

## JOB DESCRIPTION

### SENIOR ELECTROCHEMIST

#### Role Overview

We are seeking a Senior Electrochemist with strong hands-on expertise in electrochemical methods and materials processing. Experience in semiconductor-related electrochemistry is highly desirable. The ideal candidate is a technical leader who can design experiments, analyze complex data, and collaborate closely with R&D and equipment engineering teams.

#### Core Technical Expertise (Required)

##### Electrochemical Impedance Spectroscopy (EIS)

- Deep experience designing, executing, and interpreting EIS experiments
- Strong command of equivalent circuit modeling and impedance diagnostics
- Ability to extract mechanistic insights from frequency-domain data

##### Plating Processes (Electrodeposition)

- Proven hands-on experience with metal electrodeposition (Ni, Cu, Sn, or alloys)
- Knowledge of pulse plating, reverse pulse, and high-speed deposition techniques

##### Cyclic Voltammetry (CV)

- Skilled in CV for reaction mechanism elucidation, redox analysis, and surface characterization
- Experience with microelectrode CV setups is a plus

#### Additional Electrochemistry & Analytical Skills (Preferred)

- Surface characterization techniques (SEM/EDX, AFM, XPS)
- Experience with galvanostatic and potentiostatic control methods
- Understanding of electrolyte chemistry, additives, buffer systems, and bath stability
- Familiarity with modeling/simulation tools such as COMSOL, Bio-Logic EC-Lab, Scribner Associates ZView

#### Industry Background (Relevant Sectors)

Candidates coming from the following industries tend to have excellent fit:

- Semiconductor manufacturing (ECD, TSV, metallization)
- Battery systems & energy storage (EIS-heavy workflows)
- Advanced materials, functional coatings, thin films
- Printed circuit fabrication / microelectronics production

#### Education & Experience

- MSc or PhD in Electrochemistry, Materials Science, Chemical/Physical Engineering or related field
- 10+ years hands-on experience in electrochemical systems and laboratory experimentation
- Demonstrated ability to lead complex experiments, troubleshoot processes, and interpret multidimensional datasets

- Experience transferring electrochemical processes into engineering, automation, or manufacturing environments is advantageous

### Soft Skills

- Strong analytical and problem-solving mindset
- Ability to collaborate with interdisciplinary R&D, process, and equipment engineering teams
- Clear, structured communication and technical documentation skills
- Proactive, ownership-driven, and comfortable operating in a fast-paced development environment

### Location

San Martino di Lupari (PD)

### Work Mode

On-site (Office / Lab)

### Benefits & Perks

- Growth: dedicated Learning & development budget.
- Financials: relocation package, performance-based bonus (MBO) and meal vouchers
- Well-being: health insurance plan and supplemental pension fund