CSIC
Consejo Superior de Investigaciones Científicas

IMN
nano micro
Instituto de Micro y Nanotecnología

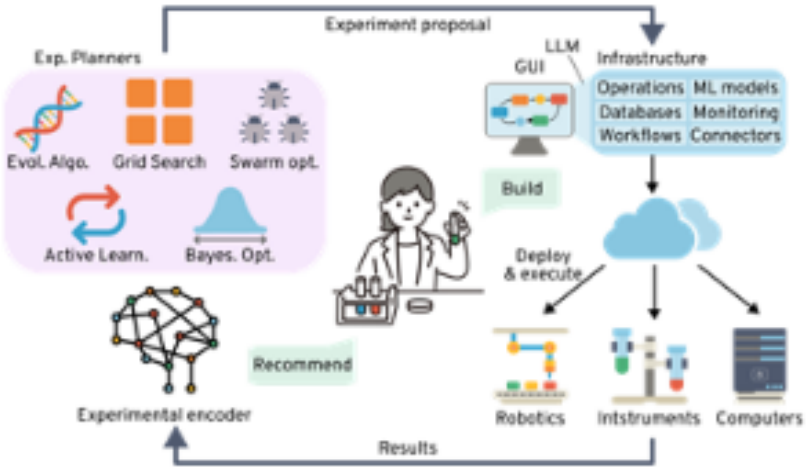
FINDER

4-year PhD Position: Building the Next Generation of Self-Driving Laboratories @ Finder [IMN-CSIC] (CAM - César Nombela programme)

Summary Self-driving laboratories have demonstrated immense potential to radically accelerate the discovery of new materials by combining robotics with AI-driven experimental planners. However, their widespread adoption is currently hindered by the high costs of commercial equipment and the complexity of integrating heterogeneous laboratory devices into unified systems.

We are looking for a highly motivated researcher to investigate the application and democratization of these systems. Your research will focus on developing affordable open-hardware solutions and building accessible orchestration architectures to seamlessly integrate autonomous techniques into traditional scientific setups. The goal is to design the automation backbone at the IMN-CSIC, directly contributing to reducing both the cost and the time required for materials discovery.

What we offer A fully funded predoctoral position with an annual gross salary of ~25.4k EUR.



What we are looking for

- **Programming expertise** Strong proficiency in programming languages, especially Python.

- **Hardware integration** Experience with robotics, computer vision, or instrument automation. Knowledge of ROS (Robot Operating System) is highly appreciated.

- **AI & Data** Experience with statistical learning theory and Python AI/ML frameworks will be highly valued.

- **Collaborative spirit** A willingness to work hands-on alongside a multidisciplinary team of scientists in a dynamic laboratory environment.

Interested? Send your CV and a brief cover letter to finder.imn-cnm@csic.es