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PROCEEDINGS OF THE 23rd INTERSOCIETY ENERGY CONVERSION ENGINEERING CONFERENCE

VOLUME 1

Stirling Engines

Heat Engines

Thermoelectric Power

Thermal Rejection Systems

Advanced Cycles and Systems

Nuclear Power

Thermionic Power

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藏书章

Editor

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FOREWORD

The world has seen tremendous changes in the energy situation over the last twenty years. We have gone from plentiful and cheap oil supplies in the sixties to the scarcity in the seventies and another, probably temporary, oil glut in the eighties. Conventional power and alternative power have seen their ups and downs. Research and development in both space and terrestrial power has also seen its ups and downs. All of these trends can be seen so clearly in the proceedings of the Intersociety Energy Conversion Engineering Conference (IECEC). The IECEC conference has served as a barometer for the energy situation in the U.S.A. and the world.

A thorough analysis of the energy scenario makes two things very clear. One is the constant need for research and development in energy resources and energy conversion technologies, and the second is the much needed international cooperation in developing and sharing these technologies. These needs have served as the basis and the theme of the 23rd IECEC: "International Cooperation for the Advancement of Energy Conversion Technologies." We, the conference organizers, have tried to make this truly an international conference. To this end, we are especially grateful to our international conference coordinators, namely, Professor Sergio Stecco, the European Coordinator, Professor Naotsugu Isshiki, the Pacific Area Coordinator, and Dr. Anil Rajvanshi, the Asian Coordinator.

At the 23rd IECEC, more than 400 technical papers are being presented in 85 sessions, including panel discussion sessions. The topics of the sessions include almost every imaginable area of space and terrestrial power. The papers have been organized into a four-volume Proceedings. The volumes are organized by topical areas for the convenience of the readers.

We would like to acknowledge the efforts of all the session organizers, session chairpersons, and co-chairpersons who worked so hard to make this conference a success. Special thanks are due to Bill Billerbeck who coordinated all the Aerospace Power sessions. Thanks are also due to the ASME staff, especially Marisa Scalice, Herb Tinning, and the Technical Publishing Department for the conference arrangements and publication of the Proceedings. Most importantly, we would like to recognize the efforts of all the authors who contributed their papers to this conference.

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Chairman: W. Billerbeck **Vice-Chairman:** R. M. Nelms

Session 18—Space Station Power Generation and Storage I—Photovoltaic Power System

Chairmen: D. W. Sheibley and T. Dougherty **Organizer:** J. H. Ambrus

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Session 25—Aerospace/Terrestrial Mechanical Energy Storage II

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Session 26—Nuclear Power III—MHTGR: Developing a Reactor with 20-20 Foresight

Co-Chairmen: A. C. Millunzi and S. R. Penfield **Organizer:** S. M. Cho

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Chairman/Organizer: M. Swerdling **Co-Chairman:** M. Shirbacheh

Session 28—Space Station Power Generation and Storage II—Solar Dynamic System

Co-Chairmen: T. L. Labus and T. H. Springer **Organizer:** J. H. Ambrus

Session 29—Space Nickel-Hydrogen I

Chairman/Organizer: S. F. Schiffer **Co-Chairman:** S. J. Gaston

Session 30—Computer Simulation of Spacecraft Power Electronics II

Co-Chairmen: J. Barton and E. Baumann **Organizer:** W. J. Billerbeck

Session 31—Space Power Automation Techniques and Systems II—Applications from Terrestrial Systems

Chairmen: L. L. Grigsby and R. Touchton **Organizers:** D. J. Weeks and L. F. Lollar

Session 32—Heat Engine Session II—Heat Engine Technology Development

Co-Chairmen: J. E. Boretz and W. D. Batton **Organizer:** J. Abbin

Session 33—Stirling Engine Component Modeling and Testing

Chairman: C. D. West **Organizer:** D. A. Renfroe

Session 34—Fuel Cells III—Fuel Cell Technology

Chairmen: J. W. Suitor and D. R. Glenn **Organizer:** B. R. Will

Session 35—Solar Energy Conversion

Chairman/Organizer: F. Kreith **Vice-Chairman:** D. E. Klett

Session 36—Thermionic Power I

Chairman: D. L. Jacobson **Organizer:** G. L. Main

Session 37—Battery Energy Storage—Terrestrial Applications I

Chairman/Organizer: S. M. Schoenung **Co-Chairman:** S. W. Eckroad

Session 38—Aerospace/Terrestrial Mechanical Energy Storage III

Chairman: J. A. Kirk **Co-Chairman:** G. E. Rodriguez

Session 39—Nuclear Power IV—MHTGR Components and Technology

Chairman: A. C. Millunzi **Co-Chairman/Organizer:** S. R. Penfield

Session 40—Space Nuclear Reactor Technology

Chairman: R. Harty **Organizer:** M. Swerdling

Session 41—Space Power Automation Techniques and Systems III

Chairmen: T. M. Cook and G. Sheble **Organizers:** D. J. Weeks and L. F. Lollar

Session 42—Space Nickel-Hydrogen II

Chairman: S. J. Gaston **Co-Chairman/Organizer:** S. F. Schiffer

Session 43—Computer Simulation of Spacecraft Power Electronics III

Chairman: B. Bechtel **Vice-Chairman:** M. Liffing

Session 44—Space Station Power Management and Distribution System I

Chairman: R. J. Frye **Vice-Chairman:** J. W. Mildice

Session 46—Advanced Cycles and Systems

Chairman/Organizer: W. D. Jackson

Session 47—Design Procedures for Stirling Cycle Machines

Chairman: D. Berkowitz **Organizer:** D. A. Renfroe

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Chairman/Organizer: P. D. Agarwal **Co-Chairman:** F. A. Wyczalek

Session 49—Solar Heating and Cooling I—Solar Energy Fundamentals

Chairman/Organizer: J. T. Beard **Vice-Chairman:** T. Min

Session 50—Thermionic Power II

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Session 52—Aerospace/Terrestrial Mechanical Energy Storage IV

Chairmen: H. K. Asper and F. J. M. Thoolen **Organizer:** H. K. Asper

Session 53—Innovative Concepts I

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Session 54—SP-100 Nuclear Reactor Technology

Chairman: A. D. Schnyer **Organizer:** M. Swerdling

Session 55—Space Power Automation Techniques and Systems IV—Space Station

Chairmen: D. Herman and R. J. Spier **Organizers:** D. J. Weeks and L. F. Lollar

Session 56—Space Nickel-Cadmium Batteries

Chairman: C. W. Koehler **Organizer:** S. Gaston

Session 57—Panel on Issues and Applications of High Tc Components

Chairman/Organizer: S. Schoenung **Co-Chairman:** D. Palmer

Session 58—Heat Engine III—Heat Engine Technology Development

Co-Chairmen: K. L. Linker and J. B. Kesseli **Organizers:** J. Moreno and J. Abbin

Session 59—Stirling Cycle Test Results

Chairmen: D. Gedeon and A. Ross **Organizer:** D. A. Renfroe

Session 60—Alternative Fuels

Chairman: D. K. Walter **Co-Chairman/Organizer:** C. J. Wallace

Session 61—Solar Heating and Cooling II—Innovative Solar Energy Systems

Chairman: T. Min **Vice-Chairman:** J. T. Beard

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Chairman: J. T. Lineberry **Organizer:** E. S. Pierson

Session 63—Space Nickel Hydrogen III

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Session 64—Thermal Energy Storage I

Chairman: J. J. Tomlinson **Co-Chairman/Organizer:** M. Olszewski

Session 65—Innovative Concepts II

Chairman/Organizer: T. M. Levinson **Co-Chairman:** R. L. Watts

Session 66—Pulse/Megawatt Space Power

Chairman: R. J. Sovie **Co-Chairman/Organizer:** A. W. Adam

Session 67—Space Power Automation Techniques and Systems V

Chairmen: W. D. Miller and T. M. Trumble **Organizers:** D. J. Weeks and L. F. Lollar

Session 68—Space Lithium Batteries

Chairman: G. Halpert **Co-Chairman:** H. Frank **Organizer:** S. J. Gaston

Session 69—Superconducting Technology Applications to Space Power

Chairman/Organizer: J. S. Fordyce **Co-Chairman:** C. E. Oberly

Session 70—Space Station Power Management and Distribution II

Chairmen: J. J. Biess and I. G. Hansen **Organizer:** J. H. Ambrus

Session 71—Heat Engine Session IV—European Heat Engine Technology Development

Chairman: E. Carnevale **Vice-Chairman:** D. Florjancic

Session 72—Applications of the Stirling Cycle as an Engine

Chairman: M. A. White **Organizer:** D. A. Renfroe

Session 73—Energy From Municipal Solid Waste

Chairman/Organizer: B. Goodman **Co-Chairman:** D. K. Walter

Session 74—Solar Heating and Cooling III—Solar Heating and Cooling Systems

Chairman: G. Meckler **Co-Chairman:** D. E. Klett

Session 75—MHD II—MHD for Space

Chairman: R. R. Holman **Organizer:** E. S. Pierson

Session 76—Space Nickel-Cadmium and Advanced Silver-Zinc Batteries

Chairman/Organizer: C. W. Koehler

Session 77—Aerospace/Terrestrial Mechanical Energy Storage V

Chairman/Organizer: J. A. Kirk **Co-Chairman:** G. E. Rodriguez

Session 78—Nuclear V—Nuclear Design Aspects of Advanced Fission Reactors

Chairman: S. Anghaie

Session 79—Space High Voltage

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Chairman/Organizer: L. H. Thaller **Co-Chairman:** J. Fellner

Session 82—Superconductivity Developments and Terrestrial Applications

Chairman/Organizer: S. Schoenung **Co-Chairman:** D. Palmer

Session 83—Thermal Energy Storage II

Chairman: J. J. Tomlinson **Co-Chairman/Organizer:** M. Olszewski

1988 IECEC PROCEEDINGS

Volume 1

Stirling Engines
Heat Engines
Thermoelectric Power
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Thermionic Power

Volume 2

Mechanical Energy Storage
Thermal Energy Storage
Fuel Cells
Battery Energy Storage—Terrestrial Applications
Space Battery Energy Storage
Superconductivity

Volume 3

Aerospace and Space Power
Photovoltaics
Space Nuclear Power
Space Power Automation
Space Power Computer Simulation
Space Station Power
Pulse/Megawatt Space Power
MHD for Space
Space High Voltage
Spacecraft Power Systems

Volume 4

Wind Energy
Solar Energy
Energy Conservation and Conversion
Innovative Concepts
Alternative Fuels
Solid Waste Energy
MHD
Index to IECEC Proceedings

VOLUME ONE — CONTENTS

OVERVIEW OF STIRLING ENGINE DEVELOPMENT

889002	Conceptual Designs and Integration of Stirling Engines in Space Power Systems D. K. Darooka.....	1
889004	A Historical Perspective on Stirling Engine Performance C. D. West.....	11

STIRLING ENGINES—BACKGROUND AND HEAT PUMP APPLICATIONS

889037	Commercial Applications for Stirling Refrigerators G. Walker, O. R. Fauvel, G. Reader, W. Ellison, S. Zylstra, and M. J. Scott....	15
889038	The Continuing Development of a Natural Gas-Fired Stirling Engine-Driven Heat Pump Russell E. Monahan and J. Michael Clinch.....	21
889039	Performance Measurements for a Diaphragm-Coupled, Free-Piston Stirling Engine Heat Pump Module Robert A. Ackermann and George T. Privon.....	27
889040	Evaluation of a Magnetic Coupling for Hermetic Power Transmission in a Stirling-Rankine Heat Pump G. Chen, R. Redlich, and D. Shade	33

STIRLING CYCLE MODELING

889115	Developments in Two-Dimensional Regenerator Modeling David Gedeon.....	39
889116	The Simulation of Franchot-Bartolini Stirling Engine for Design Purposes Carlo Maria Bartolini and Franco Rispoli	45
889117	Microprocessor Based Stirling Engine Design Aid M. Weiss, G. Walker, and O. R. Fauvel	49
889118	The Feasibility of a Ringbom Stirling Engine Combined With a Solar Pond Israel Urieli and Ming Fe Chen	55
889119	Computer Simulation of Stirling and Sibling Cycle Machines Matthew P. Mitchell and Luc Bauwens.....	59
889516	Computer Simulation of Single Cylinder Free-Piston Stirling Engines Giovani Benvenuto, Francesco Farina, and Michele Troilo	65

STIRLING ENGINE COMPONENT MODELING AND TESTING

✓ 889195	Analysis, Design and Testing of a Gas-Fired Heat Pipe Kaveh Khalili, Ted M. Godett, Ruud P. Verbeek, and R. J. Meijer	73
----------	--	----

889196	Effective Use of Hydrogen in Stirling Engines Donald L. Alger.....	79
889197	Development of a Flexure Joint for Stirling Engines O. R. Fauvel, R. Thomson, and G. Walker.....	89
889200	Liquid Piston Seals for Stirling Machines C. D. West.....	93

DESIGN PROCEDURES FOR STIRLING CYCLE MACHINES

889277	Completion and Testing of a 90 cm ³ Stirling Engine Andrew Ross.....	97
889278	Design Integration and Test of a Heat Pipe Heated 100-hp Stirling Engine Michael A. Merrigan, James E. Runyan, J. Tom Sena, W. Eaton, and J. Mikula.....	101
889279	Operational Characteristics of Free-Piston Stirling Engines D. M. Berchowitz.....	107
889280	Status of Several Stirling Loss Characterization Efforts and Their Significance for Stirling Space Power Development Roy C. Tew, Jr.	113
889281	Description of an Oscillating Flow Pressure Drop Test Rig J. Gary Wood, Eric L. Miller, David R. Gedeon, and Gary E. Koester	121
889283	Effect of Transition on Oscillation Flow Losses in Stirling Engine Coolers and Heaters J. R. Seume and T. W. Simon.....	127

STIRLING CYCLE TEST RESULTS

889346	The Design and Fabrication of a Stirling Engine Heat Exchanger Module With an Integral Heat Pipe Jeffrey G. Schreiber	133
889347	A Plan of a Stirling Engine Utilizing Incinerator Heat Naotsugu Isshiki, Kenji Hashimoto, Kazuhiko Goto, and Kimihiko Katayose ..	141
889348	A Flow-Loss Survey in a Large Fluidyne O. R. Fauvel and G. Walker.....	147
889349	Franchot-Bartolini Stirling Engine With Ross Linkage Carlo M. Bartolini and Franco Rispoli.....	151
889350	The Effect of Bottom End Temperature on the Performance of Stirling Engines G. T. Reader and C. Barnes.....	157
889352	Up-to-Date Information on the NS30S Stirling Engine Mamoru Kubo, Junji Matsue, and Fusao Terada.....	163

APPLICATIONS OF THE STIRLING CYCLE AS AN ENGINE

889432	25 kW(E) Free-Piston Stirling Hydraulic Engine for Terrestrial Solar Thermal Applications M. A. White, S. G. Emigh, J. E. Noble, P. Riggle, and T. C. Sorenson	171
889433	An Assessment of Alternative Conventional Submarine Propulsion G. T. Reader and T. Dathan.....	177
889434	Hermetically Sealed Stirling-Electric Generator Set Stig G. Carlqvist, Curt Schröder, and Lars-Åke Clementz.....	187

889435	Flight Tests of a Stirling Powered Model Aircraft Rob McConaghy.....	193
889436	Hermetically Sealed Ringbom-Stirling Engine/Generator William M. Anderson and Joseph M. Olbermann.....	197
889437	Further Tests on a Back-to-Back Free Displacer Disciplined Piston Stirling Engine C. Rallis, D. B. Kilgour, A. B. Taylor, and D. B. Banks	203
889438	Retro-Fitting a Stirling Add-On Plant Into a Naval Submarine With a Displacement in Excess of 2000 Tonnes R. A. Sylvestre, G. T. Reader, and C. Barnes.....	209

HEAT ENGINES—THERMOCHEMICAL HEAT ENGINES

889108	Design and Performance of a Small Circulating Sodium Heat Engine Neill Weber, James R. Rasmussen, Gary Harkins, and Scott L. Olsen.....	215
889109	Development of a 1 kWE Sodium Heat Engine R. F. Novak, J. R. McBride, T. K. Hunt, D. J. Schmatz, W. B. Copple, N. Arnon, and J. T. Brockway.....	219
889110	Progress in AMTEC Electrode Experiments and Modeling M. L. Underwood, R. M. Williams, B. Jeffries-Nakamura, C. P. Bankston, and T. Cole.....	227
889111	Liquid Metal Thermal Electric Converter Theoretical and Experimental Studies James B. Moreno, Joseph P. Abbin, Charles E. Andraka, and Laurence L. Lukens.....	235
889112	Electrode Systems and Heat Transfer in Thermoelectric Generator Design S. Sherit, M. Sayer, and B. Kindl	241

HEAT ENGINES—HEAT ENGINE TECHNOLOGY DEVELOPMENT

889192	C-Camp, A Closed Cycle Alkali Metal Power System R. P. Wichner and H. W. Hoffman.....	249
889193	Improvements in Modelling of Turbine Heat Rate of a Thermal Power Plant P. B. Sharma and Vinod Krishna.....	255
889187	Expert System Diagnostics for Nuclear Power Plants Robert A. Touchton, Narayanan Subramanyan, and Joseph Naser	263
889189	Identification of New Working Fluids for Use in High-Temperature Rankine Cycles Lawrence R. Grzyll, E. T. Mahefkey, and John E. Leland.....	267
889191	A 50 kW Solar Engine Utilizing Fossil Fuel Topping W. D. Batton and Hedayat-Allah Gari	273

HEAT ENGINES—HEAT ENGINE TECHNOLOGY DEVELOPMENT

889340	General Results on Mechanical Efficiency of Heat Engines J. R. Senft	277
889341	The Ice Cycle: High Gas Turbine Efficiency at Moderate Temperature Calvin C. Silverstein	285
889342	Determination of Jet Fuel Luminosity: A Free Droplet Technique for Assessing Fuel Effects on Combustion Performance in Aviation Turbines G. J. Green and T. Y. Yan.....	291

889344	An Efficient Way to Increase the Thermal Efficiency of Internal Combustion Engines Liu Zhenyan and Bai Xiabin	297
--------	--	-----

HEAT ENGINES—EUROPEAN HEAT ENGINE TECHNOLOGY DEVELOPMENT

889426	A Comparative Study on the Ways of Converting Steam Power Plants to Steam-Gas Combined Cycle Power Plants Giorgio Negri Di Montenegro, Roberto Bettocchi, Giuseppe Cantore, Massimo Borghi, and Giovanni Naldi.....	301
889427	Heat Recovery Repowering of Steam Power Plants S. P. Cicconardi, G. Gaggio, R. Lensi, and F. Donatini	307
889428	Performance Analysis of a Small Partial Admitted High Speed Steam Turbine M. Malobabic, Z. Shao, D. Burhorn, and M. Rautenberg.....	313
889429	A More General Approach to Regenerative Cycle: Theory and Applications G. L. Berta and A. Pini Prato	323
889430	A Generalized Procedure Based on a Modified Lee-Kesler Equation of State for the Automatic Calculation of Direct and Inverse Thermodynamic Cycles With Organic Working Fluids Giorgio Caw.....	331

THERMOELECTRIC POWER

889053	Optimum Design Parameters in Two-Stage Thermoelectric Generators Terry J. Hendricks.....	339
889055	Experimental Study on Alkali Metal Thermoelectric Converter Toshihisa Masuda, Kotaro Tanaka, Akira Negishi, and Takeo Honda.....	347

THERMAL REJECTION SYSTEMS

889130	High Power Inflatable Radiator for Thermal Rejection From Space Power Systems D. Chittenden, G. Grossman, E. Rossel, P. Van Etten and G. Williams.....	353
889131	An Experimental Investigation of the Properties of Magnetic Fluid in Thermal Rejection Applications Hqoshyar M. Hamedani and Lorin R. Davis	359
889132	Moving Belt Radiator Technology Issues K. Alan White, III	365
889135	Transient Performance Evaluation of an Integrated Heat Pipe-Thermal Storage System E. Keddy, J. T. Sena, M. Merrigan, Gary Heidenreich, and Steve Johnson	373
889136	Heat Pump Augmented Radiator for Low-Temperature Space Applications M. Olszewski and U. Rockenfeller	379
889137	Rotating Film Radiator for Heat Rejection in Space Seung Jin Song and Jean F. Louis.....	385

ADVANCED CYCLES AND SYSTEMS

889272	Comparative Exergy Analysis of Stig and Combined-Cycle Gas Turbines G. Manfrida and A. Bosio	391
--------	---	-----

889273	A Condenser-Boiler for a Binary Rankine Cycle Space Power System Randy M. Cotton and Jean F. Louis.....	399
889274	Overall Heat Transfer Characteristics of Tube Bundles in a Fluidized Bed Combustor, With Water Injection on the Air Side Roberto Melli and Enrico Sciubba.....	405
889275	A Study for the Application of SHELL's Proven Coal Gasification Technology Integrated With the ASEA BROWN BOVERI State-of-the-Art Gas Turbine Type 13E Into a 250 MW Gasification Combined Cycle (GCC) Module Hans K. Luthi and Thomas Hope.....	411
889276	A Feasibility Study of CAES Plants for Peak Load Generation Giorgio Dinelli, Giovanni Lozza, and Ennio Macchi.....	417

NUCLEAR POWER—ADVANCED LIGHT WATER REACTORS

889020	System 80 + TM — Design Certification of a Nuclear Power Module R. A. Matzie, R. S. Turk, and M. D. Green.....	425
889021	Future Directions in Boiling Water Reactor Design D. R. Wilkins, S. A. Hucik, J. D. Duncan, and A. S. Rao.....	433
889022	AP600 — An ALWR Conceptual Design R. A. Bruce and R. P. Vijuk.....	439

NUCLEAR POWER—LIQUID METAL REACTORS

889070	EPRI/CRIEPI Joint Study Program in Support of the Advancement of the Liquid Metal Reactor (LMR) Susan Gray, Ed Rodwell, and Sadao Hattori.....	445
889071	SAFR: An Advanced Modular Liquid Metal Reactor Power System R. D. Oldenkamp and J. E. Brunings.....	455
889072	PRISM — A World Class Competitive LMR R. C. Berglund, J. E. Quinn and F. E. Tippetts.....	461
889073	Tightly Coupled Transient Analysis of EBR-II — An INEL Engineering Simulation Project H. Makowitz, W. K. Lehto, and J. I. Sackett.....	467
889074	Passive Safety and the Advanced Liquid Metal Reactors D. J. Hill, D. R. Pedersen, and J. F. Marchaterre.....	473

NUCLEAR POWER—MHTGR: DEVELOPING A REACTOR WITH 20-20 FORESIGHT

889151	Developing a Reactor for Today's Realities and Tomorrow's Needs A. C. Millunzi and S. R. Penfield, Jr.	479
889152	Designing a Reactor for the Next Generation A. Neylan, R. Ng, and D. Dilling.....	483
889153	The Challenge of Licensing a Reactor With Passive Safety Characteristics J. C. Cunliffe and F. A. Silady.....	489
889154	Safety Evaluation of the Modular High Temperature Gas-Cooled Reactor Thomas L. King.....	495
889155	Economic Characteristics of a Smaller, Simpler Reactor Malcolm LaBar and Howard Bowers.....	499
889156	Status of International HTGR Development F. J. Homan and W. A. Simon.....	505

NUCLEAR POWER—MHTGR COMPONENTS AND TECHNOLOGY

889233	MHTGR Technology Development Plan F. J. Homan and A. J. Neylan	511
889234	MHTGR Control: A Non-Safety Related System Carmelo Rodriguez and Frederick Swart	515
889235	Magnetic Bearings: A MHTGR Design Selection With Broad Industry Potential Susan Gray and Graham Jones	521
889236	Natural Circulation Air Cooling System for MHTGR Sunil K. Ghose and Arkal S. Shenoy	525
889237	The Potential for Modular Construction/Zone Outfitting in the MHTGR David A. Dilling and Graham Jones	531
889238	Design of Major Components for the Modular High-Temperature Gas-Cooled Reactor Colin F. McDonald and Raymond Ng	537

NUCLEAR POWER—NUCLEAR DESIGN ASPECTS OF ADVANCED FISSION REACTORS

889471	The High Temperature Gas-Cooled Reactor — A Versatile Nuclear Heat Source for Space, Terrestrial, Mobile, Subterranean and Undersea Power Applications Colin F. McDonald	543
889472	Startup Analysis of a Burst Power Gas Core Reactor Kiratadas Kutikkad and Edward T. Dugan	549
889473	Static and Dynamic Neutronics of a Multi-Core Bimodal Gaseous Core Reactor Power System Mathew M. Panicker and Edward T. Dugan	553
889474	Comparisons of Some Neutron Transport Critical Calculations V. Colombo and P. Ravetto	561

THERMIONIC POWER

889217	An Analytical Method to Predict In-Core Thermionic Emitter Temperature and Current Density Profiles C. Zheng, L. L. Begg, J. L. Lawless, and E. J. Britt	567
889218	Preliminary Investigations of a Thermotunnel Converter Fred N. Huffman and Zia Haq	573
889220	Nonlinear Theory of Oscillations in Low-Pressure Thermionic Converter V. I. Kuznetsov and A. Ya. Ender	581
889221	Collector Emission Influence on Characteristics of Knudsen Thermionic Converter A. Ya. Ender and V. I. Sitnov	585
889222	Observation of Negative Ions of Cesium From Thermionic Converters and in Desorption From Metal Surfaces Jörgen Lundin, Jan B. C. Pettersson, Kenneth Möller, and Leif Holmlid	591
889295	Advanced Thermionic Nuclear Electric Propulsion for Leo to Geo Transfer in 14 Days Elliot B. Kennel and Mark S. Perry	597
889296	Characterization of Compliant Thermal Conductive Tungsten Material for Thermionic Element Application V. Trujillo, M. Merrigan, and W. Ranken	601

889297	Thermionic Conversion and Alloys for High-Temperature Nuclear Space Power	
	James F. Morris and Dean L. Jacobson	607
889298	Status Report on the Dutch Thermionic Energy Conversion Research	
	Lodewijk R. Wolff	613
889299	A Thermionic Energy Converter With a Molybdenum Alumina Cermet Emitter	
	G. H. M. Gubbels and L. R. Wolff	617