

Academic

Around six years of teaching experience both at the UG and PG level.

Examiner for various institutions both at the UG and PG level - setting and evaluation

Project supervisor for around 14 PG projects from the year 2000– Many of them have been published

Team member for academic endeavors of some institutions

Research

CSIR Research project – Completed with 12 publications (3 years) - (Rs. 2, 02, 000 /-)

DST Research project – Under consideration by DST – 1 (Rs. 10, 02, 100 /-)

Ph.D. Guidance – Currently 6 Scholars (Registered at MK University in the field of crystallography, structural and bonding characterization)

M.Phil. Guidance – 21 Scholars (Completed) (From the year 2000)

Foreign research guidance (Completed) – M.S. - 1, Ph.D. - 1

Published forty nine (49) research articles in highly reputed research Journals

Conference, seminars, symposia – Forty two (42) reports

Research experience from 1988 – to 2006 (As Research Scholar, Research Associate, Visiting Scientist and lecturer) active research in crystallography

Post doctoral career at Tohoku University, Sendai, Japan - about two years – As RA, Lecturer, and Visiting Scientist

Expertise

Various crystal growth techniques – low and high temperature methods (Slow evaporation, Gel, Melt growth, Bridgman methods, CZ Growth)

Equipments (Cameras: Laue, Oscillation, Powder, Precession cameras, Manual 4-circle X-ray diffractometer, Rigaku 4-circle automatic single crystal diffractometer, Rigaku AFC7R automatic single crystal diffractometer, AFC5R automatic single crystal diffractometer, CAD-4 automatic single crystal diffractometer, Rigaku powder X - ray diffractometer (with a superconducting magnet (5 Tesla) and a cryostat with temperature down to 4K), Microdensitometer, Crystal pulling instruments, Other crystallographic, material science related instruments.

Computer

Working Knowledge : IBM – PC, Apple Macintosh - PC, Cyber180/830A – Mainframe, SX-4 Supercomputing system – Mainframe, Operating Systems: Windows – Microsoft, Apple, Unix, Softwares: System softwares, variety of utility programs, Graphics tools, Application software – Shelxl, Wingx - Crystal structure Analysis involving light atoms, PREMOS - Modulated Structures – using super-space group, MEM – Suite programs for the electron density analysis, PDFFIT, PDFGetX – Pair Distribution Function Analysis software suite, Fullprof, JANA 2000 – Structural analysis programs using single crystal and powder data and multipole technique, Many self written programs for structural analysis – Many Self-written softwares are being submitted to the software data base of the International Union of Crystallography