International Conference on Radioactive Waste Management: Solutions for a Sustainable Future (CN-294)



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The International Master Program on Nuclear Applications at FH Aachen- Nuclear Waste Management as a Part of Holistic Education. A Student Contribution to the IAEA International Conference on Radioactive Waste Management

The FH Aachen University of Applied Sciences, at its Campus Juelich, offers the International Masters Programme in Nuclear Applications (MNA, formerly: EMiNA - European Master in Nuclear Applications). Three faculties jointly cooperate to impart a broad spectrum of scientific/technical fundamentals and practical knowledge. According to the journal Nuclear Engineering the MNA course is among the best nuclear study programms in the world. Until now students from 14 countries and all world regions have successfully participated. FH Aachen/MNA is also a founding member of the international university network CHERNE (Cooperation for Higher Education on Radiological and Nuclear Engineering). Insofar, the FH Aachen forcefully contributes to internationally maintain nuclear safety competence, in accordance with the Vienna "Convention on Nuclear Safety" –CNS.

The original curriculum includes specialization options in Nuclear Medicine, Nuclear Chemistry, Nuclear Technology. Due to the utter importance and capacity growth in NWM, the Nuclear Waste Management discipline has caught increasing attention and now has evolved into a 4th new focus field, embedded in a newly created research area on predisposal issues. Both education, research and development are linked to the IAEA and its International Predisposal Network (IPN). The first IAEA fellow (China) in NMW has already been admitted to the Juelich campus in 2019.

The new focus field on NMW is grounded on a cooperation contract between the FH Aachen and the German Company for Interim Storage (BGZ), supported with state funds through the BGZ. Throughout the nuclear sector in Germany, it must timely be ensured that retiring nuclear specialists can be replaced by qualified successors. However, academic courses on practical nuclear applications and predisposal waste management during the last decade had been phased out in Germany, excepting FH Aachen. Insofar the MNA course was chosen to be extended with modules in English and German in a targeted manner.

National and international experts and practitioners have worked on the courses and are involved as lecturers. The holistic approach also includes processes, systems and the impact of human factors in NMW. Special emphasis is placed on the active involvement of students, who contribute to the ongoing updating of content through their coursework including work and reviews on NMW issues in their home countries.

This conference contribution is provided as a community work of the MNA students. It conveys both an overview on the entire MNA programme and on details of the focus fields, with special regard to NMW.

Do you wish to participate as a Young Professional?

Yes

Speaker's title

Ms

Affiliation

FH Aachen University of Applied Sciences, International Master Programme in Nuclear Applications, Focus Field on Nuclear Waste Management

Do you wish to be considered for a Young Professional grant?

Yes

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