

**Professor Samar Hasnain**

Max Perutz Professor of Molecular Biophysics  
University of Liverpool  
United Kingdom

**Field:** Biochemistry, Systems Biology and  
Synchrotron Radiation



Prof. Samar Hasnain is a structural biologist with over 45 years of Synchrotron Radiation experience. He obtained a PhD in experimental Physics in 1976 from the University of Manchester on molecular crystals using synchrotron radiation at NINA, Daresbury Lab, United Kingdom. After spending a year as PDRA (Post-doctoral Research Associate) with Manchester he joined DESY (Deutsches Elektronen-Synchrotron) in Hamburg as a DESY Fellow working on Storage Ring Synchrotron Radiation. During his stay at DESY, the synchrotron team created HASYLAB in 1978.

In 1979, Professor Hasnain joined the UK's effort of establishing the world's first dedicated synchrotron radiation source (SRS) as a full-time scientific staff member of the Daresbury national laboratory. In 1989, he established the Molecular Biophysics group at Daresbury where he remained as head of the group until March 2008 when he moved to the University of Liverpool as Max Perutz Professor of Molecular Biophysics where he established the Barkla X-ray laboratory of Biophysics, naming the X-ray laboratory after the Liverpool's Nobel prize winner Charles Glover Barkla (1917) who had established the nature of Rontgen rays (X-rays) that helped to start the field of X-ray Crystallography. During 2011-2105 he was the International Lead for the Faculty of Health and Life Sciences of the University of Liverpool.

Prof. Hasnain is Fellow of the Institute of Physics (UK, since 1991), Fellow of TWAS (since 1997), Fellow of the Royal Society of Chemistry (UK, since 2002) and Foreign Fellow of the Pakistan Academy of Sciences (since 2017).

His main interest is in structure-function studies of proteins and their complexes that are involved in biological electron transfer, nitrogen cycles and neurodegenerative diseases. He has been involved in structure-based drug discovery targeted towards neurodegenerative diseases and malaria.

Further information: <https://www.liverpool.ac.uk/systems-molecular-and-integrative-biology/staff/samar-hasnain/>