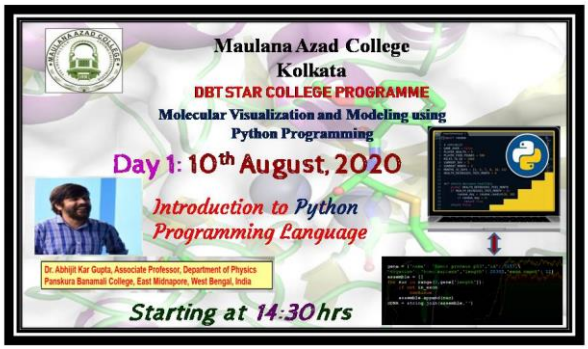
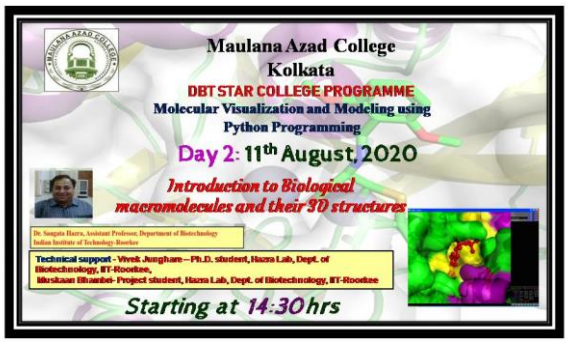
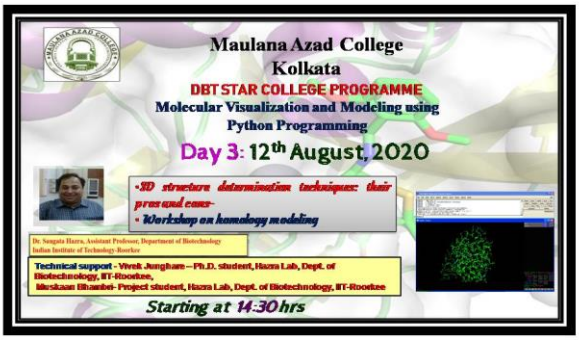
Report on workshops/seminars conducted on Research Methodology conducted during the year

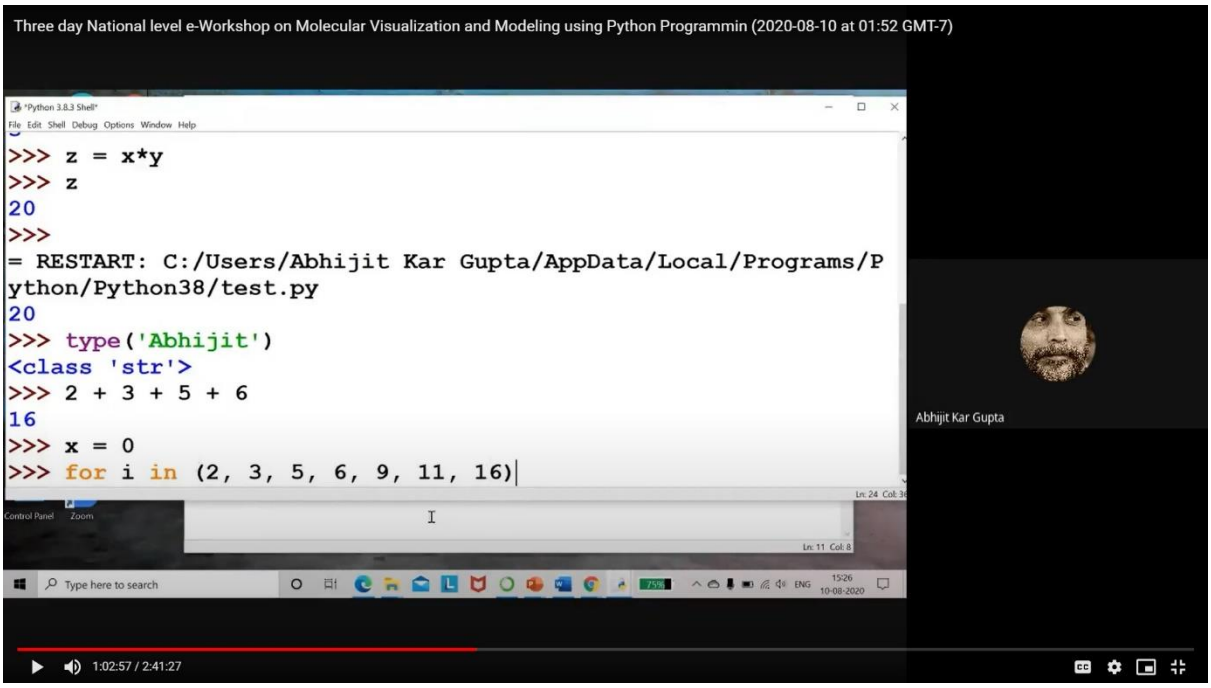
In silico tools have become integral aspect of modern-day research in almost any and every branch of basic and applied sciences. Under the circumstances, atleast a working knowledge of programming languages, computer simulations and structural modelling tools have become indispensable both for an aspiring researcher as well as an established faculty member with little or no knowledge in these fields.

In order to cater the need of both students and researchers, more so amidst COVID-19 pandemic crisis, a three day "National Level e-workshop on Molecular Visualization and Modelling using Python Programming" was organized from 10th to 12th August,, 2020. On 10th August, basic python programming language was introduced by Dr. Abhijit Kar Gupta, Associate Professor, Department of Physics, Panskura Banamali College, East Midnapore, West Bengal. Dr. Kar Gupta also explained to the learners how to write the algorithms in python and how python can be used in diverse fields of research. Day two and day three was dedicated to a hands-on training programme on homology modelling and in-silico docking using Pymol and other online tools of homology modelling. Dr. Saugata Hazra, Associate Professor, Department of Biotechnology, IIT-Roorkee along with his team of research scholars was in charge of this enticing session spanning two days. More than 120 students, research scholars and faculty members from various institutes across the country actively and enthusiastically participated in this e-workshop. They had to take an exit exam at the end of the workshop and participants securing above a cut-off marks were awarded an e-certificate. Analysis of the feedback collected from the participants demonstrated the high level of interest and enthusiasm for participation and also reflected the grand success of the event.

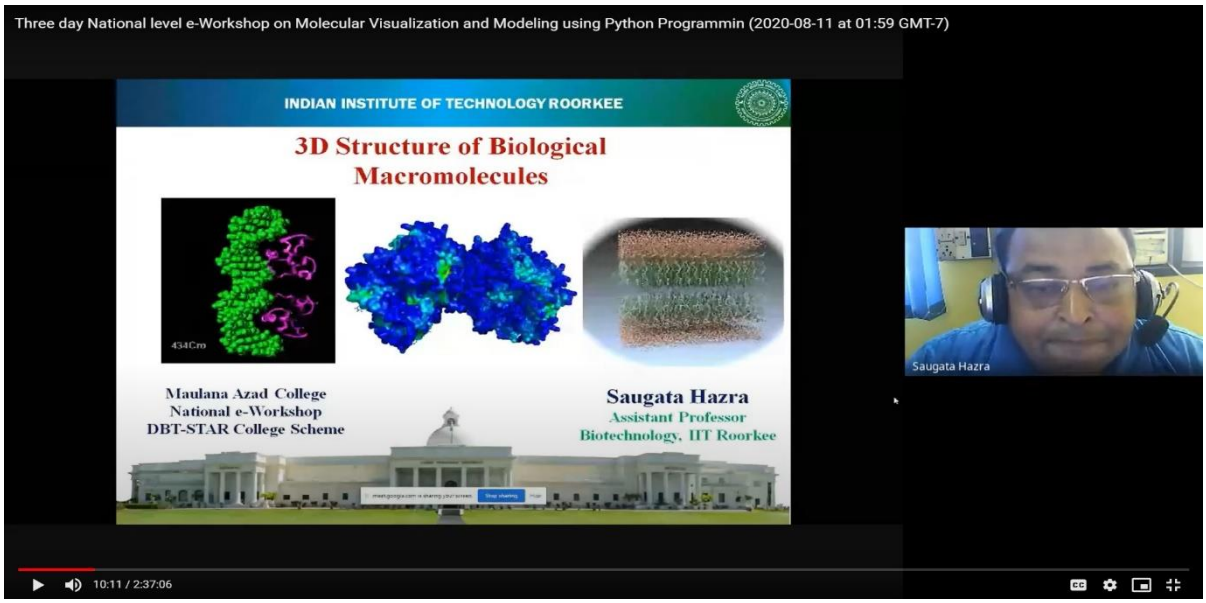




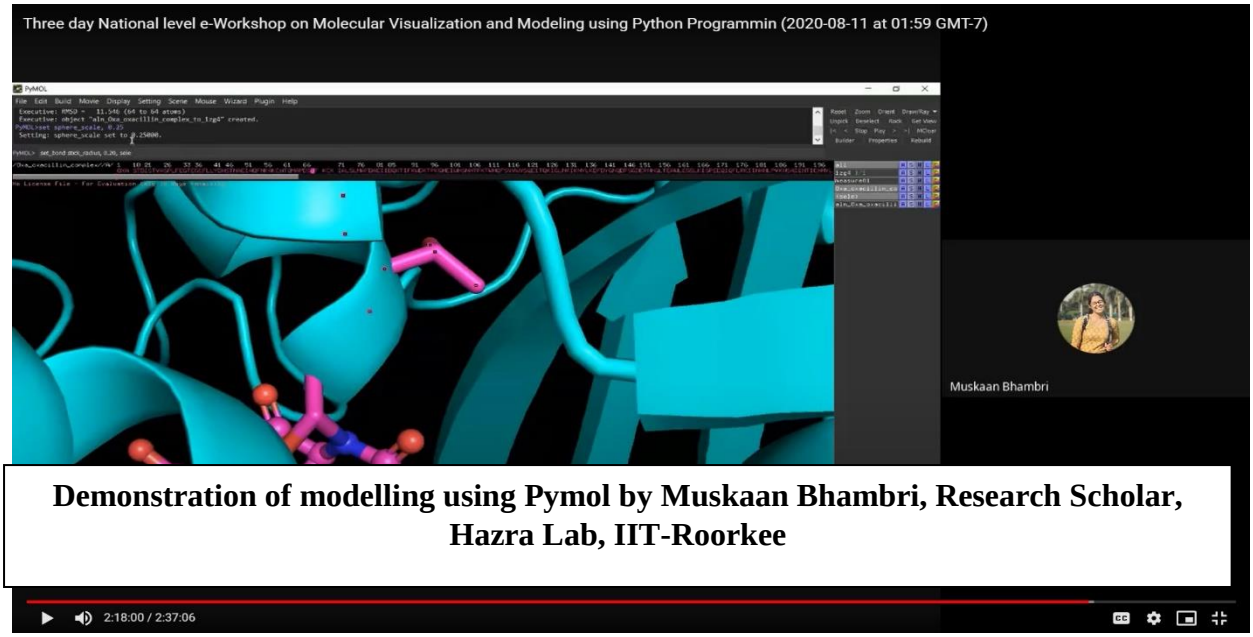




Live demonstration of Python programming language by Dr. Abhijit Kar Gupta

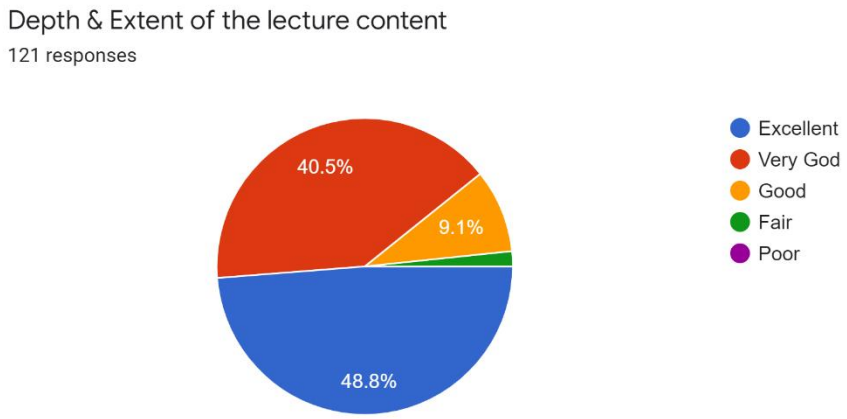


Session on structure of biological macromolecules by Dr. Saugata Hazra, Assistant Professor, Dept. of Biotechnology, IIT-Roorkee



Demonstration of modelling using Pymol by Muskaan Bhambri, Research Scholar, Hazra Lab, IIT-Roorkee

Demonstration of modelling using Pymol by Muskaan Bhambri, Research Scholar, Hazra Lab, IIT-Roorkee



An excerpt from the feedback analysis of the workshop