

Fusion technology™

CONTENTS / NOVEMBER 1986—VOL. 10, NO. 3, PART 1

305 Comments / *George Miley*

OVERVIEW

307 The Reversed-Field Pinch from Experiment to Reactor / *H. A. B. Bodin, R. A. Krakowski, S. Ortolani*

TECHNICAL PAPERS

PLASMA ENGINEERING

354 Ignition and Fueling Scenario Calculations for Neutral-Beam-Heated Tokamak Reactors Based on Pellet Injection / *Lajos L. Lengyel*

364 Divertor Engineering Studies for the International Tokamak Reactor / *Richard F. Mattas, Michael I. Baskes, Jeffrey N. Brooks, James P. Blanchard, Ahmed M. Hassanein, Albert Tobin*

BLANKET ENGINEERING

382 Neutronic Data-Base Assessment for U.S. INTOR / *Jung-Chung Jung, M. Z. Youssef, Edward T. Cheng, Joseph D. Lee*

396 Neutron Dosimetry Qualification Experiments for the Tokamak Fusion Test Reactor Lithium Blanket Module Program / *Francis Y. Tsang, Yale D. Harker, Robert A. Anderl, David W. Nigg, Dan L. Jassby*

MATERIALS ENGINEERING

405 Predictions of Fracture Toughness in Irradiated AISI 316 Based on a Tensile-Toughness Correlation / *Margaret L. Hamilton, Frank A. Garner, Walter J. S. Yang*

ENERGY STORAGE, SWITCHING, AND CONVERSION

411 Studies of Coupling Between Displacement and Eddy Currents in the FELIX Plate Experiment / *Thanh Q. Hua, Richard E. Nygren, Larry R. Turner*

(Continued)

ON THIS COVER

Horizontal and vertical lines extending from data points in graphs in Fig. 12 in the paper by Bodin et al. form the design for this issue's cover. Orange lines + points are electron temperature; the lines + points in black are electron density, shown with the graph turned upside down.

CONTENTS / NOVEMBER 1986—VOL. 10, NO. 3, PART 1

(Continued)

SHIELDING

- 424 Neutron Streaming Through Gaps in Fusion Reactor Shielding / *Alan M. Halley, William H. Miller*
- 431 Applicability of Neutron-Gamma-Ray-Coupled Albedo Monte Carlo Method to Streaming Analysis in Fusion Reactors / *Michinori Yamauchi, Masayoshi Kawai, Yasushi Seki*

FIRST-WALL TECHNOLOGY

- 440 Fusion of Low Atomic Number, Wall Coating Materials in High-Temperature Plasmas / *John G. Gilligan, Phillip D. Stroud*

MAGNET SYSTEMS

- 448 Experimental Observations of the Coupling Between Induced Currents and Mechanical Motion in Torsionally Supported Square Loops and Plates / *D. W. Weissenburger, J. M. Bialek, G. J. Cargulia, M. Ulrickson, M. J. Knott, L. R. Turner, R. B. Wehrle*

TRITIUM SYSTEMS

- 462 A Simulation Study for Hydrogen Isotope Distillation Columns in the Tritium Breeding Blanket System of a Fusion Reactor / *Masahiro Kinoshita, Hiroshi Yoshida, Hidefumi Takeshita*

DEPARTMENTS

297 Authors

474 Meeting Reports

Fusion Reactor Materials—A Review of the Second International Conference, Chicago, Illinois, April 13–17, 1986 / *J. W. Davis*

Summary of the Fusion Reactor Technology Contributions to the Fourth European Nuclear Conference—ENC-86, Geneva, Switzerland, June 1–6, 1986 / *M. Snykers*

**Indexes appear in Volume 10,
Number 3, Part 2B.**