Fellowship Profile

IAEA PROGRAMS
AT ARGONNE NATIONAL LABORATORY

Research Reactor Utilization

Training Summary:

My training consisted of a four-month training in the Nuclear Engineering Teaching Laboratory (NETL) at the University of Texas – Austin. NETL is one of the best facilities worldwide to perform neutron activation analysis. The facility has a considerable capability for Neutron Activation Analysis (NAA) which is going to be utilized in different applications. The training included hands-on practice on NAA Experiments using TRIGA reactor, Operation Training, Gamma Ray Spectroscopy, Neutron Radiography, Radioisotopes Production, and Classroom lectures.

What's Next?

The training will impact my professional career profoundly. The high professionalism and proactivity exhibited by all faculty and technicians lifted the experience to another level. I gained the ability to carryout all steps of the neutron activation analysis experiment, starting from preparing the samples up to analyzing the data, all with best practice approaches. In addition, being exposed to and participating in a highly academic research environment resulted in improving my research skills and overall soft skills.

When I return to Saudi Arabia, I will be able to perform the neutron activation analysis fully familiarized with techniques, methods and the applications involved in performing the experiments. This includes sample preparation, irradiation and extracting, measuring, and analyzing, allowing discrete sampling of elements and analyzing the chemical form of samples. I will be expected to be familiarized with the minimum detection limits and with the quality control and quality assurance of the NAA.

Bilsan A. - Saudi Arabia

Hosted by University of Texas - Austin