

Nuclear Science at the University of Rochester

Organization: University of Rochester

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Audience/Grade Level:
Undergraduates, High School

Funding source: DOE, NRC

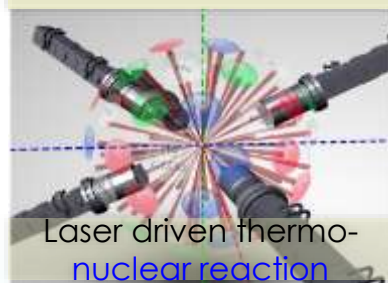


The University of Rochester (UR) Departments of Chemistry and Physics & Astronomy support basic and applied research in nuclear science. Graduate and undergraduate training includes several lecture courses and the 1-semester advanced nuclear science education lab ANSEL which is offered every year.

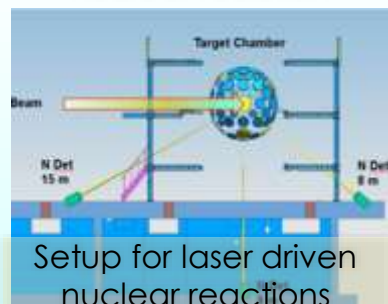


The ANSEL provides students with hands-on experience in detection of radiation in our environment, nuclear instruments and methods, and applications in nuclear forensics.

The nuclear science research group (NSRG) conducts an experimental and theoretical research program in basic nuclear science, nuclear and radiation chemistry, and detector development.



The major on-campus nuclear facilities include some of the world's most powerful laser systems Omega/EP at the UR Laboratory for Laser Energetics (LLE). While most of the LLE research and technical R&D focuses on problems associated with laser driven inertial fusion energy, the powerful laser systems are now also employed in novel nuclear science experiments conducted by the NSRG. The experiments use both, laser driven particle beams and thermonuclear plasmas, which are thought to emulate certain stellar environments.



The LLE and, on smaller scale, the NSRG routinely provide research internships for undergraduates and local high schools students.

Websites: <http://nuchem.chem.rochester.edu/index.html>
http://www.lle.rochester.edu/about/education/high_school_program.php