

## RESEARCH SCIENTIST IN COMPUTATIONAL INTEGRITY OF COMPOSITES

We seek a highly motivated Research Scientist to join our Technology Consortium, ENERCOMP. As a key member of our organization, you will play a pivotal role in managing research & technology projects in this consortium.

### **Responsibilities :**

- Initiate the design, development, execution, and implementation of technology research projects in the field of Structural Mechanics and Computational Mechanics for composite structures.
- Carry out numerical simulation and develop multiphysics-based models of composite materials and structures in complex environments with multiphysics loadings.
- Plans and executes applied research and lead the development of an internationally recognized digital toolbox for composite structures integrity in the Energy sector.
- Assist in the formulation of long-term plans for transferring predictive tools to industrial partners in collaboration with KAUST TTO and partners' business units.
- Maintains substantial knowledge of state-of-the-art principles and theories and may contribute to scientific literature and conferences.
- May participate in the development of patent applications.
- Coordinate interpartners activities and research efforts.

### **Qualifications:**

- Experience as a researcher in computational mechanics with a solid background in physico-mathematical modeling and numerical simulation of solids and materials.
- Experience in modeling and simulation of composite is required.

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- Advanced experience in fracture and damage mechanics, non-linear material, and geometrical responses are expected. Simulation of thermos/mechanical/chemical couplings.
- Excellent command of continuum mechanics and finite element simulation in both Abaqus and Ansys environments.
- Strong analytical and problem-solving skills.
- Effective team leadership and communication skills.
- Proficiency in the preparation of research project proposals, in the execution of research projects, and the project budget and schedule management.
- Proficiency in spoken and written English.



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We invite you to apply for this exciting opportunity. Join us at ENERCOMP and contribute to groundbreaking advancements in the field of composite materials.

## **Application Requirements:**

- Detailed CV.
- Cover letter.
- List of publications.
- Slides from a recent presentation in a conference or seminar.
- Three or more PDFs of recent publications considered by the candidate as being representative of his research work.
- List of three referees with complete contact information, including full details of last employer.

Interested applicants should send their complete application package to Prof. Gilles Lubineau (gilles.lubineau@kaust.edu.sa) (With a systematic cc to khathijah.osman@kaust.edu.sa). PLEASE USE this as the subject of your email: **ENER\_RS\_COMPU1**.

Only applications providing all requirements will be considered further.





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Technology Consortium for Composites Performance in Energy Applications

**ENERCOMP** is a technology consortium on **Composite Asset Performance in Energy Applications**. It aims at increasing confidence and enabling further penetration of composite materials in the Energy sector by availing new technologies for integrity management. Its mission is to develop innovative integrity management solutions through collaborations with industry and academia by translating fundamental research into deployable technologies.

# **OUR VISION**

To increase confidence and enable further penetration of composites materials in the Energy sector by availing new technologies for enhancing composite performance and integrity management.

# OUR MISSION

To develop innovative integrity management solutions through collaborations with industry and academia by translating fundamental research into deployable technologies.

# **Open Positions**

- Research Scientist in Composite Integrity
- Research Scientist in Computational Integrity of Composites
- Research Scientist in AI and Digital Twins
  of Composites
- Research Scientist in NDT
- Research Technician in Composite Testing.
- Research Technician in NDT
- Research Technician in Sensing Devices for Composites
- Project Management Officer
- Admin Assistant

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جامعة الملك عبدالله للعلوم والتقنية King Abdullah University of Science and Technology

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## KING ABDULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (KAUST)

Established in 2009, King Abdullah University of Science and Technology (KAUST) is a graduate research university devoted to finding solutions for some of the most pressing scientific and technological challenges in the world as well as Saudi Arabia in the areas of food and health, water, energy, environment and the digital domain. **KAUST** is a curiosity-driven, interdisciplinary problem-solving environment, with state-of-the-art labs, distinguished faculty and talented students.

**KAUST** brings together the best minds from around the world to advance research. More than 120 different nationalities live, work and study on campus. KAUST is also a catalyst for innovation, economic development and social prosperity, with research resulting in novel patents and products, enterprising startups, regional and global initiatives, and collaboration with other academic institutions, industries and Saudi agencies.

**ENERCOMP** is located on the **Mechanics of Composites for Energy and Mobility** Laboratory (MCEM). Building 4, Level 2.







جامعة الملك عبدالله للعلوم والتقنية King Abdullah University of Science and Technology