

The Center for Nuclear Energy Facilities and Structures (CNEFS) at North Carolina State University has an opening for a postdoctoral associate. An ideal candidate should have the following qualifications:

Required qualifications:

1. PhD in Civil Engineering (with structural engineering focus) or related field
2. Extensive experience with Finite Element modeling of complex structures and proficiency in use of commercial FE software
3. Strong written skills and proven academic track record of publications

Proffered qualifications:

4. Expertise/experience in Nuclear Engineering & Construction
5. Expertise in multiphysics simulation, including pipe stress analysis
6. Experience with Building information modeling for mega projects, esp. industrial/nuclear projects
7. Programming background

These positions will focus on integrating BIM (specifically industry foundation class (IFC)) with advanced modeling and simulation tools, such as pipe stress analysis.

This postdoctoral associate will be assigned to a 2-year research project with the Idaho National Laboratory (INL) and work on applying the concept of BIM to design and construction of their new Versatile Test Reactor (VTR). There will be opportunities for career development through direct faculty-oriented mentorship and interaction with industry leaders and researchers at a national laboratory.

If interested, please send your detailed CV, a statement that summarizes your relevant qualifications, two publications, and contact information for two references to Drs. Abhinav Gupta and Kevin Han via email - kevin_han@ncsu.edu.

About CNEFS at NC State University

Former students at CNEFS have established themselves as leaders in academia as well as the industry in many countries across the globe. We have had alumni who have been featured on Wall Street Journal for being successful entrepreneurs. Another has Chaired major technical committee in ASME. A few of the alumni serve as faculty members in USA, UK, South Korea, and Egypt. Others serve in leadership roles in nuclear energy-related organizations such as Westinghouse Electric, Duke Energy, AREVA, Electric Power Research Institute (EPRI), Korean Atomic Energy Research Institute (KAERI), etc. Some graduates work in non-nuclear energy industries such as insurance sector, automobile industry, traditional structural engineering firms, and network/telecom technology.

Learn more about:

CNEFS - <https://www.ccee.ncsu.edu/cnefs/>

NC State University - <https://www.ncsu.edu/campus-life/>

Important Note: We are not able to hire a candidate from the list of countries in the following document:

https://www.energy.gov/sites/prod/files/2017/02/f34/Part%20VII%2C%20SECTION%20J%20-%20List%20of%20Documents%2C%20Exhibits%2Cand%20Other%20Attachments%20%20Attachment%20G_0.pdf