

JOB OFFER - Nanoparticles formulation and analytical R&D

C Pessac (33), France

Desired start date: May 1st, 2025

O Long term contract

Qualification

- Minimum master 2 in Pharmaceutical Sciences, Formulation/Colloidal Science, Nanotechnology, or a related field.
- Minimum 5 years of experience in Pharma or Biotech environment (companies, start-up, CDMOs, ...), preferably in Oncology.

About Doxanano

Doxanano is a start-up created in 2023 by Isabel Marey-Semper and co-founded by Pr Sébastien Lecommandoux, director of the *Laboratoire de Chimie des Polymères Organiques* in Bordeaux, and Dr Leslie Dubrana.

Doxanano is committed to pushing the limits of conventional chemotherapy for patients with solid tumors. Our goal is to significantly increase the quantity of chemotherapeutic agents into the tumor whilst dramatically limiting adverse effects on healthy organs. We specialize in harnessing the unique properties of our DXN polymersomes drug delivery platform in combination with the precision of radiotherapy.

Your mission

Your mission focuses on developing the formulation, drug loading and analytical characterization of breakthrough polymer-based nanovesicles, with the aim of scaling them up to GLP and GMP grades in the field of oncology.

Your key Responsibilities

You will join the R&D team and take part in Doxanano's technological development. As such, we are seeking an Engineer with expertise in the development of nanoparticles, drug loading and controlled release with the following responsibilities:

Develop and optimize nanoparticle-based formulations for cytotoxic drug delivery





- Perform characterization including particle size, drug loading, and release profile optimization
- Develop flow-microfluidic formulation
- Develop specific analytical methods for each encapsulated drug
- Develop specific analytical methods for drug release profile evaluation
- Ensure formulations meet GLP and GMP standards

And later on,

- Contribute to develop Al-based nanoparticles models with the Al team
- Collaborate with cross-functional teams for scaling from lab to production
- Document work in line with GMP/GLP requirements

Your profile

- Strong experience in nanoparticles formulation, nanoparticle encapsulation techniques preferably with cytotoxic drugs or other active pharmaceutical ingredients (APIs);
- Strong knowledge of pharmaceutical manufacturing processes in particular microfluidic assisted formulation;
- Experience in analytical techniques for the characterization of drug loaded nanoparticles (DLS, HPLC, microscopy, mass spectroscopy, ...) and formulation quality control;
- Familiarity with regulatory requirements for pharmaceuticals (FDA, EMA) and experience working under GMP or GLP conditions is a plus;
- Strong analytical and problem-solving skills;
- Knowledge of Data would be a plus;
- Willing and happy to perform day-to-day experiments;
- Ability to work independently as well as in a team;

And last but not least, you are results-oriented and ready to take initiatives with a sense of urgency!

What We Offer

- The opportunity to contribute to breakthrough projects in a start-up environment
- A hands-on experience in a dynamic research and development environment
- The integration into an inter-disciplinary project from research to clinics
- A collaborative and supportive workplace culture

Application Process

Send your resume to contact@doxanano.com with the subject line "Nanoparticles formulation and analytical R&D Engineer - Job Offer ".

We look forward to your application and the possibility of you joining our team to contribute to the exciting advancements in polymer science to save lives!

