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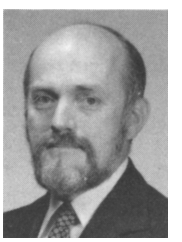
AUTHORS — MARCH 1993

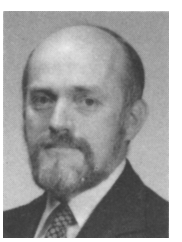
PLASMA ENGINEERING

CONTROL OF PLASMA ROTATION BY CONTROLLING THE CONTENT OF HIGHLY COLLISIONAL IONS IN STRONGLY ROTATING TOKAMAK PLASMAS WITH UNBALANCED NEUTRAL BEAM INJECTION / *W. M. Stacey, Jr., G. W. Neeley*



W. M. Stacey, Jr. (right) (PhD, nuclear engineering, Massachusetts Institute of Technology, 1966) is Callaway Regents' Professor of Nuclear Engineering at Georgia Institute of Technology. His research interests include plasma transport, plasma edge modeling, neutral beam current drive, and fusion reactor design. **G. W. Neeley** (photograph not available) (PhD, nuclear engineering, Georgia Institute of Technology, 1987) is manager of fusion systems at Babcock & Wilcox Company. His research interests include plasma transport and fusion technology.

ON THE POSSIBILITY OF CONTROLLING ENERGY CONFINEMENT IN STRONGLY ROTATING TOKAMAK PLASMAS BY CONTROLLING IMPURITY CONTENT / *W. M. Stacey, Jr.*



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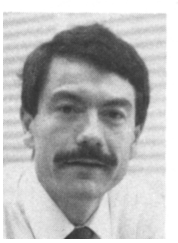
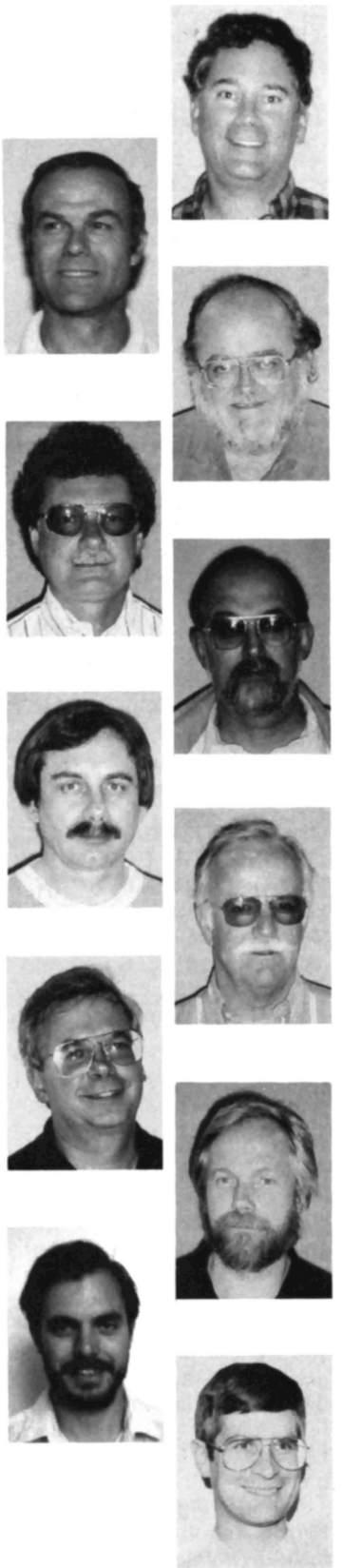
AXISYMMETRIC MAGNETIC CONTROL DESIGN IN TOKAMAKS USING PERTURBED EQUILIBRIUM PLASMA RESPONSE MODELING / *David A. Humphreys, Ian H. Hutchinson*



David A. Humphreys (top) [PhD, plasma physics, Massachusetts Institute of Technology (MIT), 1991] is a member of the DIII-D Operations Group at General Atomics studying tokamak disruption physics and plasma control. He previously contributed to the design of the MIT Alcator C-Mod tokamak and worked as a Japan Atomic Energy Research Institute fellow with the JT-60U group in Naka, Japan. His current research interests include magnetohydrodynamic stability physics, nonlinear and discrete plasma control, and computational plasma simulation. **Ian H. Hutchinson** (BA, Cambridge University, England, 1972; PhD, Australian National University, Australia, 1976) is professor of nuclear engineering at MIT and leader of the Alcator tokamak research group as head of the Toroidal Confinement Division of the MIT Plasma Fusion Center. His research and teaching focus on magnetic confinement fusion plasmas, especially tokamak operation, stability, and diagnostics.

THE LARGE-*s* FIELD-REVERSED CONFIGURATION EXPERIMENT / *Alan L. Hoffman, Larry N. Carey, Edward A. Crawford, Dennis G. Harding, Terence E. DeHart, Kenneth F. McDonald, John L. McNeil, Richard D. Milroy, John T. Slough, Ricardo Maqueda, Glen A. Wurden*



Alan L. Hoffman (top right) (PhD, aeronautics and applied mathematics, California Institute of Technology, 1967) was director of the plasma physics and fusion group at STI Optronics and the program manager of the Large-*s* Experiment (LSX). He is currently an affiliate professor at the University of Washington. **Larry N. Carey** (top left) (BME, Kansas State University, 1969) is a senior engineer at STI and the task leader for magnet design on the LSX. **Edward A. Crawford** (second from top right) (PhD, aerospace engineering sciences, University of Colorado, 1969) was a principal research scientist at STI and is currently the principal diagnostician on the LSX. **Dennis G. Harding** (second from top left) (BS, physics, Eastern Washington State College, 1970) was a scientist at STI and is currently the task leader for vacuum systems on the LSX. **Terence E. DeHart** (third from top right) (Associates Degree, electrical engineering, Erie County Technical Institute, 1964) is the principal research engineer at STI and the project manager for LSX construction. **Kenneth F. McDonald** (third from top left) (MS, electrical engineering, Texas Tech, 1979) is a senior engineer at STI and the task leader for power supply design on the LSX. **John L. McNeil** (fourth from top right) is a research associate and the facilities manager at STI and is the task leader for facilities on the LSX. **Richard D. Milroy** (fourth from top left) (PhD, electrical engineering, University of Alberta, Canada, 1978) is a principal research scientist at STI and the task leader for data acquisition and controls and numerical modeling on the LSX. **John T. Slough** (fifth from top right) (PhD, astrophysics, Columbia University, 1981) was a principal research scientist at STI and an experimental leader on the LSX. He is currently the director of TRAP. **Ricardo Maqueda** (bottom left) (MS, physics, University of Buenos Aires, Argentina, 1988) is a graduate student at the University of Washington. He was responsible for the Thomson scattering and bolometry measurements on the LSX. **Glen A. Wurden** (bottom right) (PhD, astrophysical sciences, Princeton University, 1982) was an associate professor at the University of Washington and directed the Thomson scattering and bolometry measurements on the LSX. He is currently working at Los Alamos National Laboratory.

DIVERTOR SYSTEMS

ON HYDROGEN TRANSPORT AND EDGE PLASMA MODELING OF LIQUID-METAL DIVERTORS / *Chungpin Liao, Mujid S. Kazimi, John E. Meyer*

Chungpin Liao (top) [BS, nuclear engineering, National Tsing-Hua University, Taiwan, 1982; MS, 1989, and PhD, 1992, nuclear engineering, Massachusetts Institute of Technology (MIT)] is currently a postdoctoral fellow at the Plasma Fusion Center at MIT, working on liquid-metal and gaseous divertor concepts and edge plasma physics. His interests include engineering evaluation of physical systems, magnetohydrodynamics, plasma material interactions, and investigation of UFO mechanisms. He also had contributions to the discovery of non-Gaussian behavior in the ionospheric plasma heating experiments carried out at Arecibo, Puerto Rico. **Mujid S. Kazimi** (center) (BS, nuclear engineering, University of Alexandria, Egypt; MS, 1971, and PhD, 1973, nuclear engineering, MIT) is professor and head of the Department of Nuclear Engineering at MIT. He worked at Westinghouse in the Advanced Reactors Division and at Brookhaven National Laboratory before joining MIT in 1976. His interests include engineering design and safety analysis of nuclear systems. He is a research leader for the development of advanced methods for safety analysis of nuclear power plants and fusion technology. He is currently chairman of the High-Level Waste Tank Advisory Panel for the U.S. Department of Energy. **John E. Meyer** (bottom) (BS and MS, 1953, and PhD, 1955, mechanical engineering, Carnegie Institute of Technology) is a professor in the Department of Nuclear Engineering at MIT. He worked at Westinghouse Bettis Atomic Power Laboratory before joining MIT in 1975. His principal fields of interest include nuclear reactor engineering analysis (structural mechanics, heat transfer, fluid flow, instrumentation, and control).

ICF TARGETS

HEAVY-ION-DRIVEN TARGETS FOR SMALL-SCALE INERTIAL CONFINEMENT FUSION EXPERIMENTS / *José M. Martínez-Val, Mireia Piera*

José M. Martínez-Val (right) (PhD, nuclear engineering, Madrid Polytechnic University, Spain, 1977) is a professor of nuclear technology and vice director of the Institute of Nuclear Fusion at Madrid Polytechnic University. His current interests are neutronics (both in fission and fusion applications) and inertial confinement fusion (ICF). **Mireia Piera** (PhD, nuclear engineering, Madrid Polytechnic University, Spain, 1986) is an associate professor of nuclear technology in Spain's Open University. She also works with the Institute of Nuclear Fusion at Madrid Polytechnic University. Her research work has focused on ICF physics and fusion-fission hybrid reactors.

MATERIALS ENGINEERING

ON THE INTERACTION OF NIOBIUM DEUTERIDE WITH PLASMAS / *T. Schober, H. Conrads, Armin Schulz*

T. Schober (right) (MSc, physics, University of Stuttgart, Germany; PhD, materials science, Cornell University, 1969) has been a member of the staff of Forschungszentrum Jülich since 1971 and adjunct professor of metallurgy at

the University of Aachen since 1986. **H. Conrads** (right) (Dipl. Phys., 1962, and Dr. rer. nat., 1966, physics, Rheinisch-Westfalische Technische Hochschule, Germany) has been the technical director of the Institut für Plasmaphysik at Forschungszentrum Jülich since 1986. **Armin Schulz** (left) (PhD, plasma spectroscopy, Universität Bochum, Germany, 1992) is interested in X-ray spectroscopy, radiation transport, and atomic physics.

COLD FUSION

MEASUREMENTS OF EXCESS HEAT FROM A PONS-FLEISCHMANN-TYPE ELECTROLYTIC CELL USING PALLADIUM SHEET / *Edmund Storms*

Edmund Storms (photograph not available) (PhD, radiochemistry, Washington University) recently retired after 32 years at Los Alamos National Laboratory. His work has mainly involved high-temperature materials research for space power. His studies have included a wide range of chemical and physical properties, including superconductivity, with a major emphasis on thermodynamics and materials science.