

Hala

March 2015

Current OSU Research Activities:

- Calculation of collision strength for electron impact excitation using relativistic Breit-Pauli R-matrix (BPRM) method for Si IX with Dr. Sultana N Nahar and Prof. Anil K Pradhan, Ohio State University, US.
- Spectral and structural studies of low charged ions of Selenium (Se II-Se V) with the help of semiempirical quasi-relativistic Hartree-Fock calculations using Cowan computer package.
- High-resolution Fourier transform spectrometry in collaboration with Dr. G. Nave of National Institute of Standard and Technology, Maryland-US .

Award and Fellowships:

- Senior Research Fellowship (SRF) by Council of Scientific and Industrial Research (CSIR), 2013, Government of India.
- Dr Ram Raj Prasad Memorial Award (Gold Medal and cash), for having first class first in M.Sc. Physics, Patna University, Patna, 2011.
- Patna University Gold Medal for first position in M.Sc. Physics, Patna University, Patna, 2010.
- INSPIRE Junior Research Fellowship under AORC scheme, funded by DST, Government of India, 2010.

Project:

IUAC-UGC project: Structural Studies of Multiply Ionized Selenium Atoms,
PI: Hala, BTR-II, IUAC/XII.3A

Professional Membership:

- Member of The American Physical Society (APS).
- Division of Atomic, Molecular and Optical Physics (DAMOP) of APS
- Forum on International Physics (FIP) of APS (unit:FIP)
- Life time member of “Indian Society of Atomic and Molecular Physics” (ISAMP).
- Life time member of “International Society for Muslim Women in Science” (ISMWS), Ohio State University.