



**Opening for PhD student position  
in the frame of double degree program  
in cooperation between**

**Institute of Fluid-Flow Machinery Polish Academy of Science (IMP PAN)  
and Kaunas University of Technology (KTU)**

Subject: Research and development of additively manufactured high performance composite structures reinforced with continuous fibers

**Possible scientific supervisors:**

**prof. dr. Marius Rimašauskas (KTU),**

**dr hab. inż. Magdalena Mieloszyk, prof. IMP PAN (IMP PAN)**

Scholarship from the IMP PAN side will be financed from mTSDPAN STER project funded by the Polish National Agency for Academic Exchange (NAWA)

**About the project**

We are looking for a talented person holding MSc title, who is interested in continuing her/ his scientific work and writing a doctoral dissertation in a form of a double degree program in Mechanical Engineering. The research will be realised in the cooperation between Institute of Fluid-Flow Machinery Polish Academy of Science (Gdańsk, Poland) and Kaunas University of Technology (Kaunas, Lithuania).

This research will focus on additive manufacturing of composite structures made of high-performance engineering thermoplastics reinforced with continuous fibers. Combinations of continuous fibers and high-performance thermoplastics should allow to improve mechanical performance significantly, moreover properties of polymers such as heat resistance, chemical resistance, biocompatibility will allow to use composite structures in aerospace or automotive industries or medical sector.

**The offer**

We offer a PhD position:

- in the Department of Mechanics of Intelligent Structures at the IMP PAN
- admission to the Tricity Doctoral School Polish Academy of Sciences (TSD PAN)
- position funded with a PhD scholarship is offered for 48 months
- the monthly amount of the PhD scholarship is:
  - 4 400 PLN/month gross before the mid-term evaluation
  - 5 340.90 PLN/month gross after the mid-term evaluation.

**Eligibility criteria/ Skills/Qualifications**

1. Masters in mechanical engineering, material science, physics or related fields.
2. High average grade obtained during studies.
3. Good knowledge of written and spoken English.
4. High motivation for scientific work and a strong commitment to research work.
5. Acceptance by the KTU side of the double degree program
6. PhD student in TSD PAN (optional)



## Specific Requirements

We especially seek candidates who:

- possess knowledge about numerical methods (mostly finite element method) and modelling,
- have experience with Matlab environment, ability to write codes in Matlab language.
- possess knowledge about mechanical tests
- mobility and flexibility for conference travels.

In addition, the following will be assessed:

- the candidates' scientific track record (publications, conferences, projects, scholarships, etc.),
- the prizes and distinctions of the candidate resulting from the research carried out.

## Selection procedure

Selection process is in accordance to TSD PAN regulations.

1. Submission of applications is possible until **July 30, 2024, 10:00 AM**
2. Form of applications: Applications in English can be sent by e-mail to **tsdpan@imp.gda.pl** with a subject "PhD student in mTSDPAN".
3. Candidates interested in applying for the position should submit the following documents:
  - cover letter
  - CV / scientific resume
  - copy of the certificate of Master degree
  - the list of scientific achievements (publications, participation in research projects, participation in conferences, awards, scientific stays, etc.)
  - optional: letter(s) of recommendation obtained from people (e.g. supervisors, former managers) directly cooperating with the candidate.
4. The application must contain information about the educational background and work experience.
5. Please, attach the requested documents in the PDF format.
6. The result of the recruitment procedure will be sent to the candidates via email.
7. Please include in the application the following statement:

*"I hereby authorize to process my personal data included in my application for the needs of the recruitment process (in accordance with the Act of 08.20.1997 r. on personal data protection - Dz. U. No 133, item 883) "*

If necessary, selected candidates may be invited for an interview (in person or via online videoconference).

Additional questions could be sent by email to Magdalena Mieloszyk: [mmieloszyk@imp.gda.pl](mailto:mmieloszyk@imp.gda.pl)