

# Fusion technology™

## CONTENTS / MARCH 1989—VOL. 15, NO. 2 PART 1

### TECHNICAL PAPERS

#### PLASMA ENGINEERING

- 143 Modeling of Pellet Acceleration by Two-Stage Guns / *Giulio Riva, Adolfo Reggiori*
- 154 Application of a Two-Fluid Theoretical Plasma Energy Confinement Scaling to Current Tokamak Reactor Designs / *Erfan Ibrahim*

#### BLANKET ENGINEERING

- 166 A Helium-Cooled Solid Breeder Concept for the Tritium-Producing Blanket of the International Thermonuclear Experimental Reactor / *Mohamed A. Abdou, A. René Raffray, Zinovy R. Gorbis, Mark S. Tillack, Yoichi Watanabe, Alice Y. Ying, Mahmoud Z. Youssef, Kaoru Fujimura*

#### FIRST-WALL TECHNOLOGY

- 183 Local Wall Power Loading Variations in Thermonuclear Fusion Devices / *Matthew C. Carroll, George H. Miley*

#### TRITIUM SYSTEMS

- 193 Enhancing Tritium Release from Diffusion-Limited Solid Lithium Compounds / *Theodore A. Parish, Donald E. Palmrose*

#### FUSION REACTORS

- 204 Alternating Current Tokamak Reactor with Long Pulses / *Osamu Mitarai, Sean W. Wolfe, A. Hirose, Harvey M. Skarsgard*

### DEPARTMENTS

- 139 Authors
- 214 Meeting Reports  
Summary of the 15th International Conference on Plasma Sciences, Seattle, Washington, June 6–8, 1988 / *Loren C. Steinhauer*  
Summary of the U.S./Japan Workshop on Plasma-Based 14-MeV Neutron Sources, Osaka, Japan, June 7–10, 1988 / *Frederic H. Coensgen*
- 223 Special Issue Call for Papers

#### ON THIS COVER

This month's cover design is based on a figure from the paper by Abdou et al., concerning a helium-cooled solid breeder blanket.