

# **fusion**technology™

**CONTENTS / MAY 1988—VOL. 13, NO. 4**

## **TECHNICAL PAPERS**

### **EXPERIMENTAL DEVICES**

- 521** Studies of a Flexible Helic Configuration / *T. C. Hender, J. L. Cantrell, J. H. Harris, B. A. Carreras, V. E. Lynch, J. F. Lyon, J. A. Fabregas, J. Guasp, A. Lopez-Fraguas, A. P. Navarro*
- 536** Fast Alpha Diagnostics Using Pellet Injection / *Raymond K. Fisher, J. Stephen Leffler, Arthur M. Howald, Paul B. Parks*

### **PLASMA ENGINEERING**

- 543** Plasma Transport in a Compact Ignition Tokamak / *Clifford E. Singer, Long-poe Ku, Glenn Bateman*
- 555** Transport Simulation of a Field-Reversed Configuration Plasma / *D. E. Shumaker*

### **FUSION REACTORS**

- 577** On the Selection of the Optimum Design Choice for the Engineering Test Reactor: A Methodology for Making the Best Rational Technical Decision / *L. John Perkins*

### **ICF TARGETS**

- 594** Radiological Dose Calculations for the Diode Region of the Light Ion Fusion Target Development Facility / *Douglass L. Henderson, Mohamed E. Sawan, Gregory A. Moses*

### **TRITIUM SYSTEMS**

- 616** Two-Dimensional Cross-Section Sensitivity and Uncertainty Analysis for Tritium Production Rate in Fusion-Oriented Integral Experiments / *Yujiro Ikeda, Mahmoud Z. Youssef*

### **BLANKET ENGINEERING**

- 644** Heat Transfer for Fusion Component Applications / *Ronald D. Boyd*
- 654** A Phenomenological Model for Prediction of Critical Heat Flux Under Highly Subcooled Conditions / *Joel Weisman, Shahab Ileslamlou*

(Continued)

## **ON THIS COVER**

This month's cover, which is taken from Fig. 1 of the paper by Hender et al., is an artist's conceptualization of a coil set for four-field flexible Helic.

# CONTENTS / MAY 1988–VOL. 13, NO. 4

(Continued)

## DEPARTMENTS

- 515 Authors
- 660 Meeting Report  
Summary of the Eighth U.S. Compact Toroid Symposium/Ninth U.S.–  
Japan Workshop on Compact Toroids, College Park, Maryland,  
June 4–5, 1987 / *Alan De Silva*
- 662 Book Review  
STARPOWER: The U.S. and International Quest for Fusion Energy /  
*Stephen O. Dean*
- 664 Volume 13 Indexes
- v Volume 13 Contents