

# 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 AlN and AlScN layers
- Integration of AlN and AlScN as interposers and heat dissipation layers

The research will be conducted at ISOM ([www.isom.upm.es](http://www.isom.upm.es)) and CEMDATIC ([www.cemdatic.upm.es](http://www.cemdatic.upm.es)), 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](mailto:marta.clement@upm.es)) and Jorge Pedrós ([j.pedros@upm.es](mailto:j.pedros@upm.es))

