



11th Annual SECA Workshop Pittsburgh, PA Sheraton Station Square



Poster Presentations

- 1. Hybrid Ceramic/Metallic Recuperator for SOFC Generators**
Anthony Litka, Acumentrics Corporation
- 2. Electrodeposited Mn-Co Alloy Coating For SOFC Interconnects**
Heather McCrabb, Faraday Technology, Inc.
- 3. Solid Oxide Fuel Cell Cathodes: Unraveling the Relationship between Structure, Surface Chemistry and Oxygen Reduction**
Lincoln J. Miara, Boston University
- 4. Mn Valence in Lanthanum Strontium Manganite Determined by X-ray Photoelectron Spectroscopy and Electron Energy Loss Spectroscopy**
Mark R. De Guire, Case Western Reserve University
- 5. Surface Charge Redistribution in SOFC Materials**
Yves Idzerda, Montana State University
- 6. Characterization of glasses for SOFC sealing applications**
Amit Shyam, Oak Ridge National Laboratory (ORNL)
- 7. Crystallographic Anisotropy of Oxygen Surface Exchange in (La,Sr)MnO₃ Thin Films**
Lu Yan, Carnegie Mellon University (Poster Presenter Unable to Attend)
- 8. High Surface Area, Mesoporous (La, Sr)MnO₃ For Solid Oxide Fuel Cell Cathodes**
Robin Chao, Carnegie Mellon University
- 9. Impact of Fuel Contaminants on Performance in Coal-Based SOFCs**
Kirk Gerdes, National Energy Technology Laboratory (NETL)
- 10. Composite MIEC Cathode Infiltrated with Pyrochlore / Perovskite Materials**
Shiwoo Lee, National Energy Technology Laboratory (NETL)
- 11. Direct Coal Solid Oxide Fuel Cells with Liquid Tin Anodes**
Harry Abernathy, National Energy Technology Laboratory (NETL)
- 12. Surface-Sensitive Analytical Techniques and Their Importance in Optimizing Fuel Cell Materials**
Andrew Swisher, National Energy Technology Laboratory (NETL)



- 13. High-megawatt Power Conditioning Systems for Fuel Cells**
Allen R.Hefner Jr., National Institute of Standards & Technology
- 14. Mechanically Robust Stacks For Solid Oxide Fuel Cell Applications**
Rick Kerr, Delphi Automotive Systems
- 15. Novel SOFC Anodes with Enhanced Tolerance to Coal Contaminants**
Joonho Koh, Materials & Systems Research, Inc.
- 16. Testing and Evaluation of Solid Oxide Fuel Cells in Extreme Conditions**
Louis Carreiro, Naval Undersea Warfare Center (NUWC)
- 17. Direct Methanol Fuel Cell Operating With Concentrated Methanol**
Bogdan Gurau, NuVant Systems, Inc.
- 18. Investigation and Design Studies of SOFC Electrode Performance at Elevated Pressure**
Ted Ohrn, Rolls Royce Fuel Cell Systems (US) Inc.
- 19. Catalysis of Electrochemical Oxidation of CH_4 And Coal-Derived Coke in a Solid Oxide Fuel Cell**
Felipe Guzman, University of Akron
- 20. Structured Oxide - Based Reforming Catalyst Development**
Dushyant Shekhawat, National Energy Technology Laboratory (NETL)
- 21. Development of a Microchannel High Temperature Recuperator for Fuel Cell Systems**
Michael Lukas, FuelCell Energy, Inc.
- 22. Viscous Glass Sealants for SOFC Applications**
Scott Misture, Alfred University
- 23. Direct Coal Conversion Using Liquid Tin Anode SOFC Alternative System Configurations**
Thomas Tao, CellTech Power LL
- 24. Performance and Stability of High temperature Solid-oxide Electrolyzers**
S. (Elango) Elangovan, Ceramatec, Inc.
- 25. Perovskite Adsorbents for Warm-Gas Arsenic and Phosphorus Removal**
Erick J. Schutte, Eltron Research & Development, Inc.

26. **The effect of current collector geometry on ohmic resistance**
Matthew Alinger, GE Global Research
27. **Effect of MgO Addition on the Crystalline Phase Formation and Thermal Expansion of a Barium Aluminosilicate SOFC Glass-Ceramic Sealant**
Niladri Dasgupta, Materials & Systems Research, Inc. (Poster Presenter Unable to Attend)
28. **High-Temperature Viscous Sealing Glasses for Solid Oxide Fuel Cells**
Richard Brow, Missouri University of Science & Technology
29. **A New Generation of “Molecular Basket” Sorbents (MBS) for Separation of CO₂ and H₂S from Various Gas Streams**
Xiaoliang Ma, Pennsylvania State University
30. **Water Neutral Fuel Processing and Sulfur Cleanup**
Subir Roychoudhury, Precision Combustion, Inc.
31. **The Effect of Electrical Polarization on Solid Oxide Fuel Cell Cathode Thin Films**
Brian Ingram, Argonne National Laboratory (ANL)
32. **In Situ X-Ray Studies of La_{0.6}Sr_{0.4}Fe_{0.8}Co_{0.2}O₃ Epitaxial Thin Films as Model SOFC Cathodes**
Brian Ingram, Argonne National Laboratory (ANL)
33. **First Principles Identification of New Cathode Electrocatalysts**
Erick Schutte, Eltron Research & Development, Inc.
34. **Microanalyses of Structure, Composition, and Morphology of the Surfaces and Interfaces in LSM-Infiltrated LSCF Cathodes**
Wentao Qin, Georgia Institute of Technology
35. **Modeling and Investigation of Oxygen Reduction Activity on Mixed Ionic-Electronic Conductors for SOFC Cathodes**
Meilin Liu, Georgia Institute of Technology
36. **Status of SOFC Stack Technology at NexTech Materials**
Michael Day, NexTech Materials, Ltd.
37. **Mechanical Characterization and Modeling of Electrolyte Membranes in Electrolyte-Supported SOFCs**
Mark E. Walter, Ohio State University

- 38. Dual Interconnect Coatings for Planar SOFC Stacks**
Jung Pyung Choi, Pacific Northwest National Laboratory (PNNL)
- 39. SECA CTP Stack Fixture Testing at PNNL**
Y-S Matt Chou, Pacific Northwest National Laboratory (PNNL)
- 40. Development of Ceramic Interconnect Materials for SOFC**
Kyung Joong Yoon, Pacific Northwest National Laboratory (PNNL)
- 41. Spectroscopic Investigation of the Impact of Film Thickness and Post-Growth Treatment on the Electronic Structure of $\text{La}_x\text{Sr}_{1-x}\text{MnO}_3$ Films**
Stefan Krause, University of Nevada, Las Vegas
- 42. Effect of Syngas Trace Contaminants on SOFC Anode Performance**
Ismail Celik, West Virginia University