

## **SUSANA TEIXEIRA**

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NIST Center for Neutron Research (NCNR)

Neutron Scientist

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### **Education**

- Associate Level (Teaching and Learning in Higher Education) – 2012 Keele University, UK
- Doctorate - 2003 University of Reading, UK
- MSc - 1999 Instituto Superior Técnico, University of Lisbon, Portugal

### **Research Interest**

I have a strong background in Crystallogenesi and X-ray/Neutron crystallography, that I have often put at the service of the experimental determination of the average position of all atoms in crystals of biological macromolecules. Neutron diffraction is a non-destructive structural probe with a strong sensitivity to hydrogen atoms: ideal for the studies of molecules where enzymatic mechanisms, structural stabilization, or both, are impacted by the most abundant element in biological macromolecules. At present, I work at the NIST Center for Neutron Research where I use small angle neutron scattering to broaden the crystallography perspective towards studies in solutions and other phases for various materials: antibodies, protein/DNA complexes, viral particles, extremophile proteins, among others. Furthermore, I am interested in how complex colloidal systems behave under extreme conditions of pressure and temperature, relevant to food and pharmaceutical storage and processing, as well as to a more fundamental understanding of biological adaptation to different environments.

### **Webpage**

<https://www.linkedin.com/in/scmteixeira>