

Process Engineer Specialist position in the field of micro-Energy Harvesters in modern science centre CEZAMAT at the leading technical university in Poland – Warsaw University of Technology.

Position: **Process Engineer Specialist**

Application Deadline: **July 24, 2024 16:00 CET**

Candidatures with documents submit via mail on: [Tomasz.Skotnicki@pw.edu.pl](mailto:Tomasz.Skotnicki@pw.edu.pl)

### **Responsibilities:**

- Participation in the development of piezoelectric  $\mu$ Energy Harvesters technology in all its material, process and electrical aspects;
- Development of plasma etching processes;
- Production of metallic or dielectric masks;
- Analysis of the mask-to-substrate pattern transfer quality after the etching process and process optimisation;
- Development and optimisation of high temperature oxidation, LPCVD deposition and annealing processes including RTP;
- Other tasks within the scope of duties, assigned by supervisor.

### **Candidates are required:**

- 1) to have completed a higher education with a master's degree or equivalent in a technical engineering;
- 2) to have a very good knowledge of written and spoken English, allowing active participation in international scientific conferences, publication of scientific articles, research reports, free work with English scientific literature and submission of scientific grant applications, also taking into account international cooperation;
- 3) to possess ability to speak and write in Polish enabling efficient application for scientific grants in Polish research funding institutions and to conduct scientific projects in cooperation with Polish funding institutions;
- 4) to demonstrate a scientific track record of at least 8 co-authored scientific publications in journals listed in the Journal Citation Report (JCR) database;
- 5) to have a scientific profile related to a scientific specialisation in semiconductor technology, proven by publications, participation in scientific projects and professional experience;
- 6) to have at least 3 years of work experience in semiconductor manufacturing laboratories (*cleanroom*);
- 7) to have at least 6 months of internship/work abroad in a research centre focused on electronics research, nano-fabrication with cleanroom facilities and practical experience of working in such facilities;
- 8) to have practical knowledge of analytical techniques: (*SEM, optical microscopy, profilometry, ellipsometry, reflectometry*);

- 9) to have practical knowledge in semiconductor technology including: electron beam lithography, photolithography, chemical and plasma etching and deposition techniques;
- 10) to have knowledge of electric power/energy measurement techniques;
- 11) to possess experience in the organisation of laboratory work, preparation of laboratory protocols and procedures, preparation of scientific publications in English and Polish, preparation of research reports;
- 12) to have experience in the realization and optimisation of wet and dry etching recipes;
- 13) to demonstrate practical ability to analyse and solve current technological problems;
- 14) to demonstrate experience in conducting research, proven by a track record of publications and participation in scientific projects.

**We offer:**

1. Fixed-term employment, 48 months, 30% FTE;
2. Work in the SFINKS project funded by the European Research Council in frame of the Advanced Grant competition;
3. Work at a leading technical university in Poland;
4. Possibility of scientific development thought integration with a dynamic team carrying out cutting-edge research in a strategically important area;
5. Possibility to work in hybrid mode;
6. The opportunity to participate in trainings aimed at further development and improvement of qualifications;
7. Possibility of taking advantage from a group insurance package and a social benefits addressed to WUT employees (*co-financing of holidays, sports activities, language courses*)

Applicants are invited to submit a CV with their academic achievements (*publications listed chronologically from most recent to oldest*), a copy of their academic degrees by e-mail to:

[Tomasz.Skotnicki@pw.edu.pl](mailto:Tomasz.Skotnicki@pw.edu.pl)

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We reserve the right to contact only selected people. We do not return submitted documents.