NUCLEAR APPLICATIONS & TECHNOLOGY

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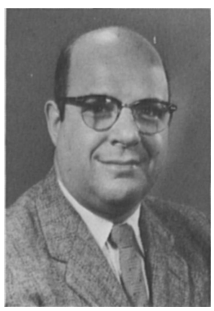
DECEMBER 1970 VOL. 9/NO. 6

REACTOR SITING



Charles Kelber (PhD, physics, University of Minnesota, 1951) joined Argonne National Laboratory in 1955. He has been active in research and test reactor development (ARGONAUT, Mighty Mouse, AHFR, AARR), reactor theory and calculational methods, and reactor safety. His current interests include applications of Monte Carlo analysis and reactor fuel safeguards.

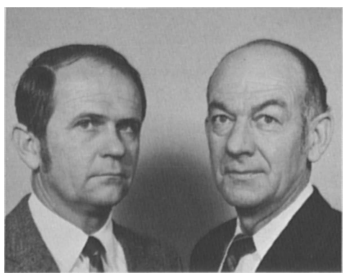
REACTORS

C. V. Chester (left) (PhD, chemical engineering, University of Tennessee) is a senior development engineer with the Civil Defense Research Project at Oak Ridge National Laboratory, Oak Ridge, Tennessee. R. O. Chester (right) (PhD, physics, University of Tennessee) is a development engineer with the Civil Defense Research Project at Oak Ridge National Laboratory, Oak Ridge, Tennessee.

FUEL CYCLES

Richard C. Kern (left) (MS, Marquette University, 1965) has been active in the field of reactor physics for the past seven years in both design and developmental work. His most recent efforts have been directed toward development of calculational methods in the areas of fuel inventories and xenon spatial oscillations. Mario V. Bonaca (right) (PhD, University of Florence, Italy, 1967) has worked with Kern in fuel and core analysis, including xenon spatial oscillation studies. The authors are members of the Safety Analysis Section of Combustion Engineering's Nuclear Power Department.

CHEMICAL PROCESSING



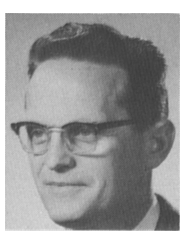
J. M. Chandler, S. E. Bolt

John M. Chandler (right) (MS, North Carolina State University) is group leader in charge of the Thorium-Uranium Recycle Facility (TURF) at Oak Ridge National Laboratory. He has had experience working with nuclear materials from the production from ores to the development and demonstration of radiochemical separation processes for the processing of spent nuclear reactor fuels. Samuel E. Bolt (left) (Louisiana State University, 1949) has been employed in the Reactor Division of Oak Ridge National Laboratory for 17 years. He was temporarily assigned to the Fuel Cycle Technology Group of the Metals and Ceramics Division when this work was performed. He is currently involved in the development of stress indices and flexibility factors of piping components for inclusion in the nuclear piping code.

Harold E. Clark, Grover Tuck

Harold E. Clark (left), senior physicist, and Grover Tuck (right), senior research physicist, have been associated with the Critical Mass Laboratory of Dow's Rocky Flats Division for some time. As a team, they have performed several series of experiments involving uranium metals and solutions.

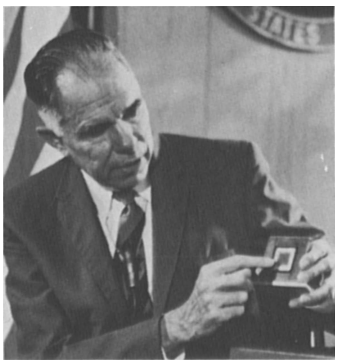
RADIOACTIVE WASTE



C. L. Fitzgerald, H. W. Godbee, R. E. Blanco, W. Davis, Jr.

H. W. Godbee (top left) (PhD, Georgia Institute of Technology, 1964) is a group leader in the Chemical Technology Division at Oak Ridge National Laboratory. He has been in the nuclear energy field since 1957 and has worked in the area of radioactive waste disposal since 1958. In 1968 he served with the International Atomic Energy Agency as a technical advisor to Greece on radioactive waste disposal. C. L. Fitzgerald (top right) (BS, University of Tennessee) is involved in the development of methods for treating radioactive wastes in a laboratory group headed by Godbee. R. E. Blanco (bottom right) is a section chief at Oak Ridge National Laboratory and is responsible for research and development in the fields of radioactive waste management and fuel reprocessing. He has authored papers on waste management and fuel processing for national and international meetings, lectured in Germany and Brazil, and was a member of the U.S. team that surveyed waste management in the U.S.S.R. W. Davis, Jr. (bottom left) (PhD, physical chemistry, University of Rochester) has been concerned with theoretical analysis of heat flow in containers of radioactive wastes.

RADIOISOTOPES

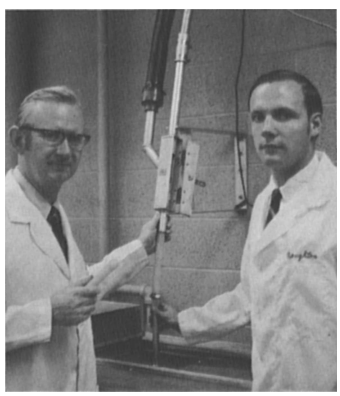


THE SYNTHETIC ACTINIDES—FROM DISCOVERY TO MANUFACTURE 830

Glenn T. Seaborg

Glenn T. Seaborg (PhD, University of California at Berkeley, 1937) is best known scientifically for his major contributions to early works on the transuranium elements for which he was awarded (with E. M. McMillan) the Nobel Prize in chemistry (1951). He is the originator of the actinide concept. In 1961, Seaborg was designated Chairman of the Atomic Energy Commission by President Kennedy.

ANALYSIS



PULSED-NEUTRON ACTIVATION ANALYSIS SYSTEM FOR SHORT-LIVED RADIOISOTOPES 851

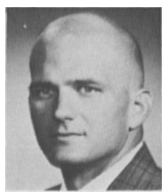
William F. Naughton, William A. Jester

William A. Jester (left) (PhD, chemical engineering, Pennsylvania State University, 1965) is assistant professor of Nuclear Engineering at Penn State and is in charge of the Radionuclear Applications Laboratory of the University's Nuclear Reactor Facility. His major research interest is in developing applications of radiation and radioisotopes and he is assisting researchers in utilizing these powerful tools. William F. Naughton (right) (BS, electrical engineering, Manhattan College, 1965; MS, nuclear engineering, Pennsylvania State University, 1968) is currently pursuing a doctoral program at Penn State. His major field interest is fuel management, and he is currently working on a fuel management program for TRIGA research reactors.

PROTON MICROPROBE ANALYSIS OF THE SURFACE OF STRANDED WIRE IN THE LUNAR MODULE 856

Gerald M. Padawer

Gerald M. Padawer (PhD, Columbia University, 1963) is a member of the research staff of the Grumman Aerospace Corporation, where he applies methods of nuclear physics to solve technical problems encountered in the aerospace industry. His principal contributions have been in the field of nuclear probe microanalysis. He is the originator of the lithium microprobe technique that measures the concentration profile of hydrogen in surfaces.



LABORATORY AND ENVIRONMENTAL MINERAL ANALYSIS USING A CALIFORNIUM-252 NEUTRON SOURCE 861

R. W. Perkins, L. A. Rancitelli, J. A. Cooper, R. E. Brown

Richard W. Perkins (upper right), Louis A. Rancitelli (upper left), John A. Cooper (lower right), and Randall E. Brown (lower left) are staff members of the Environmental and Life Sciences Division of Pacific Northwest Laboratory, a division of Battelle Memorial Institute, Richland, Washington.

TECHNIQUES

A ^{244}Cm-Be ISOTOPIC NEUTRON SOURCE 875

D. C. Stewart, E. P. Horwitz, C. H. Youngquist, M. A. Wahlgren

E. P. Horwitz (far left) (PhD, chemistry, University of Illinois), D. C. Stewart (left) (PhD, chemistry, University of California), M. A. Wahlgren (right) (PhD, chemistry, University of Michigan), and C. H. Youngquist (far right) (BS, mechanical engineering, I.I.T.) formed the team that developed this source. All are members of the Argonne National Laboratory staff. Horwitz is a specialist in separations chemistry, Stewart is associate director of the Chemistry Division, Wahlgren is a specialist in neutron activation, and Youngquist is in charge of the Hot Laboratory Operations Group.

DEPARTMENTS

Corrigendum

On September 2, 1970, M. R. Haroon requested that we publish the following corrigenda that appeared in the biographies of himself and Brian McGhee in the June issue of *Nuclear Applications and Technology*.

Correct the following:

Page 480, first line of biography which presently reads:
Brian McGhee (right) . . .
and the fifth line from the bottom of the same paragraph which presently reads:
M. R. Haroon (bottom left) . . .

Should read:

Brian McGhee (bottom left) . . .
M. R. Haroon (right) . . .