By Toshio Fujita, Kentaro Asakura, and Hidenori MIYAKE

Non Symmetrical Flows in Liquid Metal Systems

By Martha SALGUDEAN and Roderick I. L. GUTHRIE

Theory on Effective Diffusivities of Bi-disperse Porous Solids

at Constant Pressure and Influence of an Inert Gas

By Munekazu Ohmi, Tateo Usui, and Keiji NAKAJIMA

Examination of Slab Temperature Change, Rolling Power and Rolling Capacity

in a Hot Strip Mill with Mill Arrangement Equivalent to Semi Continuous Type

By Natsuo HATTA and Jun-ichi KOKADO

Characteristics of Hot Ductility in Steels Subjected to the Melting and Solidification

By Hirowo G. Suzuki, Satoshi Nishimura, and Shigehiro Yamaguchi

Technical Futures

Energy Balance of Steel Mills and the Utilization of By-product Gases
By Iwao Higashi

Report

Improved Theory on the Rate of Reduction of Single Particles and Fixed Beds of Iron Oxide Pellets with Hydrogen

By Munekazu Ohmi and Tateo Usui

Abstracts from Tetsu-to-Hagané Vol. 67 (1981), No. 16 (December)

Contents of Recent Articles on Iron and Steel Published in Japan

Contents of Tetsu-to-Hagané, Vol. 67 (1981), No. 16 (December)

会員は「鉄と鋼」あるいは「 $Trans.\ ISIJ$ 」のいずれかを毎号無料で配布いたします。「鉄と鋼」と「 $Trans.\ ISIJ$ 」の両誌希望の会員には、特別料金 4,000 円の追加で両誌が配布されます。

日 本	鉄鋼標準試料講	習会申込書	
^{フリガナ} 聴講者氏名		年令	役職
勤 務 先			
		TEL	()
分析経験			
鉄鋼化学分析		年(含原子吸光,ICP)	
鉄鋼機器分析		年 (発光分光分析, けい光×線分析)	
原料(鉄鉱石、フェロアロイなど)分析		年	
その他()分析	年	
テキスト: 要 不要	受講会場: 東京,	大阪	