



2019-IPR-F-000-012611

**Nano adjuvants: Nano encapsulation platform for delivery of vaccine co-adjuvants to stimulate the immune system**

**Position for:**

Trainee

As the science and knowledge service of the Commission, the mission of DG 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:**

The Consumer Products Safety Unit (F.2), part of Health, Consumers and Reference Materials Directorate-F at the JRC in Ispra (Italy), is looking for a trainee for the Nanobiotechnology laboratory.

Vaccines are constantly being developed and intense interest is focused on expanding their application to new fields such as cancer, autoimmune disease and antimicrobial resistance. Modern vaccines try to use adjuvants to help the immune system to develop a stronger reaction for a specific, desired outcome.

In this project we will use a safe polymer-based delivery platform developed at JRC to encapsulate molecules known to stimulate the immune system.

Her/his main activity will consist in supporting the work to optimize the platform and to develop/adapt robust method to measure the key properties of the nanoadjuvant platform such as particle size distribution (with DLS and AF4) and total adjuvant loading (with HPLC).

**Qualifications:**

**Essential:**

- University degree or near completion in chemistry, biotechnology,

	<p>nanotechnology, pharmacology, or related discipline</p> <ul style="list-style-type: none"> <li>• Good knowledge of spoken and written English (level B2)</li> <li>• Good experience of laboratory work</li> </ul> <p><b><u>Advantage</u></b></p> <ul style="list-style-type: none"> <li>• Ability to work in a team</li> <li>• Practical experience in chemical synthesis and/or analytical chemistry</li> <li>• Experience in synthesis and characterization of nanosystems is an advantage</li> <li>• Publications in this field in English would be an advantage</li> <li>• Knowledge of physic-chemical characterization techniques would be beneficial</li> </ul> <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>Directorate F – Health, Consumers and Reference Materials</p> <p>Unit F.2 – Consumer Products and Safety</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></p> <p><a href="mailto:HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu">HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu</a></p>