



Post-Doctoral Opening in Chemo-Mechanical Testing and Modeling of Thin-Film based Bioelectronic Implants (UConn)

Department of Mechanical Engineering at the University of Connecticut, USA, invites applications for Postdoctoral fellow in the Laboratory for Advanced Manufacturing Reliability (PI: Kyungjin Kim).

1-year appointment, renewable by mutual agreement. The candidate is expected to join the team as soon as a successful interview has been completed.

The main goal of this project is to develop mechanical testing and modeling to understand the mechanical and chemical failure mechanism of thin film materials on compliant substrates or substrates with non-planar surfaces for implantable bioelectronics.

Main activities include:

- Supporting our collaborators (a leading neurotech industry and laboratory) by performing relevant tests and providing meaningful and well-quantified data,
- Developing a new biomimetic testing methodology that would be more relevant to in vivo.

Qualifications

The successful candidate must hold a Ph.D. in Mechanical Engineering, Material Science or other relevant disciplines. He/She must have a strong background in one or more of the following fields: experimental solid mechanics, mechanical testing, fracture, damage mechanics and polymeric materials. The candidate should also have a good knowledge of simulation in Abaqus Standard; and experience in interfacial and cohesive failure modes.

Working Environment

University of Connecticut (UConn) is a research (R1) public university in the U.S. located in Storrs, CT. It consistently ranks as a top 25 public university in U.S. News. UConn has a beautiful campus, and all sorts of exciting activities and sports games can be found on campus. UConn is a half-hour drive to Hartford (the capital city of Connecticut), a 1.5-hour drive to Boston, and a 3-hour drive to New York. The State of Connecticut is wealthy. In recent years, the state government has strongly supported UConn's scientific research and technology translation through the \$1.7 billion Next Generation Connecticut and the \$1.0 billion Bioscience Connecticut initiatives.

Contact Method

Interested applicants should send their complete application package to Dr. Kyungjin Kim (kkim.me.uconn@gmail.com)

The application package includes:

- CV including research background, publications, experiment & modeling skills, and publications
- Names and contact information of three referees.
- Slides from a recent presentation at a conference or seminar.
- PDF of a recent publication by the candidate as being representative of his research work.