

CONTENTS

	Page
List of participants.....	IX
M. KIKUCHI - Attractive fusion reactor - Present status and the future.....	1
R. J. BICKERTON - The catalysed D-D fuel cycle and the tokamak.....	17
R. ANDREANI - Physics and technology issues in our present view of the design of a tokamak reactor.....	25
F. DE MARCO - Discussion on the prospects of fusion energy and on the lines of development of improved tokamak reactors.....	43
J. A. WESSON - High β tokamaks.....	49
S. C. JARDIN, M. S. CHANCE, C. KESSEL Jr., J. MANICKAM, D. A. MONTICELLO, W. PARK, N. POMPHREY, A. REIMAN and L. ZAKHAROV - MHD regimes for fusion reactors.....	67
M. S. CHANCE, J. BIALEK, S. C. JARDIN, C. KESSEL, J. MANICKAM, G. H. NEILSON and M. OKABAYASHI - Kink stability in tokamaks: observation and suppression.....	81
A. BONDESON and D.J. WARD - Wall stabilization in tokamaks: resistive wall modes and plasma rotation.....	95
T. S. TAYLOR - Experimental achievement of toroidal beta beyond that predicted by "Troyon" scaling.....	111
D. C. ROBINSON - Small aspect ratio tokamaks.....	127
M. OKABAYASHI - Tokamak concept improvement - Summary of impact of MHD modes on reactor design.....	141
H. ZOHN, F. RYTER and F. WAGNER - The H-mode: current understanding and extrapolability.....	149
K. THOMSEN - Common and distinct features of enhanced confinement regimes.....	163
B. C. GREGORY - Natural and applied electrostatic potential effects on confinement and divertors in tokamaks.....	177
F. ROMANELLI and F. ZONCA - Alpha-particle induced collective effects in reactor-relevant plasmas.....	191

L. M. KOVRIZHNYKH - Influence of edge turbulence and biased probe on energy and particle confinement in toroidal magnetic traps.....	205
S. A. SABBAGH, S. H. BATHA, M. G. BELL, C. E. BUSH, R.V. BUDNY, D. S. DARROW, E. D. FREDRICKSON, B. GREK, R.J. HAWRYLUK, H. W. HERMANN, S. P. HIRSHMAN, A. JANOS, D. W. JOHNSON, L. C. JOHNSON, J. KESNER, F.M. LEVINTON, D. K. MANSFIELD, M. E. MAUEL, D. C. McCUNE, K. M. McGUIRE, D. MUELLER, G. A. NAVRATIL, D. K. OWENS, H. K. PARK, A. T. RAMSEY, S. SCOTT, D. SPONG, J. D. STRACHAN, E. J. SYNAKOWSKI, G. TAYLOR, R. M. WIELAND, M. C. ZARNSTORFF, S. J. ZWEBEN and the TFTR Group - High performance deuterium-tritium plasmas in TFTR...	219
G. TONON - Current drive efficiency requirements for an attractive steady-state reactor.....	233
M. KIKUCHI - Bootstrap current - Theory and experiment	247
D. MOREAU - Prospects for steady-state tokamak reactor operation through feedback control of the current density profile.....	259
H. BRUHNS - European R&D for further improvement of the tokamak concept.....	275
V. S. CHAN - Experimental and theoretical basis for advanced tokamaks.....	289
H. NINOMIYA - Advanced tokamak program in Japan.....	305
W. M. NEVINS - Advanced tokamak operating modes in TPX and ITER.....	325
V. V. FILATOV and A. B. MINEEV - Optimization of power consumption in the tokamak volumetric neutron source.....	339
V. V. FILATOV - On the minimum power consumption of the toroidal field system.....	353
B. B. KADOMTSEV - Nonlinear transport and plasma improvement.....	365
L. LAURENT - Improvement of the tokamak concept.....	373
N. R. SAUTHOFF - Summary discussion: an integrated advanced tokamak reactor.....	387