

CONTENTS

Essay

..... K. MASHIMO (403)

JIE Award (Technical Session)

Development of ECOPRO Coal Gasification Process

..... K. KOSUGE, M. ITONAGA, S. TAKEDA, H. KOZURU, Y. NAMIKI (404)

Special Articles: Coal Ash and Slag

(Preface)

A Special Series of Reviews on Coal Ash and Slag

..... I. MOCHIDA, T. ARAMAKI (411)

(Reviews)

Current State and Prospect of Coal Ash and Slag in Japan

..... Y. ISHIKAWA, S. KAMITA (413)

Properties and Utilization of Coal Ash and Gasification Slag By-product

..... Y. NINOMIYA (423)

Recycling Promotion of Coal Ash and Slag

..... T. TANOSAKI (432)

Characteristic and Utilization of Pressurized Fluidized Bed Combustion Ash

..... T. HARADA, H. HIRAYAMA (438)

Outline of IGCC System and Effective Use for Coal Slag Collected from Coal Gasification System

..... Y. ISHIKAWA, H. YAMASHITA (444)

Risk Assessment of Green Remediation for Coastal Eco-system Using Steel Slag and Humic Substances

..... T. KOMAI, Y. KAWABE, J. HARA, K. OTSUKA (449)

Original Paper

Energy Balance of a Staged Process for the Supercritical Water Gasification of a Hydrogen Fermentation Residue
of Food Waste

..... H. MUNETSUNA, M. TAMAI, Y. NODA, Y. MATSUMURA (455)

Improved Efficiency of Bulk-Heterojunction Organic Thin-film Solar Cells

by Adding Glycerol to PEDOT:PSS Solutions for Fabricating Buffer Layers

..... K. MARUMOTO, Y. YAMAKI, T. FUJIMORI, T. MORI (461)

Development of Direct Production Process of Diesel Fuel from Vegetable Oils

..... H. TANI, M. SHIMOCHI, H. HAGA, K. FUJIMOTO (466)

Short Paper

Non-catalytic Reduction of Nitrogen Monoxide by Addition of Kerosene

..... Y. OHIRA, K. NAKAGAMI, H. SAWADA, M. OHTA E. OBATA (471)

Lecture Note

Coal (8):

Structural Analysis of Coals Using Solid State NMR..... K. SAITO, K. KANEHASHI (474)

Introduction of Research Group (Tokyo University of Science) (480)

Entropy (484) JIE Calendar (485)

Bulletin Board (485) From the Editors..... (487)