

PhD studentship at IMDEA Nanoscience - Madrid, Spain

Job description

We are looking for a candidate to carry out a PhD project, as part of the proposal: **Redesigning Exogenous Metal-based Chemistry in the Human Cell (RENASCENCE)**, awarded by the Spanish Ministry of Science, Innovation and Universities.

Supervisor

The candidate will carry out their studies under the guidance of [Dr Ana Pizarro](#), focusing on the synthesis of new organometallic compounds and how these travel through the intracellular nano-space, as well as the chemical reactions they mediate inside the cell.

Group website

<https://nanociencia.imdea.org/metallodrugs-to-modulate-cancer-cell-machinery/group-home>

General requirements

We are looking for a **Chemistry graduate** with experience in organic or organometallic synthesis at the **Masters level**. A good level of written and spoken **English** is required.

Project description:

Metal-based drugs offer unprecedented versatility in medicinal chemistry. Our lab generates new metallodrug candidates –based on Re, Ru, Os, Ir, Rh, and Pt– with capability for selective in-cell reactivity. The transition metal makes them unique; not only the metal's chemical reactivity can be controlled inside the cell (inhibited or amplified), but it also can result in exciting mechanisms of action to stop cancer progression.

In **this project** the successful candidate will develop a series of **metal-containing drug candidates** that exert anticancer activity upon activation. The most suitable drug candidates will be selected **for intracellular tracking** using correlative microscopy. We intend to track **transition metal-based chemistry** inside the cell.

The student's training will be multidisciplinary. In addition to organic and organometallic chemistry, they will use cell cultures and a number of microscopy techniques.

Workplace: Fundación IMDEA Nanociencia, C/Faraday 9, Madrid 28049

Application submission: Interested candidates are kindly asked to send their CV, academic record, motivation letter and reference details by email to Ana Pizarro (ana.pizarro@imdea.org).

Funding source: This contract is within the framework of the Project **Redesigning Exogenous Metal-based Chemistry in the Human Cell (RENASCENCE)**, funded by the Program MICIU-AEI.

IMDEA Nanociencia has a Gender Equality Plan, and the entire Institute is committed to measures that promote cultural, demographic, and social diversity, specifically gender diversity. All of this enhances the quality of research and contribute to excellence.