

Recrutement prévu dans le cadre du contrat recherche HORIZON RAIDO

Job title	Numerical modelling and simulation in mechanical engineering
Ref	offreEmploi_2024.07_Postdoc_projet HORIZON RAIDO
Job type (PhD, Post-doc, Engineer)	Engineer / Post-doc
Contract duration (months)	24 months
Salary	Net monthly salary: 1 900€ - 2 400€ (based on experience)
Qualifications (Master degree, PhD...)	Engineering degree or PhD in mechanical engineering, mechanics of materials & structures.
Job hours (full time/ part time)	Full time
Employer	UBFC – Université Bourgogne Franche-Comté
Host Laboratory	FEMTO-ST
URL Host Laboratory	https://www.femto-st.fr/en
Address Host Laboratory	24 rue de l'Épitaphe Besançon, France
Job description	<p>The proposed work is part of the European project RAIDO (www.raido-project.eu/) dedicated to reliable artificial intelligence and data optimization. The work will take place within the Department of Applied Mechanics at the FEMTO-ST Institute. The recruited person will be responsible for generating a database created by FEM simulation. This database will be used by other project partners to train and evaluate the performance level of artificial intelligence tools. The specific task will be to model and simulate the quasi-static mechanical behaviour of plant fibres. Some of the models have been already developed and validated as part of a PhD thesis (https://theses.hal.science/tel-04472025). The assigned work will involve using these models on a larger number of fibres to expand the existing database. Additionally, the task will also involve developing new models and new inverse methods for the simultaneous identification of all elastic parameters.</p> <p>The main activities will be:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Preparing and carrying out digital simulations and calculations <input type="checkbox"/> Developing FE models and numerical methods for parameters identification <input type="checkbox"/> Evaluating the results <input type="checkbox"/> Presenting and discussing the results <input type="checkbox"/> Writing technical reports

	The recruited person will also participate in technical meetings and consortium meetings of the RAIDO project. They will also have the opportunity to supervise interns.
Supervisor(s)	Vincent PLACET, Research Engineer (HDR), University of Franche-Comté, vincent.placet@univ-fcomte.fr
Candidate profile	<ul style="list-style-type: none"> ▪ Engineering degree or PhD in mechanical engineering, mechanics of materials & structures. ▪ Expertise in FE modeling and analysis. ▪ Software: proficient with FEM (COMSOL, ABAQUS) and Matlab ▪ Hard skills: analytical problem-solving thinking, organizational talent ▪ Soft skills: structured and independent way of working, ability to work in a team, solution-oriented, self-motivated, hard-worker ▪ English: fluent reading, writing and speaking with ease.
Keywords	FE Simulation, Mechanics, Composites, Fibres
Application deadline	July the 26 th , 2024
Starting Job	October 2024
Application <i>Depending on the type of position</i>	<p>Post-doc position</p> <p>Please send the following documents (all in one PDF file) by e-mail to "vincent.placet@univ-fcomte.fr" :</p> <ol style="list-style-type: none"> 1) For EU candidates: Copy of your national ID card or of your passport page where your photo is printed. For non-EU candidates: Copy of your passport page where your photo is printed. 2) Curriculum Vitae (may include hyperlinks to your ResearchID, Research Gate Google Scholar accounts). 3) Detailed list of publications (may include hyperlinks to DOI of publications). 4) Letter of motivation relatively to the position (Cover Letter) in which applicants describe themselves and their contributions to previous research projects (maximum 2 pages) 5) Copy of your PhD degree if already available. 6) Coordinates of reference persons (maximum 3, at least your master thesis supervisor): Title, Name, organization, e-mail. <p>If you have questions regarding the application, please contact the supervisors.</p>