

INSTITUTO DE SISTEMAS OPTOELECTRÓNICOS Y MICROTECNOLOGÍA & CENTRO DE MATERIALES Y DISPOSITIVOS AVANZADOS PARA TECNOLOGÍAS DE INFORMACIÓN Y COMUNICACIONES UNIVERSIDAD POLITÉCNICA DE MADRID



Advanced packaging of GaN-based HEMTs

The PhD candidate will work on the design, modelling, and fabrication of advanced packaging architectures for the System-in-Package (SiP) integration of GaN-based High Electron Mobility Transistors (HEMTs) including:

• Optimization of various packaging architectures (wirebonding, embedded chip, and flip-chip) for high frequency and high power operation

- Synthesis of high thermal conductivity AIN and AIScN layers
- Integration of AIN and AIScN as interposers and heat dissipation layers

The research will be conducted at ISOM (<u>www.isom.upm.es</u>) and CEMDATIC (<u>www.cemdatic.upm.es</u>), Technical University of Madrid. The candidate will pursue an industrial PhD in a joint program with INDRA Sistemas S. A., a Spanish multinational company, within the project "Chair UPM-INDRA in Microelectronics"

WHAT WE OFFER

 Three-year contract. Annual gross salary of 25,350 € and health and social benefits according to Spanish law

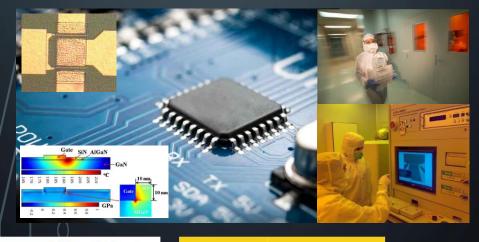
• Excellent facilities, international atmosphere, and partnering with industry

WHAT WE NEED

A Master degree in Electronic/Telecommunication/Materials Engineering or Physics
Proficiency in English, goal-oriented mindset, creativity, teamwork & communication skills. Previous research experience will be highly valued

• Applicants should send a motivation letter & CV to both Marta Clement

(marta.clement@upm.es) and Jorge Pedrós (j.pedros@upm.es)







MINISTERIO PARA LA TRANSFORMACIÓN DIO Y DE LA FUNCIÓN PÚBLICA



Plan de Recuperación, Transformación y Resiliencia