

# **Postdoctoral Fellowships**

Utc Université de Technologie Compiègne

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### **CALL FOR APPLICATIONS 2025 - FELLOWS**

Supervisor Julie Marteau

Supervisor page <a href="https://www.researchgate.net/profile/Julie-Marteau">https://www.researchgate.net/profile/Julie-Marteau</a>

Host Institution Université de Technologie Compiègne (UTC)

https://www.utc.fr/en/

Research Lab Laboratoire Roberval

https://roberval.utc.fr/

**Research Team** Équipe Matériaux et surfaces

https://roberval.utc.fr/recherche/equipes-de-recherche/equipe-materiaux-

et-surfaces/

# **Project Title**

Influence of surface morphology and microstructure of metallic materials on their mechanical behaviour

## **Project Description**

Local indentation can help the understanding of the mechanical behavior of metallic materials. However, the morphology of the surface can have non negligible impact on the results. Models need to be built to better decorrelate microstructure influence from morphology on the results. Experiments using SEM, EBSD, confocal microscopy and nanoindentation tests will also be performed.

#### **Keywords**

Microstructure, indentation, mechanical properties

### **Description of the Host Lab**

The mission of the Laboratoire Roberval is to develop innovative experimental and numerical methods for the analysis, modeling and design of mechanical structures and systems.