FOCUSED SESSION 4: Ion-Transport Membranes
Friday, January 31, 2014

8:00 AM-12:20 PM
Room: Coquina Salon B
Session Chair(s): Charles Lewinsohn, Neal Sullivan

8:00 AM
(ICACC-FS4-001-2014) Mixed conducting membranes for oxygen separation (Invited Speaker)
Henny J.M. Bouwmeester*, University of Twente, Netherlands

8:30 AM
(ICACC-FS4-002-2014) Oxygen Transport Membranes: Prospects and Challenges (Invited Speaker)
Martin Søgaard*, Andreas Kaiser, Peter V Hendriksen, Technical University of Denmark, Denmark

9:00 AM
(ICACC-FS4-003-2014) Composite ceramic membranes for hydrogen separation
Neal P Sullivan*, Colorado School of Mines, USA; Pallavi (Dolly) Chitta, S. (Elango) Elangovan, Ceramatec, Inc., USA; Wade A Rosensteel, Colorado School of Mines, USA; Sebastian Dierickx, Karlsruhe Institute of Technology, Germany; Sandrine Ricote, Sean Babinec, Colorado School of Mines, USA; Anthony Manerbino, W. Grover Coors, CoorsTek, Inc., USA

9:20 AM
(ICACC-FS4-004-2014) Thermo-mechanical Characterization of Ba0.5Sr0.5(Co0.8Fe0.2)1-xZrxO3-δ and La5.4WO12-6 Membrane Materials for Carbon Capture Processes
Vasiliki Kallirro Stournari*, Jürgen Malzbender, Tilmann Beck, Lorenz Singheiser, Forschungszentrum Jülich GmbH, Germany

9:40 AM
Break

10:00 AM
(ICACC-FS4-005-2014) Advances in Ion Transport Membrane Technology for Syngas Production (Invited Speaker)
Jack C. Chen*, Ceramatec, Inc., USA; Christopher F Miller, Michael F Carolan, Ted Foster, Air Products and Chemicals, Inc., USA

10:30 AM
(ICACC-FS4-006-2014) Oxygen permeability and structural stability of BaCo(Fe)O3-δ-based ceramic membranes (Invited Speaker)
Hailei Zhao*, Yunfei Cheng, Nansheng Xu, Yuan Li, Xiaotong Liu, Yao Lu, Ji Zhang, University of Science and Technology Beijing, China

11:00 AM
(ICACC-FS4-007-2014) Reliability Assessment of Ceramic Membranes for Oxygen Separation
Mattison K Ferber*, MTIC, USA; Charles Lewinsohn, Ceramatec, Inc., USA

11:20 AM
(ICACC-FS4-008-2014) Manufacturing and Performance of supported BSCF-Membranes for oxygen separation
Patrick Niehoff*, Falk Schulze-Kueppers, Stefan Baumann, Robert Vassen, Hans Peter Buchkremer, Wilhelm Albert Meulenborg, Forschungszentrum Juelich, Germany

11:40 AM
(ICACC-FS4-009-2014) High Oxygen Permeance ITM from Plasma Sprayed LaSrCoFeO on Porous Metallic Supports
Maria Ophelia Jarligo, Robert Vassen*, Martin Bram, IEK-1, Forschungszentrum Jülich GmbH, Germany; Jose M Serra, Julio García-Fayos, Instituto de Tecnología Química, Universidad Politécnica de Valencia, Spain
12:00 PM
(ICACC-FS4-010-2014) Contribution of Surface Exchange Kinetics on the Mixed Ionic/Electronic Conduction of Fluorite-Perovskite Composite Membranes
Jong Hoon Joo, Korea Institute of Energy Research, Republic of Korea; Min Jae Shin, University of Science and Technology, Republic of Korea; Geum Sook Park, Chungnam National University, Republic of Korea; Chung-Yul Yoo, JI-Haeng Yu*, Korea Institute of Energy Research, Republic of Korea