

Letter of motivation for PhD in Chemistry

Statement of purpose

Submitted by Renu Bhati.

I am writing this application to pursue PhD in chemistry in your institution. I am extremely interested in doing research in Spectroscopy as beautifully it explains the structure of atoms and molecules including the electron configurations of ground and various excited states and applying spectroscopy in the field of synthesis and characterization of compounds is really awesome.

While studying the undergraduate programme at Maharshi Dayanand University, India. I was involved in the rigorous coursework where I have developed the deep interest in chemistry- Organic, Inorganic, Physical, Analytical work, along with instrumental analysis studies. The university has offered me a good platform to pursue and realize my passion for chemistry. After graduation, I had opportunity to do my master in chemistry from Jiwaji University, Madhya Pradesh, India. During my post-graduation I was exposed to modern emerging technology in chemistry which includes TCSPC, High performance liquid chromatography (HPLC), Gas chromatography, GC-MS, IR, NMR, UV-VIS spectroscopy, Polarimetry, Conductometry, Voltammetry. During my post-graduation I have enhanced my enthusiasm and started to apply innovative experimental approaches to the study of basics of sciences. During my master's I have worked at Dr. A. P. J. Abdul Kalam Central Instrumentation Facility (India) as an intern. During my training I have gained experiences in the instrumental work. My training experience gave me a new zeal to enter into chemistry research. Additionally, I have attended several national as well as international conferences to understand the basics of chemistry.

After completing master degree, I had opportunity to enroll myself as a research fellow (Project Associate) at Shiv Nadar University (India). For the last one year I am involved in project entitled "Photoinduced charge transfer and Förster energy transfer dynamics in supported ionic liquid membranes" at ultrafast spectroscopy lab under the supervision of Dr. Biswajit Guchhait. My time at Shiv Nadar University is highly enriching I am able to present my work at lab meeting.

I am confident that I can complete the research project very effectively. I believe that these skills and experience will allow me to complete a larger scale project like a PhD effectively. This research will help for academic understanding of self-assembled materials, but more than this it will have great impact on wider society.

If given an opportunity to work with you I believe I will definitely bring out something qualitative in the field of chemistry.

