# Dr. Claudia Gasparrini

## EUROfusion Engineer & Researcher Consorzio RFX

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## **Research Interests**

- Water chemistry optimisation for nuclear reactors cooling circuits
- Nuclear materials: irradiation damage and activation
- Corrosion and protection of materials in fusion power plants

## **Biography**

Passionate researcher with a strong interest in nuclear science and engineering. I am eager to contribute to the development of nuclear technology by researching materials with state-of-the-art-techniques thanks to the establishment of cross-country collaborations. I graduated in Chemical Engineering at Padua University after an internship at Consorzio RFX during my BSc and at Royal Institute of Technology (KTH) during my MSc. I obtained a PhD in Nuclear Materials from Imperial College London and currently I am a EUROFusion Fellow at Consorzio RFX, Padua, Italy and an Academic Visitor in the Centre for Nuclear Engineering and Department of Materials at Imperial College, London, U.K. My research interests span from understanding the mechanism of environmental degradation (corrosion and oxidation) to the influence of radiation damage on materials used in fission and fusion reactors. I am now working on water chemistry optimisation for fusion experimental reactors cooling circuits. I previously worked in two consortia in close contact with both UK universities and industries to understand the phenomenon of neutron irradiation embrittlement of reactors pressure vessel steels and nuclear waste management and optimisation of advanced technology nuclear fuels.

## National and International Collaborations

- Imperial College London, UK
- National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), Italy
- Australian Nuclear Science and Technology Organisation (ANSTO), Australia
- Bristol University, UK