Industrial Electrochemistry and Electrochemical Engineering General Session

Editors:

J. Staser

D. Riemer

Sponsoring Division:

Industrial Electrochemistry and Electrochemical Engineering



ublished by

The Electrochemical Society

65 South Main Street, Building D Pennington, NJ 08534-2839, USA

fax 609 737 2743 www.electrochem.org **Acstransactions** **

Vol. 72, No. 22

Copyright 2016 by The Electrochemical Society. All rights reserved.

This book has been registered with Copyright Clearance Center. For further information, please contact the Copyright Clearance Center, Salem, Massachusetts.

Published by:

The Electrochemical Society 65 South Main Street Pennington, New Jersey 08534-2839, USA

> Telephone 609.737.1902 Fax 609.737.2743 e-mail: ecs@electrochem.org Web: www.electrochem.org

ISSN 1938-6737 (online) ISSN 1938-5862 (print) ISSN 2151-2051 (cd-rom)

ISBN 978-1-62332-391-2 (Soft Cover) ISBN 978-1-60768-749-8 (PDF)

Printed in the United States of America.

ECS Transactions, Volume 72, Issue 22

Industrial Electrochemistry and Electrochemical Engineering General Session

Table of Contents

Preface	iii
(Industrial Electrochemistry and Electrochemical Engineering Division Student Achievement Award) Engineering the Ionic Polymer Phase Surface Properties of a PEM Fuel Cell Catalyst Layer R. P. Dowd Jr., C. S. Day, T. V. Nguyen	1
Electropolishing of an Fe-Ni-Co Alloy in Acetic Acid-Perchloric Acid Mixture Y. Aksu, M. Erdogan, G. Demirci, I. Karakaya	13
Simulation Study of Electrolyte Flow and Slime Particle Transport in a Newly Designed Copper Electrorefining Cell <i>W. Zeng, M. L. Free, S. Wang</i>	23
Black Liquor Electrolysis for Hydrogen and Lignin Extraction R. C. P. Oliveira, M. Mateus, D. M. F. Santos	43
Nickel and Gold Coatings of Germanium and Kovar Substrates Y. Cetin, M. Erdogan, G. Demirci, I. Karakaya	55
Author Index	65