

NUCLEAR APPLICATIONS & TECHNOLOGY



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REACTORS



CRITICAL MASS OF A WATER-REFLECTED PLUTONIUM SPHERE 405

David R. Smith, William U. Geer

David R. Smith (left) (MA, Washington University, St. Louis) has been with the Los Alamos Scientific Laboratory since 1949. He formerly worked in the weapons division, is currently with the critical assemblies group, and for the past seven years has been nuclear criticality safety officer for the LASL. William U. Geer (BS, Mississippi State University) first associated with the Los Alamos Scientific Laboratory in 1951 as part of Armed Forces Special Weapons Project, and is now in the critical assemblies group.



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Branislav Radak, Olga Gal, Vitomir Marković, Ljiljana Petković, Michel Labrousse, Jacques Libmann, Jacques Roger



Branislav Radak (upper left) (PhD, physical chemistry, University of Beograd) did research work connected mainly with the use of calorimetry in aqueous radiation chemistry. His present interest lies in radiation processes in solids. Olga Gal (upper right) (PhD, chemical technology, University of Beograd) has done research work involving radiation chemistry of solids and chemical dosimetry for in-pile measurements for the past several years. Vitomir Marković (center left) (PhD, chemical technology, University of Beograd) did research work connected with the calorimetric and chemical dosimetry of reactor radiation, radiation chemical processes in aqueous solutions at high absorbed doses. He is presently interested in pulse radiolysis of aqueous solutions. All three of the above authors are senior chemists in the Radiation Chemistry Department of the Boris Kidrič Institute of Nuclear Sciences. Ljiljana Petković (center right) (BS, physical chemistry, University of Beograd) is a chemist in the Radiation Chemistry Department of the Boris Kidrič Institute of Nuclear Sciences. Michel Labrousse (bottom right) (engineer, Arts et Metier School) works in CEN Saclay on the development of in-pile dosimetry methods and reactor parameters measurements. He is particularly interested in calorimetric methods. Jacques Libmann (bottom left) (engineer, ESME Paris) has been interested in dosimetry for several years. He is chief of the ISIS reactor staff at CEN Saclay. Jacques Roger (bottom center) is the technician who studied and built most of the calorimeters used in the reactors of the Department des Piles Experimentales from the Commissariat a l'Energie Atomique.

REACTOR SITING



UNDERSEA REACTOR SITING

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Robert N. Endebruck, Walter H. D'Ardenne, Warren F. Witzig

LCDR Robert N. Endebruck (left) (MSNE, Pennsylvania State University) is Operations Officer of the Naval Nuclear Power Unit, Fort Belvoir, Virginia. Walter H. D'Ardenne (upper right) (PhD, nuclear engineering, MIT) assistant professor, Nuclear Engineering Department of The Pennsylvania State University, has research interests in reactor physics parameters, nuclear analysis, thermal-hydraulic analysis, and nuclear safety analysis. Warren F. Witzig (PhD physics, Pittsburg University), professor and head of the Nuclear Engineering Department at The Pennsylvania State University, has experience in reactor design, research and development, and management.

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Louis J. Anastasia, Peter G. Alfredson, Martin J. Steindler

Louis J. Anastasia (left) (MS, Purdue University) is involved in the development of fluidized-bed fluoride volatility processes in a laboratory group headed by Martin J. Steindler (right) (PhD, University of Chicago) at Argonne National Laboratory. Peter G. Alfredson (inset) (MS, University of New South Wales) is a group leader in the Chemical Engineering Section of the AAEC Research Establishment, N.S.W., Australia.

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Gordon Edison, Graham A. Whitlow

Gordon Edison (right) (PhD, nuclear engineering, MIT, 1965) and Graham A. Whitlow (PhD, metallurgy, University of Wales, 1962) joined the advanced reactors division of Westinghouse in 1967. Edison came from ORNL where his efforts were in reactor analysis and design evaluation; he currently is responsible for critical experiment planning and nuclear analysis methods used by Westinghouse in the FFTF project. Whitlow is engaged on the Westinghouse Development Program on vanadium alloys for LMFBR application, his previous experience being gained with the United Kingdom Atomic Energy Authority in the uranium alloy field.

ECONOMICS



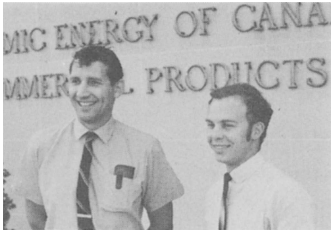
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A. de la Garza, S. A. Levin

A. de la Garza (left) is responsible for advanced systems analysis in AECOP (AEC Combined Operations Planning), a multi-contractor group administered by Union Carbide's Nuclear Division, and S. A. Levin is the head of long-range operations planning for Union Carbide's Nuclear Division. Both have long been with Union Carbide, engaged in gaseous diffusion plant design, operations analysis, and long-range planning.

INSTRUMENTS



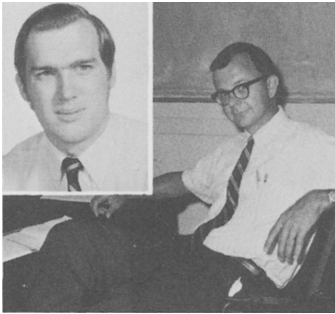
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W. E. Downs, M. W. Davis

W. E. Downs (left) with the Research Division of Commercial Products, AECL, since 1964, is interested in isotope neutron sources and their commercial applications. M. W. Davis is a student at the University of Waterloo, Waterloo, Ontario, in the co-operative applied physics course.

RADIATION



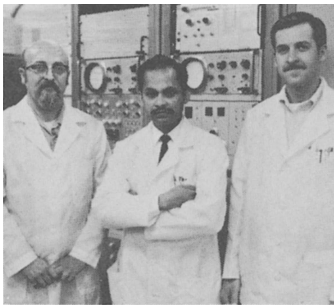
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Carl A. Detrick, James L. Kelly

Carl A. Detrick (above) (MS, University of Virginia, 1967) is a member of the Bettis Atomic Power Laboratory physics group responsible for analysis of a partial prototype core for the reactors to be used in the next generation nuclear-powered aircraft carrier USS Nimitz. James L. Kelly (PhD, Louisiana State University, 1962) is an associate professor of nuclear engineering at the University of Virginia.

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K. K. S. Pillay, C. C. Thomas, Jr., J. W. Kaminski

C. C. Thomas, Jr., K. K. S. Pillay, and J. W. Kaminski (shown left to right) are all members of the Research Department of the Western New York Nuclear Research Center, Inc. Thomas is research manager and has been with the center since 1962. His major interests are in activation analysis, radiation chemistry, and radiation biology. Pillay (PhD, Penn State University, 1965) is senior research scientist at the center and interested in nuclear chemistry and in the applications of nuclear methods to analytical problems. Kaminski's work is in the field of activation analysis and he is a research technician at the center.

DEPARTMENTS

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