



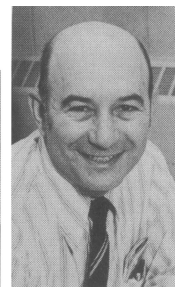
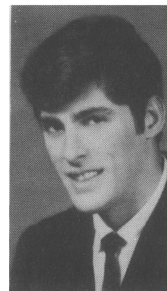
## AUTHORS — JULY 1973

### REACTORS

#### THERMAL ANALYSIS OF THE PENNSYLVANIA STATE UNIVERSITY BREAZEALE NUCLEAR REACTOR

*J. A. Haag*  
*S. H. Levine*

John A. Haag (left) (BS, engineering science, Pennsylvania State University, 1969; MS, nuclear engineering, 1971) has been employed as an operations engineer at the DIG prototype for the Knolls Atomic Power Laboratory since graduating in 1971. Samuel H. Levine (PhD, nuclear physics, University of Pittsburgh, 1954) is professor of nuclear engineering and director of the Breazeale Nuclear Reactor at Penn State. His technical interests currently are fuel management, neutron spectrum measurements, and research with TRIGA reactors.

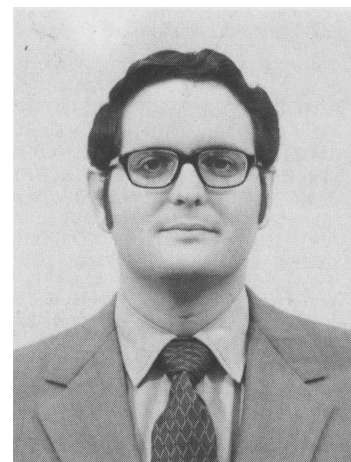


### FUEL CYCLES

#### CRITICALITY SAFETY EVALUATION OF A SHIPPING CONTAINER FOR MODERATED LOW-ENRICHED URANIUM COMPOUNDS

*Ricardo Artigas*

Ricardo Artigas (PhD, nuclear engineering, Purdue University, 1967) is presently the nuclear criticality safety specialist for General Electric's Nuclear Energy Division, and as such is responsible for division-wide consultation on matters of criticality safety both nationally and internationally, for coordinating the criticality safety methodology across all NED fuel cycle installations, and for periodic audits of criticality safety programs at those locations. He is also responsible for conducting the criticality safety programs of General Electric Nuclear Fuels Laboratories at San Jose, California. Artigas was previously associated with the Columbus Laboratories of Battelle Memorial Institute.

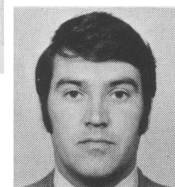


### CHEMICAL PROCESSING

#### THERMAL CONSIDERATIONS AND ANALYSIS FOR A RADIOACTIVE WASTE REPOSITORY

*R. D. Cheverton*  
*W. D. Turner*

R. D. Cheverton (left) (MS, mechanical engineering, Georgia Institute of Technology) is a design engineer for Union Carbide, Nuclear Division, participating in reactor design and development since 1953 and more recently in the design of repositories for radioactive wastes. He attended Oak Ridge School of Reactor Technology. W. D. Turner (MS, applied mathematics, North Carolina State University) is a computing applications analyst with Union Carbide, Nuclear Division.



**COMPATIBILITY OF REFRACTORY METALS WITH  $^{244}\text{Cm}_2\text{O}_3$** 

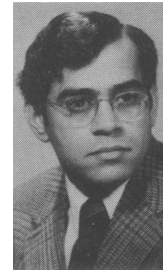
J. R. DiStefano (left) (MS, University of Tennessee, 1964) has been associated with Oak Ridge National Laboratory since 1957. He has worked on problems ranging from alkali metal corrosion to materials research relating to space nuclear systems and molten salt reactor development. He is presently engaged in materials studies relating to radioisotopic generator applications. K. H. Lin (PhD, chemical engineering, University of Minnesota) has been on staff at ORNL since 1967. During this time he has worked in the areas of materials and chemical science and radioisotopic process development. Currently, he is working on processes for the control of liquid streams in various nuclear installations.

*J. R. DiStefano*  
*K. H. Lin*

**MONITORING AND MEASUREMENT OF CARBON ACTIVITY IN SODIUM SYSTEMS**

K. Natesan (left) (PhD, metallurgy and materials science, Carnegie-Mellon University, 1969) and T. F. Kassner (PhD, metallurgical engineering, Purdue University, 1962) are in the Materials Science Division at Argonne National Laboratory. The authors are presently involved in various aspects of the corrosion and mechanical behavior of LMFBR materials in a sodium environment.

*K. Natesan*  
*T. F. Kassner*

**A DUAL-ENERGY METHOD FOR MEASURING VOID FRACTIONS IN FLOWING MEDIUMS**

F. E. LeVert (left) (PhD, nuclear engineering, Pennsylvania State University, 1971) is presently employed at Tuskegee Institute, Tuskegee, Alabama. His technical interests include reactor noise, high temperature properties of alkali metals, and the use of radiation in biomedical applications. E. Helminski (PhD, physics, University of Michigan, 1970) is also employed at Tuskegee Institute. He has been active in promoting the utilization of young scientists in government advisory positions and is presently investigating gamma-gamma correlations through noise analysis techniques.

*F. E. LeVert*  
*E. Helminski*

