

Teaching statement for assistant professor position application

[Science](#), [Physics](#)



723832 Dear Search Committee members: I am writing to apply for the position of Assistant in Physics. I have extensive experience in science and I have published extensively in this area. I have been both a guest lecturer and professor at many universities around the world.

Currently, I am a visiting scientist in the Chemistry and Chemical Biology Department (CCBD) at Cornell University. In my position my responsibility is to monitor and advise graduate student projects on protein expression, purification and labeling, and single molecule FRET measurements with rigorous data analysis. I also direct undergraduate research that involves protein purification and single molecule experiments. The students are working on a single molecule study of metalloregulator-DNA interactions for transcriptional regulation. As their professor for this project, I make sure that students stay on task and that they are producing the results necessary for the project.

Prior to my work at Cornell University, I was a Postdoctoral Fellow at Free University in Berlin, Germany. I supervised students, taught theory and monitored an advanced laboratory courses on Methods of Biophysics. I was responsible for all aspects of this course including grading lab reports and monitoring student progress. I learned a great deal about how students approach scientific experiments and their role in supporting and developing experiments.

My goal in teaching is to help students learn at both the physical and visceral levels. I want them to learn that science is always changing, no matter what project one is working or how the experiment is running. Sometimes students are afraid that if they do not receive the results they think they

should receive, that the experiment is not working. I teach them that science is always challenging and as an experiment moves along, there are times when visceral knowledge is more important than what they are exactly seeing.

I have taught physics courses as a lecturer at Katmandu University in Nepal. This opportunity helped me to find ways to mentor students and to make coursework interesting. Many students have said that I am a very approachable professor in my teaching style and I make science interesting. In addition to my teaching experience, I am also an active research scientist. I have presented at many conferences, and I have published extensively on various scientific topics as shown in my resume. As an example, my research in Applied Science (Physics, Chemistry, and Biology) is particularly suited to this position. My PhD dissertation and post-doctoral work focused on the blue light photoreceptor photoactive yellow protein (PYPO). Photoreceptors are nature's spectacular molecules that mediate living beings to interact with their environment through light; human vision is one example of this type of photoreceptor.

I believe I bring richness to any teaching position because I am an active researcher in the field. In my past courses, students have related that having someone who is actually doing the work they want to do, helps them gain insight into what can be done for their futures. Most of all, I enjoy teaching science. I believe that it is a topic that is inherent in everything we do, and I enjoy bringing new students to the field and watching them make progress in many fields.