A new rotating anode-based 9 kW X-ray powder diffractometer

An atomic force microscope set up that allows researchers to characterize novel nanoparticle-based surface patterns. These nanoparticle surfaces are finding wide-spread applications as photovoltaic devices and chemical sensors.

A variety of binary and ternary eutectic microstructures during directional solidification obtained using phase field simulations.

A mould for rapid construction of fuel efficient ASTRA domestic stove.
An imaging ellipsometer that enables surface characterization with high lateral resolution is being used to study the formation of various pore-forming toxins on fluidic lipid membranes.

The transformation of fly ash to sand via geopolymerization.

An Electron Probe Micro Analyzer, housed at Advance Facility for Microscopy and Microanalysis (AFMM), for mineral and material chemistry and compositional mapping.

Inductively Coupled Plasma Mass Spectrometry (ICPMS) used for simultaneous determination of concentrations of a wide-suite of elements in samples.

The role of zinc in the biomechanics of substrate boring by fig wasps.

A 20 kW solar power plant on the JRD Tata Memorial Library to power the Central Office at IISc.