Graduate Positions
Institute for Space and Nuclear Power Studies (ISNPS)
The University of New Mexico, Albuquerque, New Mexico

The Institute for Space and Nuclear Power Studies (https://isnps.unm.edu/) has current openings starting spring, summer or fall semesters 2014, for qualified graduate students to pursue PhD in Chemical, Mechanical or Nuclear Engineering at the University of New Mexico in the following areas, both experimental and modeling and simulation:

- Boiling and two-phase flow
- Micro-fluidics, micro-emulsion, and fabrication methods and synthesis of porous nanoparticles of SiO$_2$, Y$_2$O$_3$, Cr$_2$O$_3$, Al$_2$O$_3$, etc.
- Methods and techniques for advanced cooling of electronics
- Advanced CFD and thermal hydraulic simulation of complex fluids and nuclear reactors
- Nuclear Fuel and cladding materials for enhanced accident tolerance
- Molecular dynamics simulation of materials and radiation effects in reactor materials
- Methods of controlling surface hydrophilicity and hydrophobicity for enhancing boiling heat transfer in microchannels and on micro-structured surfaces
- Methods for iodizing and developing hydrophilic micro-porous and microstructure surfaces and techniques for materials synthesis and characterization
- Neutronics and thermal-hydraulics design, modeling and simulation, and safety analysis of Small Modular Reactors
- Multiphysics simulation of complex and hybrid power systems and effective interfacing of analysis codes
- Space nuclear power and environmental effects (space radiation and debris)

Preference is for individuals with prior industrial, research experience, education and training and/or an MS in these or closely related fields. They are expected to work effectively with little supervision, individually and part of a team, have excellent communication and technical writing skills, and have demonstrated skills advanced computer programing and appreciate working in a laboratory environment. For prescreening prior to applying for admission, please respond by email to mgenk@unm.edu, and attach a short letter of introduction with research interest and preferred field of study, a CV, a copy of your undergraduate and graduate transcripts. Some research areas require US citizen or permanent residence.