

NUCLEAR LEGACY

We welcome ANS members who have careered in the community to submit their own Nuclear Legacy stories so that the personal history of nuclear power can be captured. For information on submitting your stories, contact nunews@ans.org.

Jay F. Kunze—ANS member since 1960

I was born and raised in Pittsburgh, Pa. In 1959, I received my Ph.D. in experimental nuclear physics utilizing the 400-MeV synchrocyclotron at Carnegie Mellon University, involving measuring the scattering of pimesons from protons (as a liquid hydrogen target). I joined ANS in January 1960.

I later joined General Electric's Aircraft Nuclear Propulsion project to build a nuclear jet engine at the National Reactor Testing Station at Idaho Falls (now Idaho National Laboratory). In January 1961, the U.S. Army's experimental nuclear reactor SL-1 blew up, killing three army personnel. At first, the Air Force would not permit General Electric to

take part in the cleanup, but after the Aircraft Nuclear Propulsion project was canceled by President Kennedy in March, GE took on the SL-1 disassembly and analysis project. I oversaw the analysis, which took nearly two years.

After the SL-1 experience, I directed work on conducting critical experiments for the Air Force and for NASA Lewis Research Center, primarily for space propulsion applications, including a gas-core (using uranium hexafluoride) critical experiment. In 1965, I became chair of the Idaho Local Section of ANS.



Kunze

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Massachusetts
Institute of
Technology

Department of Nuclear Science and Engineering Faculty Positions

The Department of Nuclear Science and Engineering (NSE) at the Massachusetts Institute of Technology (MIT), Cambridge, MA, is a world leader in the generation, control and application of nuclear reactions and radiation for the benefit of society and the environment. NSE faculty educate and conduct research in fields from fundamental nuclear science to practical applications of nuclear technology in energy, security and quantum engineering.

We are seeking candidates for faculty positions to start July 1, 2025, or on a mutually agreed date thereafter. We welcome exceptional applicants broadly engaged in nuclear science and engineering, especially those pursuing **nuclear fission reactor design for off-grid applications, risk- and economics-based fission reactor design or advanced sensor technologies for fission reactor applications**. The search is for candidates to be hired at the assistant professor level; under special circumstances, however, an untenured associate or senior faculty appointment is possible, commensurate with experience. Applications will be accepted starting November 15, 2024.

While we welcome applications from a wide range of disciplines, a commitment to excel in teaching in the Department is essential. Faculty duties will include teaching courses at the graduate and undergraduate levels, advising students, conducting original scholarly research, and developing course materials at the graduate and undergraduate levels. Applicants must have earned a doctorate in Nuclear Science and Engineering or a related Engineering or Scientific field by the start of employment, and must have demonstrated excellence in research and scholarship in a relevant technical field. Employment is contingent upon the completion of a satisfactory background check, including possible verification of any finding of misconduct (or pending investigation) from prior employers.

Applications are to be submitted electronically at <https://faculty-searches.mit.edu/nse-fission/>. Each application must include: a curriculum vitae, a two-page strategic statement of research interests, a one-page statement of teaching interests, and electronic copies of no more than three representative publications. Each candidate should also include the names and contact information for three or more references. If a candidate is requested to proceed beyond the initial application phase, their letter writers will need to submit their letter by a deadline that will be specified at the appropriate point in the application review process.

Recognizing MIT's strong commitment to diversity in education, research and practice, minorities and women are especially encouraged to apply.

Applications received before December 15, 2024 will be given priority.

MIT is an equal opportunity/affirmative action employer. We value diversity and strongly encourage applications from individuals from all identities and background. All qualified applicants will receive equitable consideration for employment based on their experience and qualifications and will not be discriminated against on the basis of race, color, sex, sexual orientation, gender identity, pregnancy, religion, disability, age, genetic information, veteran status, ancestry, or national or ethnic origin. See MIT's full policy on Nondiscrimination (<https://policies.mit.edu/policies-procedures/90-relations-and-responsibilities-within-mit-community/92-nondiscrimination>). Know your rights.

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