



2018-IPR-D-000-010066

**Molecular based detection of  
microorganisms as chemical pollutants'  
indicators in the water samples**

**Position for:**

Trainee

As the science and knowledge service of the Commission, the mission of Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.

The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: <http://www.jrc.ec.europa.eu>

**Short description of activity:**

Within the Unit Sustainable Resources Water and Marine Resources, Water4you deals with water related policies and water quality. In more recent studies, it has been shown that the microorganisms are capable to adapt quickly to the environmental conditions, therefore they could be indicators of water quality. In this context, the project aims to identify microorganisms as potential indicators of water quality by implementing molecular based techniques.

The traineeship will be then focused on the set up of quantitative PCR and other related techniques for the detection of some microorganisms e.g. bacteria and viruses in freshwaters and effluents samples which could reflect the different chemical pollutants' concentration.

**Qualifications:**

**Essential:**

Five year's university education in Biological Science, Biotechnology and related fields.

Good knowledge of microbiology and molecular biology e.g., microorganism cultivation; acid nucleic extraction.

Good knowledge of English language. (B2 level)

	<p><b><u>Advantage:</u></b></p> <p>Knowledge of PCR and quantitative PCR and metagenomics.</p> <p><b><u>For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:</u></b></p> <p><a href="https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees">https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees</a></p>
<b>Unit /Directorate</b>	<p>Sustainable Resources Water &amp; Marine Resources</p> <p>Further information: <a href="https://ec.europa.eu/jrc/en/research-topic/water">https://ec.europa.eu/jrc/en/research-topic/water</a></p>
<b>Indicative duration</b>	5 months
<b>Preferred starting date</b>	As soon as possible
<b>JRC Site</b>	Ispra
<b>Country</b>	Italy
<b><u>JRC contact details</u></b>	<p><b>For any technical problems with your application, please contact:</b> <a href="mailto:HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu">HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu</a></p>