

PBFC-2

2nd International Conference on Polymer Batteries and Fuel Cells

Second Circular and Call for Papers

Riviera Hotel • Las Vegas, Nevada, USA • June 12-17, 2005



Organized by: Broddarp of Nevada, Inc. and The Electrochemical Society

Visit our website at: www.electrochem.org/meetings/satellite/pbfc/002/pbfc.htm

2nd International Conference on Polymer Batteries and Fuel Cells

Lithium batteries and fuel cells based on polymer components have been under intense research and development over the recent years. In many instances, they are competing for the same market area. These polymer devices have potential advantages in terms of versatility in design, safety, and improved energy density. Accordingly, several commercial types of lithium and lithium-ion polymer batteries (LPBs) are now being introduced in the electronics market and Polymer Electrolyte Fuel Cells (PEFCs) are considered to be the power sources of choice for electric vehicle propulsion. However, despite active research and development, there are still many problems to overcome, from basis to applications, in these polymer devices from the standpoint of both the materials and the manufacturing processes. The next few years are expected to be critical for the progress and establishment of LPBs and PEFCs. Therefore, this conference, focusing on both device types, appears as an ideal forum to present and discuss the latest developments in the fields. It will provide unique opportunities for common discussion and exchange of experiences between battery and fuel cell scientists.

PBFC-2 will be an event that cannot be missed for the two communities that rarely meet in spite of many R&D interests shared in common, such as polymer electrolytes and final marketing including consumer electronics and electric vehicles. The organizing committee and the supporting scientific societies cordially invite you to participate in PBFC-2, which will be held

in 2005 at the exciting location of Las Vegas, Nevada. The scientific program of PBFC-2 foresees plenary sessions, where invited speakers will highlight the key advances in the fields, completed by poster sessions. All presentations will be in English.

Conference Scope

- Lithium Polymer and Plasticized Electrolytes
- Proton Polymer Electrolytes
- Fuel Cell Membranes
- Interfacial Phenomenon
- Battery Anodes
- Battery Cathodes
- Fuel Cell Anode and Cathode Electrodes
- Noble and Non-noble Metal Catalysts
- Fuel Processing
- Performance of Advanced Devices
- Cell and System Designs and Modeling
- Market and Applications
- New Science and Technology

Co-Chairs

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Executive Committee

Tetsuya Osaka, Waseda University, Japan
Brono Scrosati, University of Rome, Italy
Jung-Ki Park, KAIST, Korea
Ralph J. Brodd, Broddarp of Nevada, USA
James McGrath, Virginia Polytechnic Institute and State Univ.

International Advisory Committee

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Zempachi Ogumi, Kyoto University
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Tetsuya Osaka, Waseda University
Jung-Ki Park, KAIST
Donald R. Sadoway, Massachusetts Institute of Technology
Robert F. Savinell, Case Western Reserve University
Jean-Marie Tarascon, L.R.C.S. URA-CNRS 1211
Josh Thomas, Uppsala University
Masahiro Watanabe, Yamanashi University
Masayoshi Watanabe, Yokohama National University
Osamu Yamamoto, Mie University
Kyung-Suk Yun, Korea Institute of Science & Tech.
Karim Zaghib, Hydro-Quebec, IREQ
Seung Mo Oh, Seoul National University
Su-Moon Park, Postech
Jong-Kee Yeo, LG Chem Ltd.
Seok-Yeol Yoon, Samsung SOI Co., Ltd.

Local Organizing Committee

M. Alamgir (Compact Power)
C. Johnson (Argonne National Laboratory)
F. Gibbard
N. Ilchev (Gillette)
B. Chaloner-Gill (Consultant)
C. Lampe-Onnerud (TIAX LLC)
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E. Saidi (Valence Technology)
M. Y. Saidi (Valence Technology)
M. Thackeray (Argonne National Laboratory)
T. Zawodzinski (Case Western Reserve University)
J. Zhang (Celanese)

Partial List of Invited Speakers

K.M. Abraham (E-Kem Sciences)
J. Akridge (Sion Power)
M. Alamgir (Compact Power)
R. Baldwin (NASA Glenn Research Center)
I. Barsukov (Superior Graphite Co.)
C. Cornelius (Sandia National Laboratory)
M. Doeff (Lawrence Berkeley National Laboratory)
S. Gottesfeld (MTI Micro Inc.)
S. Greenbaum (Hunter College of CUNY)
C. Grey (SUNY at Stony Brook)
M. Hickner (Sandia National Laboratory)
Y. Shao-Horn (MIT)
C. Johnson (Argonne National Laboratory)
R. Jow (U.S. Army Laboratory)
P. Jacobsson (Chalmers University of Technology)
J. B. Kerr (Lawrence Berkeley National Laboratory)
C. Lampe-Onnerud (TIAX LLC)
B.-Y. Liaw (University of Hawaii)
J. McGrath (Virginia Tech)
M. Meador (NASA)
K. Naoi (Tokyo University of Agriculture and Technology)
H. Ohno (Tokyo University of Agriculture and Technology)
T. Ohzuku (Osaka City University)
T. Osaka (Waseda University)
J.-K. Park (KAIST)
Y. Saidi (Valence Technology)
E. Shembel (Ener1, Inc.)
P. Stonehart (Stonehart Associates)
M. Stanley Whittingham (SUNY at Binghamton)
R. Yazami (CNRS and California Institute of Technology)
J. Zhang (Celgard)
K. Zaghib (Hydro-Quebec, IREQ)

Important Deadlines

February 15, 2005

Meeting Abstracts

June 12-17, 2005

Meeting Dates

May 20, 2005

Meeting Registrations
(Advance)

At the Meeting

Submission of manuscripts
for publication in the *Journal
of Power Sources*

May 20, 2005

Hotel Reservations

Abstract Preparation and Submission

Abstracts shall be submitted in English in accordance with the guidelines below:

- Abstracts are required to be no more than one page in length in legal format consisting of two columns and in Times New Roman size 10 font. A recommended format is one column of text and references, and an additional column of tables, graphs, or figures.
- We encourage you to submit your abstracts electronically at the following website: ecs-sat.peerx-press.org/cgi-bin/main.plex

The deadline for submission is
February 15, 2005.

Registration, Payment, and Cancellation Details

Participants are requested to fill out and return the Registration Form with the registration fee by May 20, 2005, to qualify for the advance rates. A registration form follows and is also available at www.electrochem.org/meetings/satellite/pbfc/002/pbfc.htm. Mastercard, VISA, or American Express are accepted. Personal checks are also accepted. Payment must be made in U.S. funds drawn on a U.S. Bank. Cancellations of registration by letter or fax received by the Conference Chair by May 27, 2005 will be refunded in full. There will be no refunds after May 27, 2005. The regular registration fee includes admission to all sessions, a meeting program and conference abstract CD, daily coffee breaks, Monday welcoming reception, and Wednesday sightseeing tour.

Conference Proceedings

Papers of PBFC-2 will be published in a special issue of the *Journal of Power Sources*. The journal provides an interdisciplinary forum on all aspects of the science, technology and commercialization of primary/secondary batteries and fuel cells, as well as on their application in important and emerging markets. Acceptance of an abstract does not imply acceptance for the *Journal of Power Sources* by Elsevier Science Publishers. Papers will be subject to the standard review procedure specified by the journal.

Presentations

The program of oral presentations is composed of invited talks followed by papers on similar subjects. There will be no parallel session. The conference will be equipped with an LCD as well as an overhead projector. The chairs reserve the right to schedule offered papers as a poster or oral presentations. All contributed posters are scheduled to be presented in the afternoon poster sessions.

Technical Exhibition and Sponsorship Opportunities

The PBFC-2 offers a unique opportunity to market your company through sponsorship and/or exhibition of your products and services. A

separate brochure is available for the sponsorship and Technical Exhibition, on request.

Sponsorship can be tailored to fit your individual needs. The levels include: Platinum: \$10,000+, Gold \$5,000+, Silver \$2,000+, and additional sponsors less than \$2,000 and for special events. In addition, sponsorships are available for special events. Special event sponsorships are assigned by the organizers on a first-come, first-served basis. Sponsors will be recognized by level in the meeting program, the meeting website, and at the meeting itself.

A Technical Exhibit will be held concurrently with the conference and conveniently located adjacent to the technical program sessions to allow conference participants easy access to the Technical Exhibit.

Parties interested in sponsorship and exhibition should contact either Troy Miller, ECS Director of Development, by phone at 609.737.1902 ext. 126 or by e-mail at troy.miller@electrochem.org; or Ralph Brodd by phone at 702.897.3027 or by email at ralph.brodd@earthlink.net.

The Venue

A city renowned for its entertainment attractions, Las Vegas is truly an oasis in the middle of the Mohave Desert. It offers the most unique variety of amusements and leisurely distractions in the world. It truly is a city that never sleeps. Las Vegas offers many attractions that are of appeal to all, including world-class golf courses and water sports. In addition to the planned visit to the awe-inspiring Hoover Dam, you may wish to hike at Red Rock Canyon or the Valley of Fire State Park. Bus and airplane tours are available for various sites including the Grand Canyon and Zion National Parks. The water show at the Bellagio is not to be missed.

Climate

Las Vegas is located at the southern tip of Nevada in a broad flat basin surrounded by the Sierra Nevada Mountains. The city itself forms a huge oasis in this desert valley. The climate is hot and dry. Las Vegas only receives an average of four inches of rainfall per year, with more than 250 days of sunshine.

Accommodations

The PBFC-2 Conference will be held at the Riviera Hotel in Las Vegas, Nevada. The Riviera enjoys a legendary past as one of the first top-notch Las Vegas hotels in the state of Nevada, known for its big name entertainment and friendly hospitality, as well as its worldwide name recognition. Over 2,000 refurbished oversized rooms offer maximum comfort and breathtaking views of the glittering Las Vegas strip with its western scenic panoramas. The conference rates are as follows: Run of House: \$82/night for a single or double room; Petite Suite: \$175.00/night for a single or double; Please call 1.800.634.6753 in the continental U.S. or direct at 1.702.794.9412. Please

mention that you are with The Electrochemical Society group. An online reservation form will be available shortly at the PBFC-2 web site located at www.electrochem.org/meetings/satellite/pbfc/002/pbfc.htm.

Welcoming Reception

All participants and accompanying persons are cordially invited to attend the Welcome Reception. The reception will be held on Monday, June 13, 2005 from 7:00-9:00 PM.

Conference Banquet

A Conference Banquet will be held on Wednesday, June 15, 2005 starting at 7:00 PM. During the dinner, jazz pianist Mike Shane will play for your enjoyment. **Please be aware that tickets must be purchased separately for the banquet.**

Air Travel to Las Vegas

Las Vegas is located in the southwestern United States. McCarran Airport is the main airport serving Las Vegas and Clark County. It is located 1 mile (1.6 km) from the Strip, 3.5 miles (5.6 km) from the Riveria Hotel, and 5 miles (8 km) from downtown Las Vegas. The Las Vegas Airport is ranked among the 10 busiest airports in the world based on the amount of passenger activity. Las Vegas is served by over 60 domestic and international air carriers.

Transportation to the Riviera Hotel

The Riviera Hotel is located 3.5 miles north of McCarran International Airport. There are a variety of shuttle, limousine, and taxi services available at McCarran International Airport. Approximate shuttle prices to the Riviera Hotel are \$5.50 per person.

Website

The following website is available, providing you with the latest announcements and most up-to-date information on PBFC-2: www.electrochem.org/meetings/satellite/pbfc/002/pbfc.htm.

Preliminary Conference Time Table

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Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
08:30 AM	Registration Sunday 1:00-5:00 PM Monday-Friday 8:00 AM-5:00 PM	Opening Session				
09:00						
09:30		Technical Session	Technical Session	Technical Session	Technical Session	Technical Session
10:00						
10:30		Break	Break	Break	Break	Break
11:00						
11:30		Technical Session	Technical Session	Technical Session	Technical Session	Technical Session
12:00						
12:30						
01:00 PM		Lunch	Lunch	Lunch	Lunch	Lunch
01:30						
02:00						
02:30		Technical Session	Technical Session		Technical Session	Technical Session
03:00						
03:30		Break	Break	Sightseeing	Break	Break
04:00						
04:30						
05:00		Poster Session (1)	Poster Session (2)		Poster Session (3)	Technical Session
05:30						
06:00						Closing Session
06:30						
07:00	Welcome Reception					
07:30						
08:00			Banquet			
08:30						
09:00						

