**Research Profile**

**Dr. Nagendra Singh Tomar**

I am currently working on structural and functional characterization of proteins/enzymes involved in RNA metabolism from microbial and human origin using molecular biology and biophysical techniques. I have acquired extramural research grants to support our current theme of research in advanced biotechnology. Aberrant splicing is hall mark of cancerous states, which has encouraged us to explore roles of various splicing factors in breast cancer, prostate cancer and leukemic cell lines. We have identified and characterized couple of such splicing proteins which are essential for metastasis and expressed in high concentrations in cancerous cells. Simultaneously, we are also working on characterization of  enzymes involved in tRNA modifications from *pseudomonas* and *mycobacterium* species in search of novel druggable targets for designing antimicrobial agents.