

The Electrochemical Society

# Student Posters (General)

at the 210<sup>th</sup> ECS Meeting

ECS Transactions Volume 3 No.38

October 29 – November 3, 2006  
Cancun, Mexico

Printed from e-media with permission by:

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571  
[www.proceedings.com](http://www.proceedings.com)

ISBN: 978-1-60423-914-0

Some format issues inherent in the e-media version may also appear in this print version.

---

Copyright 2007 by The Electrochemical Society, Inc.  
All rights reserved.

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

Published by:

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

Telephone 609.737.1902  
Fax 609.737.2743  
e-mail: [ecs@electrochem.org](mailto:ecs@electrochem.org)  
Web: [www.electrochem.org](http://www.electrochem.org)

ISSN 1938-6737 (online)  
ISSN 1938-5862 (print)

Printed in the United States of America.

---

*ECS Transactions, Volume 3, Issue 38*  
Student Posters (General)

**Table of Contents**

*Preface*

Electrochromic Properties of Mixed Metal Oxide Thin-Film and Its Application to Nitrate-Ion Sensor <i>T. Takeyasu, S. Takase and Y. Shimizu</i>	1
Liquidus Temperature of Molten Cryolite-Based Aluminum Electrolyte <i>H. Kan, Z. Wang, Z. Shi, Y. Ban and Z. Qiu</i>	7
Corrosion Performance of Stainless Steel and Inconel in Simulated Fuel-Cell Media <i>S. V. Rivas, E. Cuara, F. Manriquez, I. Terol and G. Orozco</i>	13
Electrochemical Performance and Microstructure of The LNF-SDC Composite Cathode for SOFC <i>P. Sornthummalee, K. Sato, T. Komatsu, H. Orui, R. Chiba and M. Arakawa</i>	21
A Derivative Method for the Estimation of the Electrochemical Production Rate of Ozone in Sulfuric Acid <i>J. G. Limon-Petersen, H. Gutiérrez-Murillo, J. G. Ibanez and B. Flores-Saijfe Farias</i>	29
Cr(VI) Reduction using Polyaniline Coating on RVC Electrodes <i>A. Porras, S. Gutierrez, F. Vilches, A. Alatorre Ordaz and P. Herrasti</i>	37
Electrolysis of Methyl-t-Butyl Ether in Aqueous Solutions using Electro-generated Persulfate <i>R. Felix, P. Inda, A. Diaz, S. Lin Ho and M. Oropeza</i>	47
Electrochemical Oxidation of Arsenites, by an Anode of Reticulated Glassy Carbon as Previous Step for Removal <i>S. Perez, S. Lin Ho and R. Felix</i>	61
Dopamine Detection using an Electrode Modified with Carbon Nanotubes <i>G. Alarcón-Ángeles, B. Pérez-López, S. Corona-Avenidaño, A. Rojas-Hernández, M. Palomar-Pardavé, M. Romero-Romo, M. Ramírez-Silva, S. Alegret and A. Merkoçi</i>	77

Electrochemical Formation of A Novel Conducting Poylmer Membrane on CPE from Aqueous Solution Containing Pb(II) Acetate <i>M. Avila-Jiménez, M. Ramírez-Silva, G. Rosquete Pina, M. Palomar-Pardavé and M. Romero-Romo</i>	81
Electrochemical and Spectrophotometric Detection of the Chromo- Diphenylcarbazide Complex using FIA <i>V. García-Dávila, G. Alarcón-Ángeles, A. Rojas-Hernández, M. Ramírez-Silva, M. Palomar-Pardavé and M. Romero-Romo</i>	87
Influence of the Cetyltrimethylammonium Bromide, CTAB, on the Response of Dopamine <i>L. Hernández Martínez, M. Ramírez-Silva, G. Rosquete Pina, M. Palomar-Pardavé and M. Romero-Romo</i>	93
Silver and Silver Chloride Electrodeposits, an Alternative in the Construction of Ag/AgCl Solid Electrodes <i>G. Valdés-Ramírez, G. Álvarez Romero, M. Ramírez-Silva, M. Romero-Romo, M. Palomar-Pardavé and C. Galán-Vidal</i>	99
Development of Ionic Liquid Membranes for NO <sub>x</sub> Gas Detection and Storage Utilizing Calix[4]Arenes <i>J. H. Poplin, D. Rudkevich, R. Swatloski and R. D. Rogers</i>	105
Author Index	109