

C O N T E N T S

Essay

- Looking back on Relations between Kanagawa Prefecture and State Baden=Wuerttemberg, Germany,
at a Retirement Age H. UCHIDA ... (181)

Special Articles: Leading-edge Technology for Energy Conversion of Solar Thermal Energy into Chemical Fuels

(Reviews)

- Current and Future Status of Solar Fuel Technologies in Australia
..... J. T. HINKLEY, R. K. McNAUGHTON, J. D. PYE, W. LIPINSKI, K. M. LOVEGROVE ... (182)
- Current and Future Status of Solar-Thermochemical Fuel Technology in the United States
..... I. ERMANOSKI ... (189)
- Current Status of Solar Thermochemistry in Spain
..... J. GONZALEZ-AGUILAR, M. ROMERO, A. VIDAL ... (194)
- Current and Future Status of Solar Fuel Technology in Germany
..... C. SATTLER, C. AGRAFIOTIS, S. BRENDENBERGER, F. CALL, A. HOUAIJIA, C. JUNG, M. LANGE
N. MONNERIE, M. NEISES-VON PUTTKAMER, M. ROEB, J.-P. SÄCK, S. TESCARI, D. THOMEY,
H. von STORCH, M. WULLENKORD ... (201)
- Current and Future Status of Solar Chemical Fuel Conversion
Using High-Temperature Solar Heat and Carbonaceous Resources
..... N. GOKON, T. KODAMA ... (212)

Special Articles: Development of Next-generation IGCC with CO₂ Capture, Oxy-fuel IGCC I

(Reviews)

- Significance and Outline of the Project: "Development of Next-generation IGCC with CO₂ Capture; Oxy-fuel IGCC"
..... M. ONOZAKI, H. MAKINO, I. MOCHIDA ... (218)
- Experimental Evaluation of CO₂ Enriched Gasification Characteristics Using Coal Research Gasifier
..... H. HAMADA ... (224)
- Coal Gasification Reactivity Evaluation and Kinetic Modeling for O₂-CO₂ Blown Gasifier
..... S. UMEMOTO, S. KAJITANI ... (230)
- Measurement of Coal Char Gasification Rate under High Temperature and High Pressure
..... K. MIURA ... (236)
- Development of Dry Sulfur Removal Process that is Operable under Condition of High Concentration of Carbon Monoxide
..... M. KOBAYASHI, N. NAKAO ... (248)
- Operativity of CO Rich Generation Gas
..... M. TSUJI, Y. MATSUO, M. MATSUNAGA, J. MIYAWAKI, S.-H. YOON, I. MOCHIDA ... (259)
- Carbon Emission and Carbon Suppressing Way under Reducing Fe₂O₃ Condition at Dry Desulfurization in IGCC
..... Y. FUJIOKA, Y. YU ... (267)
- Catalytic CO Oxidation Processes under O₂ diluted Conditions
..... H. EINAGA ... (274)
- Combustion Properties of CO Rich Coal Gasification Gas
under High CO₂ Concentration Atmosphere and their Comparison with Methane
..... T. KITAGAWA, Y. NAGANO ... (281)

Lecture Note

Unconventional Natural Gas (3)

Shale Gas III The Evaluation of Shale Gas Reservoir S. TOMITA, K. TAKANO ... (288)

Abstract of the refereed papers

(Vol. 94, No. 2)

Social Life Cycle Assessment of Biomass Projects Focusing on Employment Changes in Regions

..... A. HEIHO, H. HONDO, Y. MORIIZUMI ... (293)

Study of Demand for CO₂-free Hydrogen in Japan and the World

..... Y. ISHIMOTO, A. KUROSAWA, M. SASAKURA, K. SAKATA ... (294)

The Effect of Aeration Rate on the Growth of *Scenedesmus quadricauda* in Column Photobioreactor

..... N. T. THANH, Y. UEMURA, N. OSMAN, L. ISMAIL ... (295)

(Vol. 94, No. 3)

Relationship between Feedstock Price and Break-Even Point

of Woody Biomass Power Generation under FIT Program

..... T. YANAGIDA, T. YOSHIDA, H. KUBOYAMA, M. JINKAWA ... (296)

Compression-grinding Treatment of Wet Rice Straw for Bioethanol Production

..... F. HASEGAWA, K. SAGA, Y. KAIZU, K. IMOU ... (297)

~~~~~  
Report on Symposium: Impact of Fuel Cell Vehicles Leading to the Practical Stage in 2015 ..... (298)

Report on the 10th Conference on Biomass Science ..... (300)

Report on the 2nd Asian Conference on Biomass Science ..... (303)

Entropy ..... (304)     JIE Calendar ..... (305)

Bulletin Board ..... (305)     From the Editors ..... (308)

~~~~~