## + meet cinch MEET-CINCH A MODULAR EUROPEAN EDUCATION AND TRAINING CONCEPT IN NUCLEAR AND RADIO CHEMISTRY

In 2010–2016 a series of two "CINCH projects" – CINCH-I: Cooperation in Education in Nuclear Chemistry, and CINCH-II: Cooperation and training in Education in Nuclear Chemistry – was supported within Euratom FP7. The projects aimed at mitigating the special skill-based deficits within nuclear chemistry at master and doctorate levels and the decline of number of staff qualified in this field. The projects were built around the well-proven five-phase (Analysis, Design, Development, Implementation, Evaluation) Systematic Approach for Training (SAT) developed by IAEA; while CINCH-I dealt with the first three phases of the process, CINCH-II concentrated on the Implementation. Additionally, evaluation mechanisms were proposed and tested on the pilot courses developed during the projects. European Network on Nuclear and Radiochemistry Education and Training (nrc-network.org) was established within CINCH-II project.



The MEET-CINCH project does not aim at sustainability of CINCH-I and CINCH-II only – its main aims are to pro-actively bring the results achieved so far to their end-users (CINCH VET – Vocational Education and Training – e-shop), significantly contribute to attracting new talents and increasing the nuclear (chemistry) awareness by developing a MOOC – Massive Open On-line Course, and investigate the applicability of the modern Flipped (Inverted) Classroom concept in the nuclear chemistry teaching and training field.

## Organization of the Work

Similarly to CINCH and CINCH-II, the proposed organisation of this project is built around three pillars:

- Nuclear Awareness that aims particularly on general public and secondary school students
- Sustainability and Evolutionary Developments that aims particularly at vocational education and training (VET) of NRC professionals
- Novel Education and Training Approaches that aims both at university students and VET,

With IonLab, one of the six remote-controlled experiments, a student is able to perform radionuclide separations followed by an online detection. It can be used to demonstrate the potential of ion-exchangers and chromatographical methods in radioanalytics. This experiment is set up to perform a separation of Sr-90 and Y-90 but can be adapted to various separation schemes using modern resins for extraction chromatography.

## **MEET-CINCH** Partnership



supported by three cross-cutting activities:

- Mobility
- Management
- Ethics requirements



1 Coordinator: Gottfried Wilhelm Leibniz University Hannover, DE 2 Czech Technical University in Prague, CZ, 3 Chalmers University of Technology, SE, 4 University of Helsinki, FI, 5 University of Cyprus, CY, 6 Jozef Stefan Institute, SI, 7 University of Leeds, UK, 8 National Nuclear Laboratory Ltd., UK, 9 Politecnico di Milano, IT, 10 Evalion Ltd., CZ, 11 Commissariat à l'énergie atomique et aux énergies alternatives, FR, 12 Reseau Europeen pour lénseignement des Sciences Nucleaires, FR

## Contact

Prof. Dr. Clemens Walther Institut für Radioökologie und Strahlenschutz, Leibniz Universität Hannover Herrenhäuser Str. 2, 30419 Hannover Telephone: +49 511 762 3312

Project webpage: WWW.CINCH-PROJECT.EU

European Network on Nuclear and Radiochemistry Education and Training: **nrc-network.org nucwik.wikispaces.com** – CINCH-created wiki for learning aids in Nuclear Chemistry **moodle.cinch-project.eu** – CINCH-created e-learning platform for Nuclear Chemistry



This project has received funding from the Euratom research and training programme 2014–2018 under grant agreement No. 754 972.