



SHARAFAT ALI

From Sweden to France



Project: **Structure and mechanoluminescence properties of nitrogen-rich oxynitride glasses**

Research topic: **Engineering**

Swedish Institution: **Linnaeus University**

French Institution: **University of Rennes**

Dates of mobility: **01/10/2023 to 07/10/2023**

Program: **SFVE-A**



PRESENTATION

[Sharafat Ali](#) is Associate Professor in Glass Science and Technology at the [Department of Built Environment and Energy Technology](#) of Linnæus University ([LNU](#)). He is interested in the synthesis and characterization of nitrogen-rich oxynitride glasses and thin films for applications in optics, optoelectronics, displays, electronics, architecture, biomedical and energy. He obtained his PhD in Inorganic Materials from [Stockholm University](#) in 2009 and a Master's in Materials Processing Technology from [KTH](#) Royal Institute of Technology in 2002.

ACTIVITIES IN FRANCE

Sharafat Ali's main objective at the Institute of Physique de Rennes ([IPR](#)) was to evaluate the structure and mechanoluminescence properties of newly developed nitrogen-rich oxynitride glasses. He was hosted by Prof. [Tanguy Rouxel](#), one of the pioneers of the oxynitride glasses, and his colleague, Associate Prof. [Yann Gueguen](#) and post-doc researcher [Theany To](#), researching on the fracture properties of glasses. During this mobility, he started working on the article "Effect of composition on the thermal properties and structure of M-Al-Si-O-N glasses, M = Na, Mg, Ca", currently under preparation. Furthermore, he will collectively supervise a Master's thesis student on the topic of "Mechanical properties of special glasses for high-technology applications". He also frequently met with PhD students and Post-Docs of Tanguy Rouxel's group during his stay at IPR. He held a seminar entitled "Nitrogen-Rich Glass and Thin Films: Potential Applications and Challenges" at the [University of Rennes](#), in front of around 30 participants, including master and PhD students, followed by discussions and feedback mainly with Prof. [Jean Rocherullé](#) from the Rennes Institute of Chemical Sciences ([ISCR](#)), but also with Prof. [Frack Tessier](#) ([ISCR](#)). Regular visits and exchanges of master/PhD students between LNU and the University of Rennes, as well as future joint EU applications, were discussed.