

High-frequency antenna engineer

Mission / Abstract

SIAE MICROELETRONICA is looking for an antenna/microwave researcher to dive into the cutting-edge world of HF wireless technology. The selected candidate will work in Italy within the HORIZON MSCA project [EMPOWER-6G](#) (Grant 101120332) as a Doctoral Candidate (DC). The SIAE DC will simultaneously pursue an industrial doctorate at the Politecnico of Milano, Italy. EMPOWER-6G is a project with 15 DCs from 10 industrial/academic partners from 9 European countries. The mission is to design a novel converged optical-wireless architecture that realizes an efficient 6G FR2 (mmWave) Cell-Free-based access network for high-density and high-coverage deployments and that is aligned with the latest O-RAN specifications. Under the expert guidance of both industrial and academic mentors, the SIAE DC will be responsible for the development of groundbreaking massive MIMO antennas with cutting-edge beamforming capabilities.

Major Responsibilities

- Pursue doctoral studies at the Politecnico of Milano.
- Proposing and developing novel mm-wave MIMO antennas with beamforming capabilities.
- Prototyping and experimental validation of designed components.
- Technical documentation.
- Internal and external dissemination of the significant results.
- Collaboration with universities, research centers and partners.

Requirements

- Master's degree in electronic engineering, telecommunications or equivalent.
 - A Bachelor's or master's thesis in design of antennas or microwave components is considered a plus.
- Knowledge of the antenna array theory and of RF front-end architectures for beamforming, MIMO and massive MIMO.
- Hands-on experience on antennas and microwave circuits design.
- Proficient in written and spoken English.
 - A certificate of English proficiency could be necessary for registration for the doctorate.
- Ability to work in team.
- Proactive attitude.

Additional welcome skills

- Basic knowledge of measurement techniques of microwave systems and relevant instruments.
- Basic knowledge of EDA tools suitable for RF/MW designs, such as Keysight ADS, Ansys HFSS.
- Familiar with programming languages like Matlab, Python.

Eligibility criteria

- Applicants must have a master's degree and cannot already hold a PhD.
- Applicants must be within the first four years (full-time equivalent) of their research careers at the time of recruitment by SIAE. This is measured from the date when they obtained the master's degree, which formally entitles them to pursue a doctorate.

- *Applicants must not have resided or carried out his/her main activity in Italy for more than 12 months in the last three years immediately prior to the reference recruitment date.*

Documents for application

- *Updated CV and cover letter in English.*
- *Recommendation letters from previous employers and/or University professors.*
- *Relevant publications or theses in the described field of work.*
- *Master Diploma, Bachelor Diploma and Grade Transcripts.*

How to Apply

Send required documents to recruiting@siaemic.com with EMPOWER-6G CANIDATE as subject and simultaneously, you must submit your application through the dedicated site: <https://www.5gstepfwd.eu/oaf-2023>