Synthesis of Single wall carbon nanotubes

Department of Physics is running a major project entitled "Growth of Single Wall Carbon Nanotubes for semiconducting applications" funded by Department of Information Technology, New Delhi.

The aim of the project is to synthesize and characterize single wall carbon nanotubes (SWNTs) using Plasma Enhanced Chemical Vapor Deposition (PECVD) technique and to study their characteristics for semiconducting applications. Recently, PECVD (Black Magic 2" System, from M/S AIXTRON, UK) has been installed for the growth of SWCNTs. SWCNTs samples of 1 nm with 90% purity are available at Materials Science Lab of Department of Physics, JMI.



PECVD CNT Growth System with Enclosure Exhaust, JMI



Single wall carbon nanotubes