

NUCLEAR APPLICATIONS & TECHNOLOGY



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Craig B. Smith and R. B. Matthiesen

Craig B. Smith (right), an assistant professor at the School of Engineering and Applied Science of UCLA, is assistant director of its Nuclear Energy Laboratory. R. B. Matthiesen, an associate professor, is head of the school's Earthquake Engineering and Structures Laboratory.

REACTORS



NUCLEAR REACTION RATES IN EBR-II IRRADIATED STAINLESS STEEL 35

N. D. Dudey, Robert R. Heinrich, J. Williams, and Allen A. Madson

The authors, representing a total of nearly 60 years experience in the nuclear field, are members of the nuclear constants group of ANL's Chemical Engineering Division. Group Leader N. D. Dudey (right) and Allen A. Madson (left) are primarily interested in charged particle reactions and low-mass fast-neutron fission yields. Robert R. Heinrich (center) and J. Williams are interested in both monoenergetic and integral cross-section measurements.

FUEL CYCLES

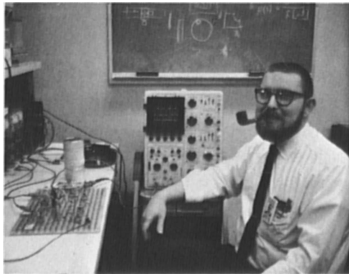


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D. E. Hatch and S. A. Levin

D. E. Hatch (right) is a member of Union Carbide Nuclear Division's long range planning staff, headed by S. A. Levin. Both have long been associated with AEC gaseous diffusion plant design, operations analysis, and long range planning, and both have BS degrees in chemical engineering, Hatch from Case Institute of Technology (1949) and Levin from Johns Hopkins (1943).

RADIOACTIVE WASTE

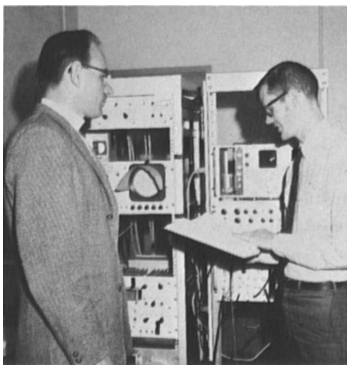


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J. D. Jensen

J. D. Jensen received his MSEE at the University of Washington in 1966 before joining BMI's Pacific Northwest Laboratory where he is responsible for the design and development of infrared scanning and nondestructive testing systems.

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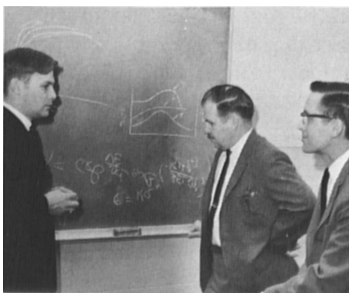


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M. E. Anderson and R. A. Neff

Both authors are members of the physics group at Mound Laboratory. M. Edward Anderson (left) (MS, University of Michigan) is concerned with measurements of fast-neutron fluxes and energy spectra, while R. A. Neff (MS, Ohio State University) studies neutron dosimetry in addition to fast-neutron fluxes.

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R. Carlander, S. D. Harkness, and F. L. Yaggee

R. Carlander, F. L. Yaggee, and S. D. Harkness (right to left), are members of the cladding and analysis group of ANL's Metallurgy Division. Their research has been directed toward the understanding of fast-neutron effects on physical and mechanical properties of structural and cladding alloys for LMFBR applications.

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T. Meshii and J. A. Ford

T. Meshii (left) (BS, Osaka University) is a mechanical engineer on loan to Atomic Power Development Associates from the Central Research Institute of Electric Power Industry of Japan. J. A. Ford (MS, Rensselaer Polytechnic Institute), head of the systems section at APDA, has been active in research and development of sodium-cooled fast breeder reactors.

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James B. Smathers, Dick Duffey, and Sitarama Lakshmanan

James B. Smathers (left) was chief of the reactor group at Walter Reed Army Institute of Research, and is now assistant professor of nuclear engineering at Texas A & M University. Dick Duffey is professor of nuclear engineering and Sitarama Lakshmanan (not pictured) an associate professor of chemistry at the University of Maryland. The authors combined their interests in nuclear engineering, biochemistry, and bioengineering to develop the method the paper reports.

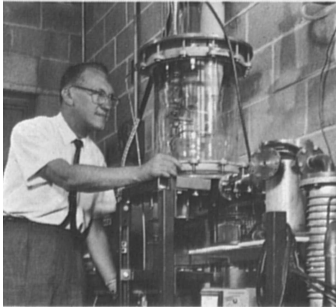
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J. J. Ritts, M. Solomito, and P. N. Stevens

J. J. Ritts (center) (BS, University of Tennessee, 1966) is a research associate of the Reactor Analysis Department of the ORNL Reactor Division, and M. Solomito (right) (MS, Rensselaer Polytechnic Institute, 1963) is a research associate in the Neutron Physics Division. Paul N. Stevens, a professor of nuclear engineering at the University of Tennessee, is a shielding consultant to the Neutron Physics Division.



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Edmund S. Sowa

Edmund S. Sowa (BS, chemical engineering, Illinois Institute of Technology, 1951) has been on the staff at Argonne, since 1951, where he is responsible for advanced concept experiments in space power and charged-particle propulsion. Active in research on liquid metals, his specific interests include EBR-II fuel irradiation, fuel-cycle facility development, fast-reactor safety experiments, magnetohydrodynamics, and materials research.



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N. I. Sax, J. C. Daly, and J. J. Gabay

N. I. Sax (right) is head of the Radiological Sciences Laboratory, Division of Laboratories and Research in the New York State Department of Health. J. C. Daly (center) is a senior sanitary chemist in charge of the Counting and Data Processing Section, and J. J. Gabay, a senior research scientist, is supervisor of the Radiochemistry Section.

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