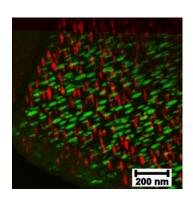
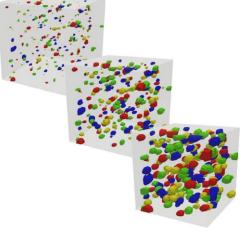
Postdoc position in computational mechanics of materials

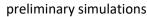
at the Institute of Fundamental Technological Research, Polish Academy of Sciences, Warsaw, Poland

Modelling of the β -to- ω phase transition in metastable β -Ti alloys





experiment [Zháňal et al, J. Mater. Sci. 2018]



Keywords: mechanics of materials, microstructure, phase transition, finite element method, phase field method

WE OFFER

Employment as a postdoc (assistant professor) in the project "Revealing the effect of diffusion on formation of the omega phase in metastable beta-Ti alloys: micromechanical insight from phase-field modelling". The position is funded by the National Science Centre (NCN) in the amount of 140 000 PLN per year (gross) for a period of 30 months (a net monthly salary of about 7 500 PLN).

TASKS

- Development of new models within the phase-field framework.
- Computer simulations of microstructure evolution during the β -to- ω transformation.
- Deriving insights from the simulation results to explain the underlying physical mechanisms.

See <u>a short description of the project</u>.

COLLABORATION

The project is a joint endeavor between the Institute of Fundamental Technological Research, Polish Academy of Sciences (IPPT PAN) and the Faculty of Mathematics and Physics, Charles University in Prague, Czech Republic. The successful candidate will actively engage in cross-institutional collaboration, involving yearly visits to Prague to foster discussions, exchange ideas, and share research findings with the colleagues at Charles University.

REQUIREMENTS

- PhD degree in mechanical or civil engineering, materials science, or related obtained after 2017.
- Good publication record in JCR journals (Web of Science).
- Strong oral and written communication skills in English.
- Experience in the project topic (mechanics of materials, micromechanics, computational mechanics, finite element method, phase field method) will be an asset.

INTERESTED?

Potential candidates are encouraged to contact **Prof. Stanisław Stupkiewicz** (<u>sstupkie@ippt.pan.pl</u>). For more information see <u>http://bluebox.ippt.pan.pl/~sstupkie</u>.

The official call will be opened in May-June 2024.