommissioning Nuclear Power Plants report highlighted challenges in comparing decommissioning costs across countries.

Empowering Cost Benchmarking: Guidance on Converting General Cost Work Breakdown Structure into the International Structure for Decommissioning Costing

Following this focus then shifted to problem-solving, with solutions proposed to mitigate issues such as approaches to promote a standardised reporting of costs. This resulted in the creation of the International Structure of Decommissioning Costing (ISDC 2012) – a joint collaboration between the NEA, IAEA and the EC with the aim to provide countries and operators a standardised format for reporting decommissioning cost data. It categorises decommissioning costs into 11 principal activities (and further subcategories) allowing for a standard reporting template. Efforts since then have focussed on implementing and building industry confidence in the solutions proposed such as the ISDC. While major efforts have been sustained such as 2016 Costs of Decommissioning Report and efforts related to improving a common definition, calculation and reporting of uncertainty and risk in relation to cost estimates, several challenges have also been identified. A lack of collected data on actual costs, as well as perceived obstacles to data sharing, can lead to the emergence of barriers in the way of cost benchmarking activities. Enabling the removal of these barriers is essential to introducing cost benchmarking approaches. A key guidance report detailing steps towards cost benchmarking was published in 2025 by the NEA with future work planned.

DR. JOSEF KIM

13:40 **TUESDAY**

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KOREA'S STRATEGIC LENS: TRANSLATING GLOBAL BEST PRACTICES INTO NATIONAL SUCCESS

This presentation, Korea's Strategic Lens: Translating Global Best Practices into National Success, explores how the Republic of Korea has transformed itself from a technology importer into a globally recognized nuclear leader by effectively adapting and optimizing international best practices across the full nuclear lifecycle.

Beginning with its early adoption of advanced technologies, safety philosophies, and regulatory frameworks from leading nuclear nations, Korea pursued a deliberate strategy of localization, standardization, and continuous improvement. This approach, supported by strong collaboration among government, industry, and academia, enabled Korea to achieve world-class performance in nuclear power plant construction and operation.

The presentation highlights Korea's excellence in nuclear construction, characterized by standardized plant designs, integrated supply chains, and rigorous schedule and cost management. These capabilities have been validated through successful international projects such as the Barakah Nuclear Power Plants in the United Arab Emirates, demonstrating Korea's ability to deliver safe, timely, and cost-effective nuclear solutions.

Equally, Korea's commitment to operational excellence is emphasized through its robust safety culture, continuous performance enhancement via international peer reviews, and the adoption of advanced digital technologies. These efforts have resulted in high reliability and strong global confidence in Korean nuclear operations.

Looking ahead, Korea is entering a new phase with the advancement of nuclear decommissioning, marked by the permanent shutdown of Kori Unit 1. By leveraging international experience and developing indigenous technologies in dismantling, waste management, and site restoration, Korea aims to establish a competitive decommissioning industry while ensuring environmental responsibility and public trust.

The presentation concludes by outlining Korea's strategic vision to enhance international competitiveness through lifecycle integration, comprehensive service exports, and strengthened global cooperation. Anchored in the principles of safety, sustainability, and global responsibility, Korea seeks to contribute meaningfully to the future of nuclear energy and the global transition toward carbon neutrality.

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WEB www.energysolutions.com

14:05 **TUESDAY**

ACCELERATING DECOMMISSIONING: THE U.S. RISK TRANSFER MODEL, AND THE INTERNATIONAL MATERIAL REUSE MODEL

In November 2023 we presented the concept;

"Nuclear Decommissioning's Contribution to UN Sustainability Goals : Recycle Everything ?"

Since that time the concept has now matured into routine application. The international community now has the opportunity to mimic the project acceleration demonstrated in U.S. nuclear facility decommissioning projects.

U.S. nuclear facility decommissioning models have been matured over more than 40 years. Therefore, it is helpful to first understand the U.S. model which has seen a progressive transfer of risk from the utility to the decommissioning entity.

This presentation will outline:

- What conditions and factors in the U.S. have led to this model
- How this approach has proven itself in practice.
- Which challenges or missteps have occurred along the way
- Which insights may be applicable to other countries.

The presentation will challenge the current established international belief that the U.S. Model is entirely dependent upon immediate access to low level waste disposal facilities. Whilst in some parts this may be true, it is important to step back and define a decommissioning project.

A decommissioning project is a project which takes a large mass of radioactively contaminated material and redistributes the radionuclides to cost effectively meet the requirements of available disposition paths. The matured US recycling model now presents an alternative pathway to disposition as waste and instead offers recycle and reuse as an option. Under this concept recycling of the material becomes an available option that meets the environmental and sustainability objectives of decommissioning projects. In doing so the international market now has an immediately available outlet for virtually all the redundant plant and equipment from nuclear island decommissioning in a way that replicates the schedule acceleration and cost avoidance advantages of the U.S. model.

This presentation will develop;

- What is the recycling model.
- What enables the recycling model.
- The benefits of the recycling model.

The presentation will conclude with aligning the U.S. based model with the benefits of a recycling and sustainable approach.

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PREUSSENELEKTRA´S FORMULA FOR PROGRESS IN DECOMMISSIONING: INNOVATIVE CONCEPTS AND COST OPTIMIZATION

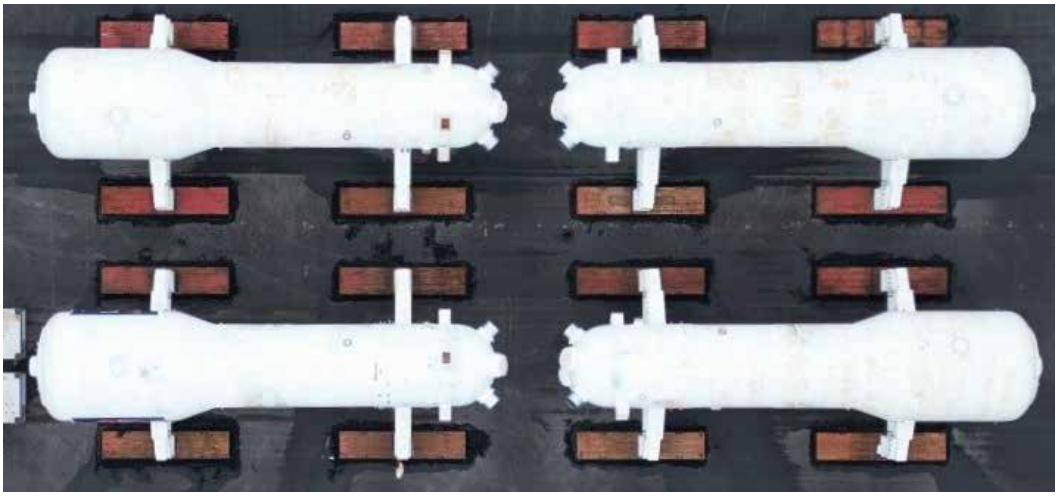
PreussenElektra (PEL) accounts for the decommissioning and dismantling (D&D) of its nuclear power plant fleet comprising six pressurized and two boiling water reactors, building on almost three decades of experience in closing the nuclear lifecycle. With progressing D&D programs and a focus shifting towards building decontamination and release, challenges still remain on various levels which call for de-regulation, innovation and, eventually, cost-optimization.

One of the key prerequisites for an efficient D&D process from system shutdown, dismantling, material treatment to disposal (SDRE process) is a regulatory and administrative framework which allows for timely and foreseeable approval of planned activities. The implementation of requirements, however, appears quite heterogeneous across federal states not necessarily considering a significantly decreasing risk for radiological hazards along defueling and D&D progress.

Technical and digital innovations are continuously under development aiming for an effective and efficient SDRE process. For instance, advanced procedures to allow for simplified release processes in former control buildings are pursued and nationwide solutions for hazardous conventional material must be found. Likewise, mutual acceptance of proven processes for the release of material across license holders is strongly advised.

To strive for excellence and cost-optimization, PEL introduced an innovative organizational model for value-oriented planning and steering to support a sustainable performance culture. The model builds upon an integrated short-term and end-of-life program approach to actively manage trends and compliance with targets.

In conclusion, the demand for advancements remains high, despite a proven progress in D&D.



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THE UK DECOMMISSIONING JOURNEY: KEY DECISIONS, CHALLENGES AND LESSONS LEARNED

The UK's nuclear decommissioning programme is one of the largest and most complex environmental engineering missions in the world, spanning decades and involving 17 legacy nuclear sites across the country. It is led by the Nuclear Decommissioning Authority (NDA), a public body established under the Energy Act (2004).
The NDA published its latest long-term strategy on 23–25 February 2026, outlining how it will safely decommission the UK's earliest nuclear sites through a more integrated "One NDA" model.

- The UK nuclear industry began in the 1940s, following the UK Atomic Energy Act (1946), which set the stage for nuclear research and early facilities.
- The UK constructed Windscale, two air-cooled reactors built between 1950–1951, designed for plutonium production. These early sites are today major decommissioning liabilities.
- Calder Hall, opened in 1956, became the world's first full-scale commercial nuclear power station. It produced both electricity and military plutonium.
- Throughout the 1960s, reactor technology expanded rapidly, including the commissioning of multiple Magnox stations (1962–1971).

Many of these early facilities pre-dated modern safety standards and were never designed with decommissioning in mind, creating long-term technical challenges and lessons to learn and take forward into the present and future decommissioning in the UK.

The UK's experience reflects a journey from pioneering nuclear technology in the 1950s to managing one of the world's most complex environmental cleanup programmes today. Key lessons—especially the importance of planning, transparency, innovation, and risk prioritisation—now shape not only UK strategy but also global best practice in nuclear decommissioning.

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HOW TO D&D THE SWEDISH WAY

In the early 1980s, Sweden established a regulatory and financial framework for the management of spent nuclear fuel and radioactive waste, as well for the decommissioning of its 12 nuclear power reactors. This framework is built upon two fundamental principles: the "polluter pays" principle and an “operator-driven system” for the management of spent nuclear fuel and radioactive waste. To satisfy the first principle, the **Nuclear Waste Fund**, a government authority, was established to manage fees paid by nuclear operators.

Under the second principle, operators formed the Swedish **Nuclear Fuel and Waste Management Company (SKB)** to develop and manage the necessary interim storage and disposal facilities.

While SKB is currently expanding the SFR geological repository for short-lived low- and intermediate-level waste, very low-level waste (VLLW) is managed via on-site landfills at three of the four nuclear sites. The designated disposal route for long-lived intermediate-level waste remains a primary focus of SKB’s ongoing research and development program.

Figure 2: Shifting hazard levels as the D&D project progresses.

Beyond its oversight, the regulator hosts regular workshops on decommissioning and related subjects, bringing together experts from the various stakeholders. This format aligns the regulator’s expectations with the license holders' pursuit of pragmatic decommissioning solutions, ensuring that the fundamental safety objective - protecting people and the environment from the ionizing radiation - is upheld.

Currently, the completion of decommissioning, specifically the clearance of large nuclear facilities and site release, is an emerging challenge due to its unprecedented scale in Sweden. As a result, expedient practices, i.e. necessary levels of optimization, are still being established, particularly as existing nuclear sites are designated as being of National Interest for energy production and distribution.

In conclusion, Sweden’s stable regulatory and financial framework sets the basis for safe but flexible and resource-efficient D&D program.

Figure 1: available waste routes in Sweden, including SKB's geological repositories SFR and SFL (planned).

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DRIVING EXCELLENCE THROUGH PARTNERSHIP: LESSONS FROM ENGIE'S DECOMMISSIONING PROGRAMME

ENGIE Electrabel's decommissioning programme is entering a new phase, with five units in post-operational phase and two in long-term operation. This presentation provides an update on the program and highlights how excellence in decommissioning is driven not only by technical innovation, but by structured, multi-actor partnerships.

The collaborative model developed within ENGIE integrates internal and external partners into the decommissioning programme. Tractebel, as engineering partner, provides integrated technical support and modelling, while SCK CEN contributes unique expertise from the BR3 dismantling project.

A concrete example of this partnership is the RIAD tool (Radiological Impact Assessment Demonstration), developed in collaboration with SCK CEN, with Tractebel defining the technical specifications and tool requirements, performing site visits to obtain key modelling input parameters and drafting qualification documentation. RIAD supports conditional clearance of materials and sustainable radioactive waste management by harmonising impact assessments and streamlining
licensing with the Belgian nuclear safety authority, FANC.

Key lessons from these collaborations include the benefits of early partner integration to accelerate progress, the role of shared standards in improving quality, and the value of international benchmarking in shortening learning curves.

ENGIE's experience demonstrates that structured collaboration – across engineering, operations, waste management, and oversight – can deliver faster, safer, and more transparent decommissioning outcomes.

SPEAKER ABSTRACTS WEDNESDAY

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09:30 WEDNESDAY

NRG PALLAS
Nuclear. For Life.

SAFE ENCLOSURE NPP DODEWAARD

Dodewaard was the first Dutch nuclear power plant. The facility was realized entirely through Dutch expertise, which required the prior establishment of the necessary supporting industries. Dodewaard was successfully constructed within a four-year timeframe.

Although the primary objective of the Dutch government-owned power plant was to develop comprehensive expertise in both the construction and operation of a nuclear power plant, the relatively small reactor vessel still delivered 60 MW electrical output over a period of 31 years.

The decision to shut down the plant was taken based on public pressure, despite five years of continued research into a lifetime extension.

The approach to decommissioning was determined independently, as no state-mandated strategy was in place at that time.

The choice for a delayed dismantling via safe containment was made based on the permit, available technology, political and financial situation and dose rate reduction. The safe enclosure was completed in 2005, marking the start of the 40-year safe-containment phase. In the meantime, the dismantling of all non-nuclear facilities have been carried out, leaving only vital structures for the safe enclosure.

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09:50 WEDNESDAY

EWN Gruppe

CURRENT STATUS OF DECOMMISSIONING ACTIVITIES AT THE EWN GROUP'S RESEARCH AND EXPERIMENTAL REACTORS

The EWN Group comprises three companies involved in the decommissioning and disposal of federal nuclear facilities. Funding is provided by the public sector. The Entsorgungswerk für Nuklearanlagen GmbH (EWN) is responsible for the decommissioning and disposal of the power reactors at the Greifswald Nuclear Power Plant (KGR) in Mecklenburg-Western Pomerania and the power and experimental reactor at the Rheinsberg Nuclear Power Plant (KKR) in Brandenburg. EWN operates several disposal facilities and an interim storage at the Greifswald/Lubmin site. The Jülicher Entsorgungsgesellschaft für Nuklearanlagen mbH (JEN) is responsible for the decommissioning of the AVR high-temperature reactor, the Chemical Cells, the FRJ-2 research reactor (DIDO), and the Large Hot Cells at the Jülich site in North Rhine-Westphalia. The facilities and equipment required for safe treatment, disposal and interim storage are available on site. The FRJ-1 (Merlin) research reactor has already been successfully decommissioned.

The Kerntechnische Entsorgung Karlsruhe GmbH (KTE) consolidates all decommissioning activities at decommissioned nuclear research and prototype facilities and the necessary waste disposal operations at the Karlsruhe/KIT Campus North site in Baden-Württemberg. The dismantling process is currently underway at the Karlsruhe Reprocessing Plant (WAK), including the Karlsruhe Vitrification Facility (VEK), the Compact Sodium-Cooled Nuclear Reactor (KNK), the Multi-Purpose Research Reactor (MZFR), the FR 2 Research Reactor, the Hot Cells (decommissioned construction sections), and the no-longer-needed evaporation and cementation plant for radioactive wastewater. This presentation will outline the current status of the decommissioning activities for the EWN Group´s research and experimental reactors. The next steps in the decommissioning will also be explained. Finally, the presentation will summarize the specific characteristics, challenges and lessons learned during the decommissioning of the research and experimental reactors.


GNS

11:00 WEDNESDAY

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ADVANCED TECHNIQUES FOR REACTOR PRESSURE VESSEL DISMANTLING

At present, numerous nuclear power plants (NPP) in Germany are undergoing D&D in parallel, creating unprecedented demands on personnel, logistics, regulatory procedures, and waste management capacities. One of the central tasks in dismantling a NPP is the cost- and time-efficient dismantling of the reactor pressure vessel (RPV).

The ReaDi project covers the planning, execution, and documentation of RPV dismantling across the PreussenElektra fleet. During the planning phase, detailed knowledge of the activity distribution is essential for reliable cost forecasting. The radiological inventory - from activation and contamination – must be validated through sampling and measurement campaigns. Based on the activity data and the RPV cutting plan, an iterative packaging concept is developed that assigns each cut piece to an appropriate container. This ensures compliance with transport regulations as well as the requirements for interim and final disposal.

To meet budget and schedule constraints during execution, GNS developed a cold-cutting technology to address challenges inherent to thermal cutting, such as complex air-filtration needs, installation of fixed work-tent structures, and the generation of large quantities of nitrous fumes. Cold cutting significantly simplifies radiation protection and contamination control. Furthermore, GNS developed positioning aids for Konrad Containers that can be flexibly adapted to the geometry of the cut pieces, thereby compensating for cutting tolerances and ensuring a rapid and continuous flow of waste containers.

ReaDi has already demonstrated its advantages in multiple projects and represents the state-of-the-art approach for RPV dismantling in NPPs. Within the completed projects, duration and costs were able to be accurately predicted due to precise planning. Based on the experience gained so far, ReaDi could optimize the approach for all future projects, reducing both time and cost substantially.



11:20 WEDNESDAY

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MODERN MILLING TECHNIQUES IN DECOMMISSIONING

Modern milling techniques play a critical role in the safe, efficient, and controlled decommissioning of industrial and nuclear facilities. As decommissioning projects increasingly involve complex reinforced concrete structures, thick-walled biological-hields, and contaminated surfaces, advanced mechanical removal technologies have become essential. Compared to conventional demolition methods, modern milling systems offer superior precision, reduced secondary waste generation, minimized vibration impact, and improved radiological control.

State-of-the-art milling technologies include remotely operated drum cutters, diamond grinding systems, roadheader-based milling units, and robotic surface removal platforms. These systems enable selective material removal, allowing operators to target activated or contaminated layers while preserving structural integrity where required. Remote and automated operation significantly reduces occupational exposure, particularly in high-dose or otherwise hazardous environments. In nuclear decommissioning projects, milling techniques are especially valuable for segmenting reactor biological-shields, dismantling internals-supporting concrete structures, and removing contaminated surface layers prior to clearance or free release. Integration with dust extraction systems, local containment solutions, and real-time monitoring further enhances safety and environmental performance.

Digital planning tools, 3D modeling, and controlled depth milling improve predictability and documentation, supporting regulatory compliance and waste classification strategies. The combination of mechanical robustness, operational flexibility, and radiological safety makes modern milling a key enabling technology for cost-effective and schedule-reliable decommissioning project

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13:15 **WEDNESDAY**

ROBBE – RESULTS OF THE OPERATIONAL FIELD TEST FOR AUTONOMOUS, ROBOT-ASSISTED PROCESSING OF ASSEMBLIES

RWE Nuclear GmbH supports decommissioning by incorporating new innovative methods – the "Integrated Decommissioning Process" (IRP) – at the nuclear power plant sites in Emsland, Gundremmingen, Mülheim-Kärlich and Biblis.

An important step in the dismantling phase is the precise surface decontamination, including of metal components, using ultra high-pressure (UHD) water jet technology, with the aim of recycling the substrates. The use of robots increases efficiency and reduces radiation exposure (ALARA) as well as the burden on staff.

The project "ROBBE" (robot-assisted processing of assemblies during the decommissioning of nuclear power plants) was awarded the "EU Innovation Prize on Nuclear Waste Management" in 2022 and presented at KONTEC 2023. Its goal is to realize the removal of contamination autonomously and in an automated manner.

As part of the ROBBE project, a robot-assisted decontamination system was developed in cooperation with the Biblis decommissioning facility and transferred into trial operational use. The following objectives were achieved: Autonomous 3D acquisition of components using laser scanning technology. Creation of a digital twin of the component as well as of the robotic system (robot arm and turntable).

Automatic determination of a cleaning trajectory, taking into account the physical process parameters and maximizing reachability (kinematic capabilities of the robotic system, singularities).

Prior simulation of the overall process; complete avoidance of collisions through path planning based on digital twins. Automatic detection and processing of previously unreachable areas when the component is reoriented. Through systematic development over the course of the project, the research stage (TRL 5–6) was exceeded, so that ROBBE can now be classified as an industrial prototype (TRL 7–8).

The evaluation of ROBBE in trial operational use shows, for over 90% of the components, a decontamination success rate of more than 90 %, provided the assemblies are optimally dismantled. In some cases, ROBBE surpasses the results of manual process control. The processing time per component is under 30 minutes, with a net processing time (3D scan and cleaning) of under 12 minutes. Finally, the ongoing project "ARRIVE – Autonomous Robot-Assisted Cleaning and Pre-Measurement" for laser ablation and radiological pre-measurement, funded by the German Federal Ministry of Education and Research (BMBF), is discussed.

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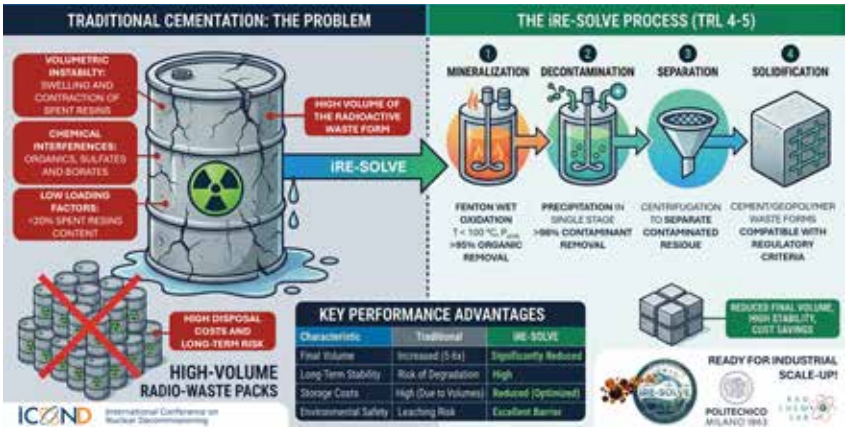
iRE-SOLVE: THE ITALIAN PATENT SOLVING THE SPENT ION-EXCHANGE RESIN PUZZLE

Spent Ion Exchange Resins (SIERs) represent one of the most challenging waste streams in the nuclear industry with around 4000 m³ yearly produced worldwide.The traditional direct cementation strategy is increasingly proving inadequate. In fact, SIERs are inherently unstable in cement matrices due to their organic nature, leading to swelling, and loss of structural integrity. Furthermore, chemical interferences from sulfates, borates, and organic by-products (e.g., amines) compromise the waste form stability, forcing low waste loading (<20%) that result in high volume increment factors (VIF), thus skyrocketing disposal costs.

iRE-SOLVE is an Italian patented technology that integrates SIER treatment with residue conditioning. It employs a Fenton-like wet oxidation process at low temperatures (<100 °C) and ambient pressure to achieve >95% mineralization of the organic matrix. Unlike state-of-the-art, iRE-SOLVE uses industrial waste as catalysts and precursors, embracing circular economy.

This technology replaces energy-intensive SIERs incineration. Moreover, evaporation of the mineralized liquor is replaced by a rapid selective decontamination step using materials constituting the conditioning matrix to isolate radionuclides into a stable, non-acidic solid residue, virtually free of interfering borates and sulfates compounds. This final residue is encapsulated in geopolymer or cementitious matrices, meeting the strictest Waste Acceptance Criteria.

The iRE-SOLVE outcompetes other strategies by eliminating organic-cement incompatibility and removing problematic borates and sulfates. Hence, the resulting residue can be directly encapsulated with high loading factors, drastically reducing the final waste volume (VIF<1), which is the primary driver of disposal costs. Life Cycle Assessment and cost-benefit analyses demonstrate that iRE-SOLVE outperforms direct cementation, while optimizing repository footprint, and finally clearing the global backlog of SIERs.



ARNE LARSSON | **13:55** | **WEDNESDAY**

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RIP'N'SHIP OF LARGE COMPONENTS – ADVANTAGES AND PERSPECTIVES

Studies and practical experience from licensees show that so called hotel costs, the time dependent costs of maintaining a nuclear facility in a safe and regulatory compliant state during decommissioning or modernisation are often the largest, or among the largest, cost contributors. As a result, virtually any action that shortens the overall project schedule delivers significant economic benefits.

At the same time, material and waste handling, is widely recognized as the major bottleneck, with a direct impact on the overall timeline. One effective approach to reducing schedule duration and mitigating these risks is to remove large components in one piece and apply rip and ship strategies, where installations are dismantled and sent for external treatment with a minimum of work on site.

For 50 years, Cyclife has provided waste and material treatment services to domestic and international customers, addressing these challenges through waste volume reduction and metal recycling in our own dedicated facilities.

The service offering has continuously evolved in response to customer needs. A major milestone will be reached in spring 2026, when Cyclife's second metal treatment facility in Sweden enters commercial operation.

This will double treatment capacity, enhance technical capabilities, and further improve radiological performance. The presentation will outline Cyclife's service portfolio, highlight the new facility, present relevant references from the 1980s until today, and demonstrate how the company contributes to a more sustainable nuclear industry.

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14:15 **WEDNESDAY**

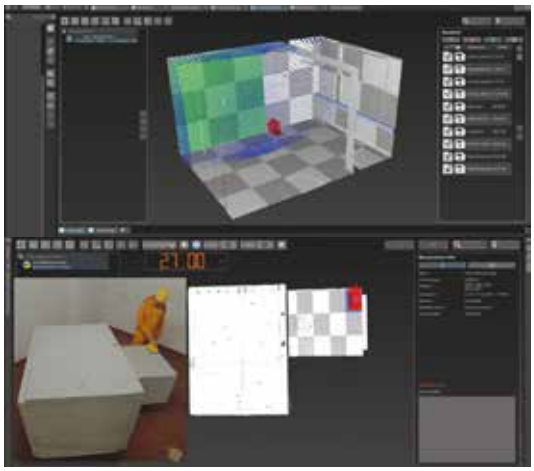
SAFETEC

RECENT DEVELOPMENTS IN THE DECOMMISSIONING OF NUCLEAR FACILITIES

Safetec GmbH is advancing digital and measurement-based solutions for nuclear decommissioning that bring together software-supported workflows, connected measurement technology, and structured documentation. Current developments build on proven digital clearance approaches and extend them from power plant structures to additional applications such as site clearance, concrete structures, materials for clearance, and pipe-related tasks.

This presentation outlines how these developments are being translated into integrated workflows that link geometric capture, 3D representations, radiological measurements, sampling, evaluation logic, and report generation. A particular focus is the continued extension of existing solutions toward broader process coverage, including differentiated workflows for clearance and removal, improved handling of heterogeneous materials and surfaces, and stronger coupling of measurement data with process control and documentation.

In addition, the presentation addresses the growing role of artificial intelligence in decommissioning. AI-supported approaches can help evaluate data more efficiently, support documentation and knowledge transfer, and assist experts in preparing and managing complex workflows. At the same time, the contribution reflects the current practical boundaries of AI use and emphasizes that its value lies in supporting qualified expert decisions rather than replacing them.



Based on practical project experience, the presentation shows how the combination of engineering know-how, radiation protection expertise, digital product solutions, and selected AI-based approaches can contribute to more resilient and more efficient decommissioning processes.

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15:15 **WEDNESDAY**

FROM AMBITION TO IMPLEMENTATION – SUPPORTING INNOVATION THROUGH RESEARCH FUNDING IN A CHANGE-RESISTANT ENVIRONMENT

Germany faces the long-term challenge of decommissioning nuclear facilities safely and managing radioactive waste responsibly. The FORKA research funding programme, coordinated by the project management agency PT GRS on behalf of the Federal Ministry for Research, Technology and Space (BMFTR), strengthens innovation in decommissioning and fosters the transfer of research results into industrial practice. PT GRS acts as a central interface between science, industry, and policy, ensuring that research addresses real-world needs.

FORKA's objectives include:

- Advancing and optimizing dismantling and decontamination technologies, focusing on automation, safety, and efficiency.
- Promoting interdisciplinary collaboration and synergies between research institutions and industry partners.
- Investing in young scientists to maintain expertise and career opportunities for the future.
- Establishing a robust national and international network to enhance knowledge transfer, reinforce Germany's reputation for excellence in nuclear decommissioning, and strengthen the competitiveness of German companies in international markets.

Each year, FORKA funds more than 60 research projects, spanning a wide range of topics including the advancement of dismantling and decontamination technologies, waste characterization and interim storage, environmental and radiation protection, digitalization, process optimization, and the development of innovative methods for cost and waste minimization. This presentation outlines the challenges and how FORKA has been addressing them, highlights PT GRS's role, and showcases how targeted research funding has enabled sustainable solutions for nuclear decommissioning. Concrete examples of practical applications will be presented, illustrating how FORKA-funded research has been successfully transferred into real-world practice. The presentation concludes with an outlook on future initiatives and opportunities for participation, aiming to advance innovation in a highly change-resistant environment.

MARCUS JOCHAM

15:35 **WEDNESDAY**

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FROM TUBE TO DIGITAL: DER ÜBERGANG ZUR DIGITALEN HOCHSTRAHLUNGS-INSPEKTION

For decades, tube-based camera systems remained the standard for visual inspection in high-radiation environments – not because they were ideal, but because no better alternative existed. Image artefacts such as lag, ghosting, and burn-in were simply accepted as long as the system survived the environment.

With the advent of radiation-tolerant CMOS sensor technology, this is fundamentally changing. The decisive advance lies not in sensor replacement alone, but in the transition from an analogue single component to a fully digital inspection chain – from image acquisition and transmission through to control, display, and documentation.

For reactor inspection and decommissioning applications, this means fewer repeat deployments, more confident defect assessment, and seamless digital documentation. The camera evolves from a passive viewing device into an integrated part of a data-capable inspection process.

This session explores why the shift from tube cameras to digital inspection infrastructure is today both technically and operationally feasible – and, from a quality standpoint, overdue.

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15:55 **WEDNESDAY**

HIGH-TECH INSTEAD OF WRECKING BALL: INNOVATIONS IN DECOMMISSIONING – EVOLUTION OR REVOLUTION?

While decommissioning projects were often considered, isolated projects in the past, decommissioning is now increasingly developing into an independent technical discipline with ever-growing demands on planning, safety, and efficiency. At the same time, new technologies and modern organizational approaches are opening up additional opportunities to further optimize decommissioning processes.

This presentation highlights the current state and development of the decommissioning of nuclear facilities using selected examples. It becomes clear that modern decommissioning projects no longer rely solely on classic demolition methods, but are increasingly characterized by precise, specialized technologies as well as new organizational and regulatory approaches. This raises the question of whether the numerous innovations of recent years should be understood as a continuous refinement of existing procedures – or whether they represent a fundamental change in decommissioning.

At the same time, it is evident that innovations in decommissioning do not arise in isolation. In fact, they develop through close collaboration between operators, authorities, research institutions, and industry partners. Professional exchange within the sector is of particular importance in this process. Technical associations like vgbe energy e.V. make a significant contribution by pooling experience from various projects, making knowledge accessible, and actively promoting dialogue between the stakeholders involved.

The aim is to provide an overview of the changes in the decommissioning of nuclear facilities and, at the same time, to demonstrate how collaboration within the industry contributes to developing new solutions and continuously improving existing processes. This highlights that decommissioning is not only a complex technical challenge but also a collaborative project involving all stakeholders.

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16:30 **WEDNESDAY**

SOCIETY AND THE NUCLEAR

Perceptions of nuclear energy technologies have changed over time and across different regions: some consider them to be a central pillar in the fight against climate change, while others regard them as too dangerous to use with a backend too difficult to manage. The history of nuclear waste disposal, especially for high-level waste, has been marked by failures and setbacks in many countries. In this talk, I will discuss why nuclear technologies are not merely technical systems, but rather 'sociotechnical' arrangements. I will also explain how this perspective can help us to understand how such differing views emerge, evolve and relate to decision-making processes in democratic contexts. Science and technology studies (STS) has shown that technologies, their development, and their use are always interwoven with rules, regulations, science, user practices, cultural significance, and other factors (Geels & Kemp, 2007). These systems can therefore never be fully controlled. They become sites of conflict when there is disagreement about the best way to solve contemporary problems. This is particularly evident in nuclear waste disposal, which can be understood as a 'wicked problem' (Rittel & Webber, 1973). These problems are characterised by high complexity, and people may not even agree on the exact definition of the problem, making it difficult to identify a solution that is widely acceptable. One approach is cooperative governance, which refers to a decision-making process involving not only political and administrative actors, but also a variety of other stakeholders who cooperate to make decisions and implement solutions (e.g. Chhotray & Stoker, 2009). While such forms of decision-making are expected to enhance legitimacy and efficiency, they also present pitfalls when used as a panacea. Strong conflict resolution mechanisms that uncover the causes of conflict are one of the basic requirements for successful governance, as discussed in this talk.

References:

Chhotray, Vasudha and Stoker, Gerry (2009): Governance Theory and Practice. Palgrave Macmillan

Geels, Frank W. and Kemp, René (2007): „Dynamics in socio-technical systems: Typology of change processes and contrasting case studies“. Technology in Society 29, Nr. 4: 441–55. https://doi.org/10.1016/j.techsoc.2007.08.009.

Rittel, Horst W. J. and Webber Melvin M. (1973): „Dilemmas in a General Theory of Planning“. Policy Sciences 4, Nr. 2: 155–69.

30 JAHRE itas Institut für Technikfolgenabschätzung und Systemanalyse

SPEAKER ABSTRACTS
THURSDAY

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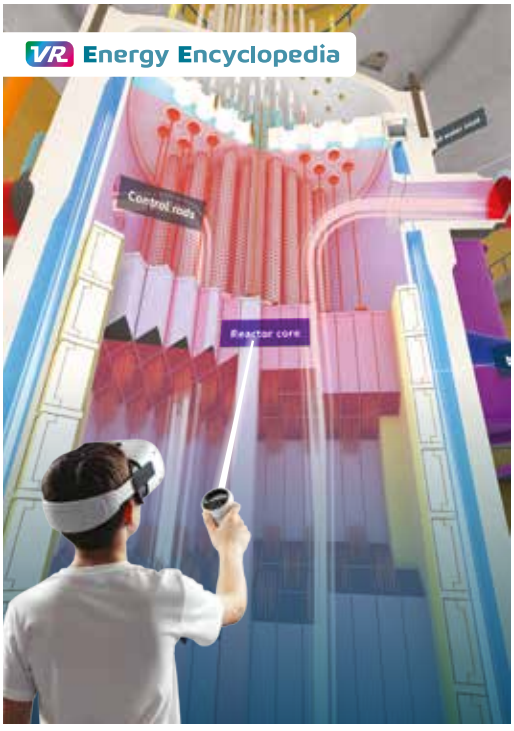
09:30 THURSDAY

TRANSFORMING ENERGY EDUCATION: INTERACTIVE 3D, E-LEARNING AND VR FOR MODERN NUCLEAR TRAINING

The increasing complexity of modern energy systems, together with the ongoing energy transition and the growing demand for qualified professionals, creates significant challenges for education and training in the nuclear sector. Traditional teaching methods alone are often insufficient to effectively communicate the structure, operation, and interdependencies of complex technologies such as nuclear power plants or advanced reactor concepts.



This presentation introduces the EnergyEncyclopedia.com platform, developed by Simopt, as an integrated educational environment combining interactive 3D models, structured e-learning modules, and immersive virtual reality (VR) experiences. The platform is designed to support education, professional training, and public outreach by enabling intuitive understanding through visualization, interaction, and experiential learning.

A key didactic principle is “learning through interaction,” where users actively explore simplified yet technically accurate models of energy systems, including nuclear facilities. Interactive 3D models allow detailed inspection of system components and processes, while VR applications enable users to explore energy technologies in spatial context, including life-sized environments and step-by-step assembly of complex systems. Complementary e-learning modules provide structured knowledge supported by videos, explanatory content, and quizzes.

These approaches contribute to improved engagement and a deeper understanding of complex energy technologies, making them more accessible to a broader audience.
Looking ahead, the energy sector will face new technological, societal, and workforce challenges that will require a new generation of skilled professionals. One of the key ambitions of the Energy Encyclopedia project is therefore not only to educate, but also to inspire young people to pursue studies and careers in engineering and energy, and to support long-term interest in the field through modern, engaging educational tools.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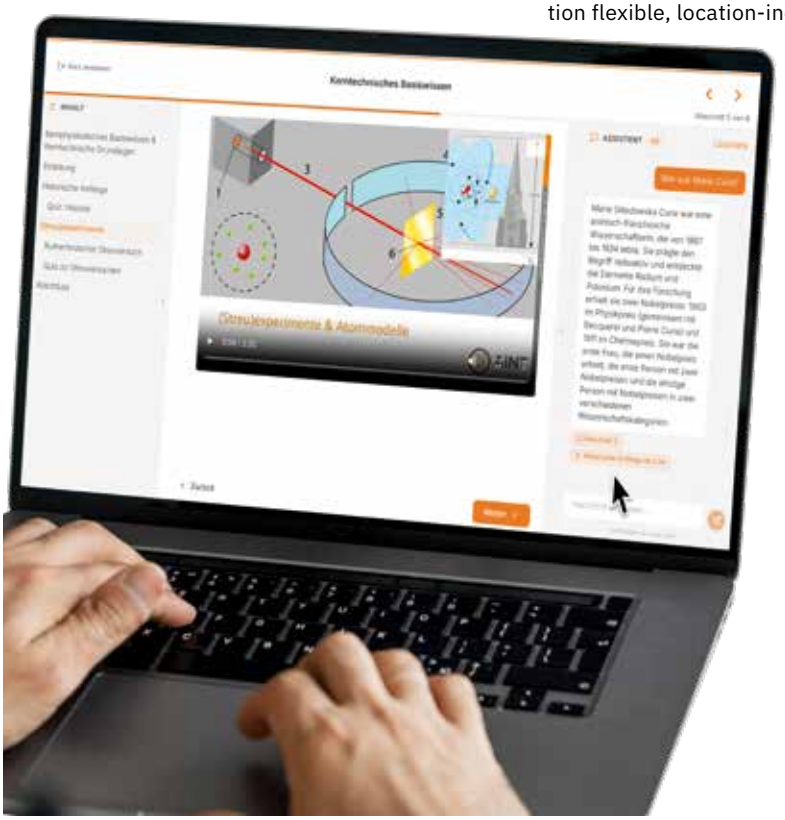
09:50 **THURSDAY**

AI-BASED TRAINING TO ADDRESS WORKFORCE SHORTAGES AND ENHANCE PROFESSIONAL DEVELOPMENT – NUCLEAR PRO

The shortage of skilled workers is one of the most pressing challenges of our time—especially in highly specialized industries where in-depth expertise and continuous development are essential. Traditional training formats are increasingly reaching their limits: they are too time-consuming, too location-dependent, and too difficult to scale.
In this presentation, we will explore how artificial intelligence is transforming the entire training lifecycle, from content creation to the evaluation of exam results, and can thus make a concrete contribution to addressing the skills shortage. On the provider side, AI enables the simplified creation of training and exam materials from existing content, as well as efficient translation into various languages.

For learners, AI empowers a personalized, interactive experience: A virtual instructor answers content-related questions in a context-sensitive manner, directly references relevant sections in the learning materials, and makes continuing education flexible, location-independent, and scalable.



AI-supported evaluation of learning progress assessments and certification exams opens up entirely new exam formats that were impossible to implement in traditional digital learning environments.

Using the concrete example of GNS Nuclear Pro, we demonstrate how these AI pillars interact in practice.

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10:10 **THURSDAY**

SYSTEMATIC KNOWLEDGE MANAGEMENT IN THE NUCLEAR INDUSTRY

The nuclear decommissioning sector faces a growing shortage of qualified professionals. As universities and research institutions increasingly discontinue nuclear-related programs and research activities, the number of new experts entering the field continues to decline. This trend poses a serious challenge for the long-term preservation of knowledge and competencies essential to safe and efficient decommissioning.

In this context, companies with longstanding experience have a crucial responsibility to actively contribute to maintaining and transferring expertise. Safetec GmbH embraces this responsibility as an established full-service provider in nuclear decommissioning. Our commitment is to ensure that valuable technical know-how is preserved, expanded, and passed on from generation to generation. With the Safetec Academy, we have translated this mission into a structured and forward-looking education and training concept, which works hand in hand with our operational divisions. Modular programs are being developed for all qualification levels, for both internal employees and external participants. We are actively integrating AI-supported tools, adaptive learning systems to enhance flexibility and learning efficiency. At the same time, we emphasize that in-person training and practical exercises remain indispensable components of our approach. Every decommissioning phase includes hands-on tasks for which a variety of practical skills are needed. In our fully equipped training center in Heidelberg, we enable participants to gain and apply the essential skills in realistic environments.

By continuously adapting and expanding the training program as well as combining digital innovation with practical excellence, Safetec Academy contributes to competence preservation and secures the future of nuclear decommissioning expertise.

FRANZ BORRMANN

11:15 **THURSDAY**

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METAL RECYCLING FROM DECOMISSIONING AND REFURBISHMENT - WITHIN AND BEYOND CLEARANCE

Circular economy approaches in the nuclear sector have so far concentrated on the direct reuse of systems, structures and components, or on material recycling after its clearance. We show that under certain conditions almost all material of a RPV can be reused, thereby reducing the waste volume and the consumption of new material for packaging.

We discuss in this paper how a holistic circular economy approach enables the reuse of materials from decommissioning or from retrofitting of nuclear power plants that are not suitable for (immediate) clearance or direct reuse. For activated components such as reactor pressure vessels and internals, clearance is – even after long decay times – prevented by long-lived nuclides. Except for the radioactivity the material is of nuclear-grade quality after all and is still a valuable resource for use in spent fuel casks, canisters, shielding elements and other materials used in (deep geological) repositories. Exemplar cases are evaluated, based on German data.

A special role could be played by multinational approaches, especially by multinational deep geological repositories. These can foster a higher grade of standardization (e.g. casks and containers) and thus open up economies of scale for specific recycling options that are not available today. The approach is triggered by the investigation of the waste streams going into repositories. A significant share of materials is new and not requiring disposal but used to pack and shield radioactive material or as structural parts of the repository. A way to improve the efficiency of disposal is to replace this material by waste materials.

Another question is which components for new reactors can be manufactured from non-releasable but low dose rate material. This may be especially interesting for SMRs as it is anticipated that a larger share of the parts is pre-manufactured offsite in specialised premises.

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11::15 **THURSDAY**

CIRCULAR ECONOMY EXPLAINED: AN ACADEMIC VIEWPOINT

The circular economy (CE) represents a systemic approach to sustainability that aims to decouple economic activity from the consumption of resources while minimizing negative environmental impacts. CE strategies and practices seek to maintain the value of products, materials, and resources within closed-loop systems for as long as possible. This is achieved through strategies such as design for durability, repairability, reuse, remanufacturing, and high-quality recycling.

A key characteristic of the circular economy is its multi-dimensional objective structure, balancing environmental goals—such as reducing resource extraction and emissions—with economic viability. This often leads to trade-offs, as circular solutions must be both environmentally beneficial and economically feasible to be widely adopted.

Product and system design play a central role in enabling circularity. Modular architectures, standardized components, and material transparency facilitate efficient disassembly, reuse, and recycling. At the same time, business model innovation—such as product-service systems, leasing, and take-back schemes—helps align incentives across stakeholders and ensures effective reverse logistics.

The successful implementation of a circular economy requires not only technological advancements but also supportive policy frameworks. Regulatory measures, economic incentives, and extended producer responsibility are essential to increase return rates, ensure material quality, and internalize environmental externalities.

The contents of the presentation are illustrated by practical example from the construction and mobility sector.

Ultimately, the circular economy is characterized by closed material loops, value retention, system-wide coordination, and the alignment of economic incentives with environmental sustainability across the entire product lifecycle.

DR. THOMAS RÖSCH | **11:35** | **THURSDAY**

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THE PLANET PROJECT: EXAMPLE OF CHANGING THE REGULATORY FRAMEWORK FOR A BUILDING ON A NUCLEAR SITE

The reuse of former nuclear facilities offers significant opportunities for future scientific applications, while requiring a carefully managed transition of responsibilities and regulatory frameworks. The PLANET project provides a practical example of such a transition.

Within PLANET, a building at the former Biblis nuclear site was formally released from its operating license under the German Atomic Energy Act (AtG). Currently, a new licensing procedure under the Radiation Protection Act (StrSchG) is being prepared to enable the installation and operation of an advanced laser-driven neutron research facility. This step represents a clear shift from nuclear operation to non-nuclear research use, involving new stakeholders, regulatory requirements, and interfaces.

This contribution presents the PLANET projects path from initial planning until today It introduces Focused Energy, its SourceLight division, and the technical objectives of PLANET, including key characteristics of the machine. The reasons for selecting the Biblis site are discussed, highlighting existing infrastructure, safety culture, and the experience of the site operator as decisive factors.

Finally, the current status of the conversion, the project timeline, and goals for the further development of the campus are presented. The contribution concludes with lessons learned so far and conclusions for future projects towards the transformation of the site towards a research campus.

DR. ANTON ANTHOFER | **11:55** | **THURSDAY**

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SECOND LIFE OF NPPS "BUILDING / LIFETIME EXTENTION /AGING AND RECYCLING"

The decommissioning of nuclear power plants presents complex technical, economic, and regulatory challenges. This presentation explores how circular economy principles and innovative site utilization strategies can transform decommissioning into opportunities for resource recovery and sustainable infrastructure reuse.

Material Recycling & Second Life of Materials: Experience from multiple German NPP decommissioning projects demonstrates the effectiveness of specific clearance processes for metal scrap recycling. Metal sorting and packaging at power plant sites, combined with standardized transport and processing protocols, has proven both robust and efficient. Annual processing volumes exceeding 120,000 tonnes show the significant scale of metal recovery potential. The presentation covers the complete process chain from dismantling through remelting, including mobile melting capabilities for specialized materials, illustrating how decommissioning waste becomes valuable secondary raw material while meeting all regulatory requirements.

Second Life of Entire Sites: Beyond material recovery, decommissioned NPP structures offer potential for repurposing and continued utilization. Reactor buildings can serve as repositories for operational knowledge and technical expertise. Innovative applications—such as utilizing existing structures for advanced research facilities or emerging nuclear technologies—demonstrate how decommissioned sites transition into innovation hubs, creating economic and scientific value while preserving both tangible infrastructure and intangible operational insights.

Lifetime Extension Support: Technical expertise in radiation protection measurements, shielding design, and facility status assessments contributes to informed lifetime extension decisions and operational safety optimization.

This integrated perspective on decommissioning demonstrates how technical solutions address regulatory requirements while creating opportunities for material recovery, site innovation, and sustained infrastructure value.

BACKUP SPEAKER

ABSTRACTS

MARCO HILDMANN

BACKUP SPEAKER

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BLAST DEMOLITION OF COOLING TOWERS ON NUCLEAR SITES: PLANNING OF PRE-WEAKENING, NUMERICAL SIMULATION, VIBRATION PROGNOSIS

Methodological planning and execution of controlled blast demolition of cooling towers with consideration of preweakening strategy for collapse mechanism prediction and prognosis of site-specific vibration effects on nearby nuclear buildings.

The contribution investigates the engineering design of the blast demolition of hyperbolic natural-draft cooling towers at nuclear power plant sites. The focus lies on the systematic development of an appropriate collapse and fall strategy, considering structural, design-related, and environmental boundary conditions. A key component is the planning and verification of the temporary preweakening of the load-bearing structure through vertical and diagonal slits as well as specifically defined blasting zones. Both the structural stability in the pre-weakened cooling tower and the reliable initiation of the intended tilting and failure mechanism after the blast detonation must be demonstrated.

To validate the selected demolition concept, analytical models and nonlinear finite element time-history analyses are applied to realistically represent material behavior, crack formation, and rotation axes. In addition, a sitespecific prognosis of vibrations induced by detonation and structural impact is performed. For this purpose, empirical measurement data from previous blast demolitions are used in combination with numerical soil models to derive frequency-dependent transfer functions to obtain acceleration and response spectra for assessing the vibration loading of nearby structures.

The integrated consideration of pre-weakening design, collapse simulation, vibration prognosis, economically efficient, and safety-oriented implementation of blast demolitions within complex nuclear facility environments.

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aix.GammaPool for planning and performing gamma spectroscopic measurements
Our aix.GammaPool program manages in-situ and laboratory measurements. In addition to a classic software application, planning and evaluation options also include a web-based module. Based on the data of measuring devices aix.GammaPool automatically generates reports, which are required for notifications to authorities (e.g. to organize clearance and disposal).

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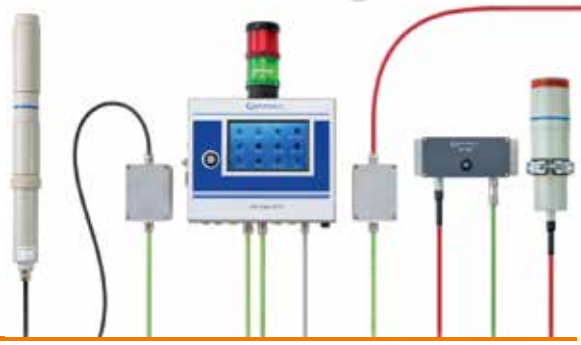

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RÜCKBAU – ENTSORGUNG – ZWISCHENLAGERUNG: DIE EWN GRUPPE

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EXCELLENCE FOR NUCLEAR

With over 50 years dedicated to nuclear back-end solutions, GNS provides proven, continuously evolving products and services for the management and disposal of spent nuclear fuel and all types of radioactive waste from the operation and decommissioning of nuclear power plants and research facilities.

For more than three decades, GNS has been responsible for the management of all radioactive waste and spent nuclear fuel from the operation of the entire German NPP fleet. Its products and services today comprise the design and manufacturing of casks and containers for LLW, ILW and HLW, the construction of equipment for the treatment and packaging of wastes, as well as the operation of treatment facilities and preparations for final disposal. For nearly three decades, GNS owned and operated the central German interim storage facilities for HLW, ILW and LLW at Gorleben and Ahaus.

More than 2,000 spent fuel and HLW casks of the CASTOR® and CONSTOR® types, as well as over 9,000 MOSAIK® casks and GNS Yellow Boxes® for ILW, are in use today in several countries across four continents. This makes GNS one of the world's leading suppliers of shielded transport, storage and disposal casks.

GNS treats both solid and liquid radioactive waste and applies suitable treatment processes to ensure the waste's acceptability for interim storage and final disposal. This requires the acquisition, documentation and continuous updating of a large amount of data and information. To support this, GNS offers comprehensive software and database solutions, for example for tracking operational waste or residues from decommissioning.

For all phases of decommissioning, GNS offers solutions ranging from the dismantling and packaging of RPVs and their internals to other primary circuit components and concrete structures. Experienced activation analyses support efficient cutting and packaging while ensuring minimal dose rates.

With its more than 1,000 employees, the companies of the GNS Group achieve an annual turnover of around 400 million euros.

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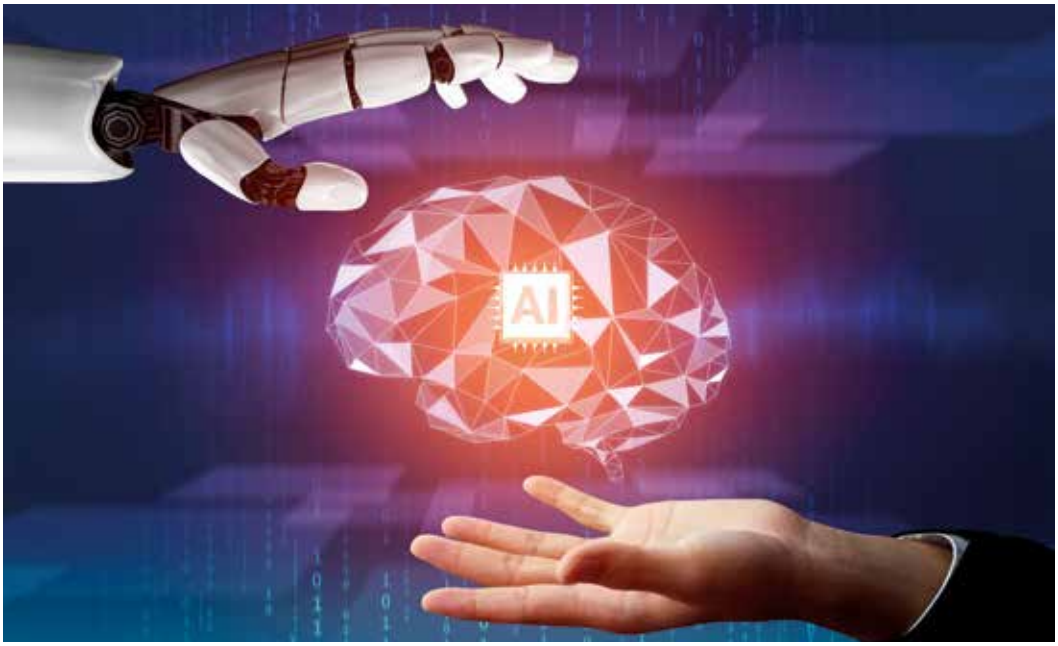

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INNOVATIVE DRY-CUTTING TECHNOLOGY FOR EFFICIENT NUCLEAR DECOMMISSIONING

Continuous innovation is a key driver of technological progress in industrial sectors. Since its founding in 1984, Jepson Power has focused on developing advanced cutting solutions and is recognized as the inventor of Dry Cutter Technology for cutting steel, stainless steel and composite materials. This technology enables cutting metal without coolants, offering shorter cutting cycles, nearly burr-free results and extended blade service life.

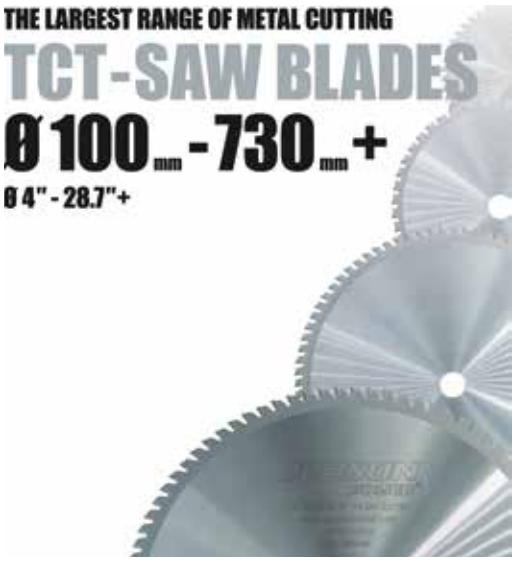
In nuclear power plant decommissioning, Jepson Power's lightweight and portable metal cutting circular saws support efficient and controlled dismantling operations. The combination of high-performance saws and specialized blades allows precise, fast and nearly spark-free cuts, improving both safety and operational efficiency in sensitive working environments.

These high performance machines are capable of cutting thick metal structures such as pipes and structural components, enabling faster dismantling processes. This increases productivity and can significantly reduce project time and costs.

Dry Cutter Technology also offers environmental benefits. As no cooling fluids or lubricants are required, the generation of contaminated liquids is avoided, eliminating the need for subsequent decontamination and disposal. This reduces secondary waste streams during dismantling.

Jepson Power combines high-performance equipment with full customer support, including training, ensuring safe, efficient, and productive operation in nuclear decommissioning.

Together, these technological and operational advantages demonstrate how innovative cutting solutions can support safer, faster, and more environmentally responsible dismantling processes in the nuclear sector.



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Environmental and Area Monitoring
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MIRION TECHNOLOGIES

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Radiation-tolerant sensors and systems that can be integrated with remote platforms for measurements in high-dose or hard-to-access areas.

These capabilities help D&D operators improve worker safety, reduce project risk, optimize waste handling, and accelerate site release while maintaining compliance with regulatory requirements.

MÜLLER AG VERPACKUNGEN

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THE PACKAGING EXPERTS – MÜLLER PACKAGING SETS STANDARDS IN QUALITY

Müller Packaging produces industrial packaging made of mild steel, stainless steel and fiber. The UN-approved hazardous goods packaging, including tight head, composite and open head drums up to 250 liters, are produced at the Swiss sites in Münchenstein and Reiden.

The company has positioned itself on its global markets as a reliable partner with high adherence to delivery dates - and as a quality leader. Customers receive safe solutions for a wide range of applications in various industrial sectors such as pharmaceuticals, chemicals, cosmetics, flavors and fragrances, mineral oil, paints and coatings, semiconductor and food sectors.

Special requirements from customers are welcome, in line with the motto „Challenges accepted“. Many years of experience, comprehensive understanding and pragmatic processes enable new customer requirements to be realistically classified and efficiently implemented. The in-house design department together with the machine and tool building departments ensure that service and maintenance drive the further development of Müller’s production while implementing quickly and reliably customer requirements.

The worldwide reputation for delivering consistently recognized quality is created at every single workplace. A „Müller groove“ has been established that enables goal-oriented, collegial work, where the individual counts and top performance is achieved every day.

Müller Packaging is pursuing the goal of reducing its CO2 emissions to net zero by 2045. The company has been committed to environmental protection, occupational safety and human rights for decades. This has led to an EcoVadis silver award.

PEDI AG

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ALPHA-TIGHT HOUSINGS AND PROTECTIVE SYSTEMS FROM PEDI ENSURE THE PERSONAL AND ENVIRONMENTAL SAFETY DURING DISMANTLING PROCEDURES.

Since more than 60 years, PEDI AG is a competent partner for the nuclear industry all over Europe. The company is specialized in developing, manufacturing and selling of protecting and shielding products for persons and environment. During the dismantling process of radioactive contaminated equipment, components or building structures, the use of tight housings or encasements is necessary, stopping the distribution of airborne particles and dust. For this purpose, PEDI uses flexible housing materials with high mechanical properties and certified for the use for alpha-tight encasements. A so called dismantling tent serves as a work place for cleaning or maintenance or dismantling activities. Particularly, it can be used for storage or handling of radioactive substances in solid, liquid or gaseous condition. The decontamination tent includes a solid frame structure and a flexible housing. The frame structure remains completely outside of the tent, so it remains free of contamination. The inner space of the housing is completely empty and easy to clean.

The housing is permanently evacuated down to -200 Pa. After use, the tent housing will generate a minimum of waste in weight and volume.

In the field of Personal Protective Equipment, a vast range of established protective suits and auxiliaries is available: Depending on the method of operation, the suits are designed for integral ventilation or to wear with mask, for single or multiple use, for light or heavy works.

For the ventilated suits, a breathing air supply is needed. The PEDI air supply and air distribution components are engineered for high reliability, durability and long live cycle. Due to these characteristics, PEDI products assure an immediate readiness for operation at every time.

Airborne particles can be collected with a variety of air samplers, test swabs (smear tests) and screening tests, allowing an efficient air monitoring right around the clock. More information on www.pedi.ch.

SAFETEC GMBH

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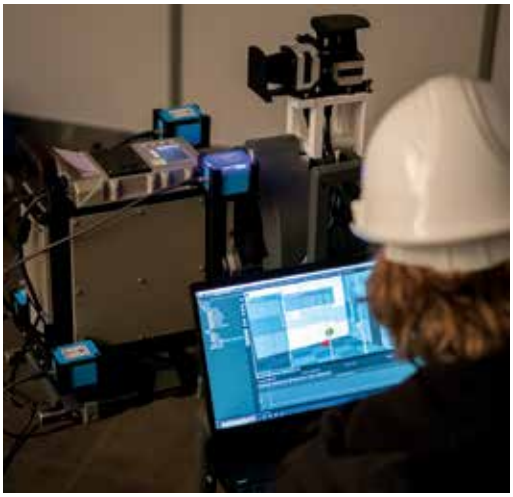
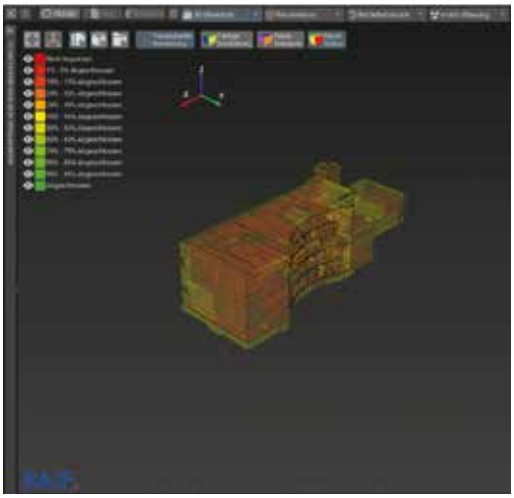
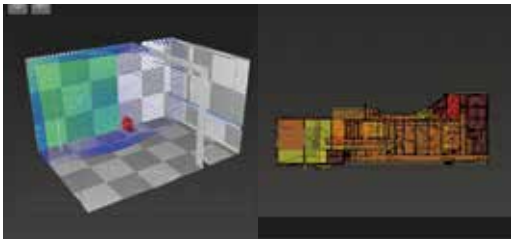
INNOVATION. RADIATION PROTECTION. ENGINEERING.

Safetec GmbH stands for innovation, expertise and reliability in radiation protection and nuclear technology. With more than 30 years of experience, we support operators, authorities and research institutions in mastering complex technical challenges safely and efficiently. Our core competence lies in radiation protection – from operational and project-related services to consulting, dosimetry, measurement technology and regulatory support. We combine profound engineering know-how with digital solutions to optimize processes, increase transparency and ensure the highest safety standards. In the field of nuclear decommissioning, we provide comprehensive services ranging from planning and licensing support to project management and on-site implementation.

Our experts contribute interdisciplinary knowledge in waste management, conditioning, clearance measurements and documentation. Innovation and digitalization are key drivers of our approach. With our own software solutions and modern data management systems, we enable intelligent evaluation of radiological data, streamlined workflows and efficient project control. By integrating engineering expertise with digital tools, we create sustainable and future-oriented solutions for the nuclear sector and beyond. Beyond nuclear facilities, Safetec also supports clients in medicine, research and industry, transferring decades of radiation protection experience to new fields of application.







TÜV RHEINLAND AG

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TÜV RHEINLAND INDUSTRIE SERVICE GMBH

Die Welt zu einem sicheren Ort machen – und das seit mehr als 150 Jahren: Dafür steht TÜV Rheinland als einer der weltweit führenden Prüfdienstleister mit einem Jahresumsatz von mehr als 2,7 Milliarden Euro und 27.000 Mitarbeitenden in gut 50 Ländern. Die hoch qualifizierten Expertinnen und Experten prüfen technische Anlagen und Produkte, begleiten Innovationen und gestalten den Wandel zu mehr Nachhaltigkeit mit. Sie trainieren Menschen in zahlreichen Berufen und zertifizieren Managementsysteme nach internationalen Standards.

Mit besonderer Expertise in Mobilität, Energieversorgung, Infrastruktur und vielen weiteren Bereichen sichert TÜV Rheinland unabhängig Qualität, insbesondere bei innovativen Technologien wie grünem Wasserstoff, künstlicher Intelligenz oder automatisiertem Fahren – und ermöglicht so eine sichere und lebenswerte Zukunft. Seit 2006 ist TÜV Rheinland Mitglied im Global Compact der Vereinten Nationen für mehr Nachhaltigkeit und gegen Korruption. Hauptsitz des Unternehmens ist Köln, Deutschland.

UNIPER NUCLEAR SERVICES GMBH

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FROM SERVICE EXPERTISE TO OPERATOR INSIGHT – A EUROPEAN LEADER IN DECOMMISSIONING AND WASTE MANAGEMENT

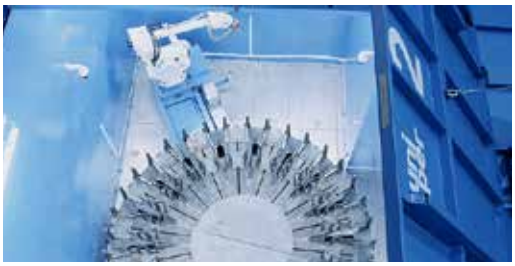
Uniper Nuclear Services is one of the leading providers of nuclear decommissioning services in Europe, combining the strengths of a specialized service provider with the experience of a nuclear operator and owner. This enables us to deliver practical, efficient and safe solutions across the nuclear lifecycle, with a strong focus on decommissioning and waste management.

With more than 40 years of experience, we are a leader in the segmentation of large and complex components, with expertise in reactor pressure vessels, large heat exchangers and biological shields. Our capabilities include dismantling of metallic and concrete structures, supported by advanced characterization methods enabling optimized waste routes and recycling.

We support our customers in planning and executing decommissioning programs, developing waste strategies and delivering compliant solutions for material handling, characterization, treatment and disposal. We provide tailored waste management systems, including solutions for complex materials such as activated and contaminated concrete.

We also offer consulting services, including cost estimations, decommissioning strategies and technical studies, supporting early-phase decision making and project optimization.

Uniper Nuclear Services is executing one of Europe's largest decommissioning programs, dismantling four reactors at Barsebäck and Oskarshamn. This demonstrates our unique ability to manage complex program from strategy to final waste management.



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DIE RICHTIGE PSA ZUR RICHTIGEN ZEIT AM RICHTIGEN ORT

Die UniTech Services Group ist mit zwei Verarbeitungsanlagen sowie Forschungs- und Entwicklungsstandorten der führende Anbieter von Schutzkleidungsmanagement-Dienstleistungen für die Nuklearindustrie in Europa. Der Hauptzweck dieser Dienstleistung besteht darin, sicherzustellen, dass der Kunde die richtige PSA (persönliche Schutzausrüstung) zur richtigen Zeit am richtigen Ort hat. Seit 2012 bietet die Niederlassung UniTech Service Group Ltd auch einen Gerüstmonitoringund Dekontaminationsservice an.

Für weitere Informationen zu unseren internationalen Kapazitäten besuchen Sie bitte unsere Website www.unitech-services.eu/de/
UniTech bietet auch eine Mobile Supply Store-Lösung an, bei der Produkte in einem rollenden Lagerhaus direkt an den Standort des Kunden geliefert werden. UniTech bereitet derzeit den Bau einer neuen Verarbeitungsanlage im französischen Joinville vor, die im Oktober 2026 eröffnet werden soll. Diese Anlage wird zusätzlichen Service-Support durch einen eigens errichteten Zwischenlagerund Leasingbereich für kontaminierte Materialien undeine eigene Arbeitszone für TMD-Arbeit bieten.

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WÄLISCHMILLER ENGINEERING IS A GLOBAL MANUFACTURER OF MANIPULATORS, REMOTE HANDLING SYSTEMS AND ROBOTS FOR THE NUCLEAR SECTOR.

For over seventy years Wälischmiller has produced world-class innovative equipment for the nuclear industry. The company is certified according ISO 9001:2015, ISO 14001:2015, DIN ISO 45001:2018, ISO 19443:2018 and CEFRI-E.

Wälischmiller has a hard earned international reputation for performance, excellence in engineering and exceptional robotic hardware. In the most difficult and challenging nuclear environments, Wälischmiller has demonstrated the ability to bring solutions and success to many of the most difficult high-radiation remediation challenges.

Full range supplier
Products reaching from simple tools to advanced solutions
Mechanical telemanipulators for a wide range of applications (models A100 and A200, VNE80/90 and Model 9)
Remote-controlled power manipulators from the A1000 series for handling heavy loads
Robot system TELBOT® with unique capabilities which includes unlimited rotation in all axes, no wiring inside or outside the TELBOT® arm, and unlimited fast and precise movement
Inline robot system LIROB

Products from a single Source
Engineering including product design and development
High manufacturing depth including single part assembly
All required specialised staff available within the company
Installation at sites
Worldwide service and maintenance


Power Manipulator A1000