Job Offer (Specialist Supporting Position)

Unit name: Faculty of Mechanical Engineering, Silesian University of Technology, Gliwice, Poland Job title: *Specialist Supporting Position*

The Faculty of Mechanical Engineering at Silesian University of Technology, Gliwice Poland, hereby announces a competition for a Specialist Supporting Position in the research project entitled: "Deciphering laser-microstructure interaction in multicomponent alloys (DECLARMIMA)". The research project (UMO-2021/42/E/ST5/00339) is funded by the Narodowe Centrum Nauki (NCN) within the framework of SONATA BIS 11 competition.

Requirements:

- 1. Bachelor's degree awarded in the field of chemistry, physics, technology, materials engineering, mechanical engineering, arts (mathematics), or management.
- 2. Good background in at least one of the following methods: (1) Measurement techniques, (2) Machine Learning, (3) Computational method, (4) Linux computing, (5) Web app development. The experience(s) must be documented in SCI(E) publication(s);
- 3. **Proven track record** of knowledge about the virtual framework required for integrating numerical analysis (finite element analysis and multiscale simulations) with machine learning. This is best represented by publications that have results obtained from simulations or calculations performed using the following softwares or libraries: MOOSE framework, Elmer multiphysics, Quantum Espresso, scikit-learn library and TensorFlow library.
- 4. Ability to communicate fluently in English language;
- 5. Ability to work independently as well as work together in team;
- 6. Strong publication record reflecting all of the following metrics/experiences:
- (i) The candidate has published at least two SCI(E) articles in punktami based **highest ranking journal**(s)*. If the publications have multiple authors, the candidate is the first author for at least one of the publications in the highest ranking journal(s)*.
- (ii) The candidate has published SCI(E) articles in TOP5 journals**. The candidate has the experience as an author within a team of multiple authors for at least one TOP1 journal**.
- (iii) The experiences or background mentioned in Requirement 2. must be attested with the publications fulfilling one of the criteria 6(i) or 6(ii).
- (iv) Web app development in connection to a SCI(E) publication.
- *A journal with 200 points (punktami) is considered **the highest ranking journal** for the context of this job announcement.
- ** TOP1 journals are categorized respectively in the 99 percentiles category in the CiteScore ranking list. TOP5 journals are associated with the percentiles values equal to or larger than 95 percentile in the CiteScore ranking list.

The website https://punktoza.pl/ provides the information about both the **punktami** of a journal and **CiteScore based percentile category score of a journal.** (The webpage can be translated into English language for getting the information in this language.).

Description of tasks:

The task of the person (LM2) employed in the **Specialist Supporting Position** is to work together with the principal investigator (PI) for the maintenance and expansion of the research laboratory within the framework of DECLARMIMA project. Working as the laboratory manager, the LM2 will support the PI in the procurement/purchase of the equipment and materials required in the project. The LM2 will manage the virtual infrastructure of the laboratory so as to maintain a

conducive environment for conducting necessary experiments, and performing necessary simulations, modeling and data analysis in computers. The LM2 will instruct the student(s) to perform the computer simulations in the most scientific way. The project blends experiments, multiscale simulations and machine learning techniques and thus there will be an accumulation of data of huge varieties. For the designed data management scheme (e.g. metadata schemes for experimental and simulation datasets) in the laboratory, the LM2 will also perform the task of maintaining smooth information flow among the research team members (of the project).

NCN call for proposals type: SONATA BIS - ST

Deadline for submission of tenders: 26.05.2024 (17:00 CEST)

Form of tender submission: email

Terms of Employment:

Place of work: Faculty of Mechanical Engineering, Silesian University of Technology, Gliwice,

Poland.

Announcement of competition results: 30.05.2024

Duration of employment: 20 months Working hours: Full time (40 h/week).

Date of commencement of employment: As soon as possible.

Additional Information:

Application procedure:

The application should contain the following documents/information:

1. CV including the following information (list of scientific achievements, a list of publications, conference

presentations, awards and distinctions for scientific activity, experimental skills);

- 2. Copy of the Bachelor's degree diploma or equivalent document;
- 3. Title page of all of the co-authored publications/manuscripts published articles in, manuscripts accepted for publications in, and manuscripts submitted to SCI(E) journals. Whenever applicable, a clear note must be attached alongside each paper about the name of the software(s) and library/libraries that have been employed to bring out the results in the paper. If applicable, the link to a web app has to be attached as a note alongside a publication.
- 5. Application letter or letter of motivation (maximum 1 page);
- 6. Acronym for reference of this position (Reference: D-LM-2024-2).

In addition to the above documents, please prepare a document consisting of the following statement: "I consent to the processing of my personal data for the purpose of recruitment in accordance with Art. 6 sec. 1 letter a of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 / EC (general regulation on data protection). "

Application document (all of the documents combined together in a single pdf file) in English should be sent electronically to the principle investigator (PI) of the project Dr. Anil Kunwar (e-mail address: anil.kunwar@polsl.pl). It is recommended to include the job reference (Reference: D-LM-2024-2) in the subject of the email message.