CONTENTS / JULY 1986—VOL. 10, NO. 1

TECHNICAL PAPERS

SAFETY/ENVIRONMENTAL ASPECTS

7 Approaches to Achieving Inherently Safe Fusion Power Plants / Steven J. Piet

31 Implications of Probabilistic Risk Assessment for Fusion Decision Making / Steven J. Piet

FUSION REACTORS

49 Options for Commercial Tokamaks / Ali E. Dabiri, Donald C. Keeton, Scott L. Thomson

PLASMA ENGINEERING

58 Plasma Performance of Tokamak Fusion Core Experiment and Joint European Torus with Sawtoothing / Lee M. Hively, David R. Mikkelsen

70 Burn Control by Hydrogen Feeding for Self-Sustained Plasma in Tokamak Fusion Reactors / Koichi Maki

78 A Self-Consistent Calculation of Rotating Magnetic Fields / J. L. Sperling, A. J. Glassman, K. G. Moses, B. H. Quon

BLANKET ENGINEERING

84 Preliminary Design Studies of a Cylindrical Experimental Hybrid Blanket with Deuterium-Tritium Driver / Sümer Şahin, Tawfik A. Al-Kusayer, Muhammad Abdul Raoof

100 Time-Dependent Neutron-Induced Effects in a DEMO Fusion Reactor Blanket: Burnup Calculations / Luciano Giancarli

MATERIALS ENGINEERING

106 Fabrication of Porous LiAlO₂ Ceramic Breeder Material / Carlo Alvani, Sergio Casadio, Lorenzo Lorenzini, Giovanni Brambilla

113 Interstitials in Copper-Zinc Alloys / Wolfgang Schüle

(Continued)
CONTENTS / JULY 1986—VOL. 10, NO. 1

(Continued)

EXPERIMENTAL DEVICES

124 Vacuum Vessel Eddy Current Modeling for Tokamak Fusion Test Reactor Adiabatic Compression Experiments / James DeLucia, M. Bell, King-Lap Wong

TRITIUM SYSTEMS

137 Design Concept of Cryogenic Falling Liquid Film Helium Separator / Masahiro Kinoshita, Toshihiko Yamanishi, John R. Bartlit, Robert H. Sherman

TECHNICAL NOTE

FUSION FUEL CYCLES

149 Time-Dependent Net Core Breeding Gain of Fusion-Fission Symbiotic Systems / G. N. Throumoulopoulos, G. Pantis

DEPARTMENTS

1 Authors

154 Meeting Reports

Summary of the Course and Workshop on Basic Physical Processes of Toroidal Fusion Plasmas, Varenna, Italy, August 26–September 3, 1985 / M. Lontano

Summary of the Mini-Workshop on Muon-Catalyzed Fusion, Los Alamos, New Mexico, December 16–17, 1985 / Steven E. Jones