



## SECOND ANNOUNCEMENT AND CALL FOR PAPERS



### REMT2011

# International Symposium on Renewable Energy & Materials Tailoring 18-19 Sept., 2011 Kyoto Univ., Japan

<http://www.echem.energy.kyoto-u.ac.jp/index-e.html>

## Background

The concept of "Materials Tailoring" has been proposed to achieve precise control of micro- and nanostructures of materials to obtain unique physical and chemical properties. The first symposium of EPTM (Electrochemical Processing of Tailored Materials) was held in conjunction with the 40<sup>th</sup> ISE Meeting in Kyoto (1989). Since that time, several symposia have been held at ISE and ECS Meetings as EPTM or MPND (Materials Processing of Nanostructured Devices).

## Scope of the Symposium

The objective of this series of symposia is to provide a forum for discussion of materials tailoring including various approaches for characterization, both *in-situ* and *ex-situ* measurement approaches, and quantum chemical and mathematical modeling of the reaction and deposition processes in which electrons, ions, radicals, and clusters interact at the surfaces and solid-liquid interfaces. The topics cover various fields such as microelectronics, bioelectronics, and traditional electrochemical engineering. Special attention is now given to renewable energy conversion and storage reactions. The complexity of the present state-of-the-art warrants the creation of a new strategy to promote the exploration of the frontier by developing interactions among a highly diversified and interdisciplinary group of scientists and engineers that includes electrochemists, material scientists, plasma scientists, electronics engineers, energy scientists, *etc.* The session will consist of invited lectures and contributed presentations (oral and poster) in the following areas:

- (1) Materials tailoring with *in-situ* synchrotron radiation light source techniques, *etc.*
- (2) Plasma and electrolytic processing, liquid phase processing, self-assembly
- (3) MEMS and device fabrication, ULSI interconnection

- (4) Nuclear and high temperature materials tailoring
- (5) Electrochemical processing in ionic liquids
- (6) Electromagnetic field effects
- (7) Energy conversion and storage devices
- (8) Bioelectrochemical interfaces
- (9) Computational materials chemistry
- (10) Sustainability evaluation and simulation
- (11) Electrochemical Nucleation and Growth
- (12) Electrochemical Processing in Space Energy System (ESA-JAXA)

The symposium will be co-organized by several research teams like “Innovation Technology toward CO<sub>2</sub> Evolution Reduction” supported by JST-CREST (PI: Prof. Y. Uchimoto, Kyoto Univ.). Special issue publication may be expected after the symposium.

Expected Speakers and Attendees (as of June 17<sup>th</sup>, 2011):

R. Alkire (UIUC)  
A. Gewirth (UIUC)  
R. Griessen (Amsterdam)  
S. Hamaguchi (Osaka)  
F. Hine (Nagoya Inst. Tech.)  
Y. Ito (Doshisha)  
H. Kim (Seoul)  
G. Kipouros (Dalhousie, Halifax)  
R. Kosteki (LBNL)  
O. Magnussen (Kiel)  
P. Mandin (CNRS)  
T. Moffat (NIST)  
Z. Ogumi (Kyoto)  
S. Orimo (Tohoku)  
U. Pal (Boston)  
R. Penner (UC, Irvine)  
F. Prinz (Stanford)  
M. Rosso (Ecole Polytechnique, Paris)  
M-L. Saboungi (CNRS)  
R. Selman (IIT)  
P. Schmuki (Erlangen)

W. Schwarzacher (Bristol)  
J. Stickney (Georgia)  
I. Terasaki (Nagoya)  
G. Zangari (Virginia)  
T. Kakiuchi (Kyoto)  
G. Martin (NTNU)  
G. Stafford (NIST)  
A. Manabe (Chlorine Engineering)  
Y. Sone (JAXA)

Symposium Organizing Committee

H. Kim (Seoul N. Univ. & GDIST)  
T. Moffat (NIST)  
T. Osaka (Waseda Univ.)  
Y. Ogata (Kyoto Univ.)  
A. Tasaka (Doshisha Univ.)  
Y. Uchimoto (Kyoto Univ.)  
R. Hagiwara (Kyoto Univ.)  
T. Homma (Waseda Univ.)  
H. Yasuda (Osaka Univ.)  
K. Amezawa (Tohoku Univ.)  
T. Nohira (Kyoto Univ.)  
T. Goto (Doshisha Univ.)  
K. Hachiya (Kyoto Univ.)

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## **Publications**

The abstracts will be made available at the registration desk of the Symposium. The proceedings of the symposium might be considered to publish as a special issue of the international journal. All participants whose abstract is accepted are expected to submit the full paper no later than the end of December, 2011. Some of participants may be expected to review these manuscripts as volunteers.

## Deadlines

July 31, 2011: Pre-Registration (Title and abstract - A1 format, within 1 page)

Aug. 5, 2011: Notification of acceptance of contribution

Sept. 18-19, 2011: Presentations

Dec. 31, 2011: Submission of full paper (Instructions for preparation will be given at our web site.)

**Any more information about the conference, pre-registration, registration and submission of abstracts will be provided at the web site.**

<http://www.echem.energy.kyoto-u.ac.jp/index-e.html>

**Fee** – (includes registration, banquet, and a book of abstracts\*). **Please pay at door by cash.**

Participant*	30,000 yen
Accompanying person	10,000 yen
Student*	5,000 yen ( <i>not including banquet</i> )

All prospective authors / attendants, please complete the form below and return it by e-mail to [remt2011@www.echem.energy.kyoto-u.ac.jp](mailto:remt2011@www.echem.energy.kyoto-u.ac.jp)

## Participant Information

**A. Personal Data** (Please use a separate form for each participant.)

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Middle initial: \_\_\_\_\_

Title of Presentation: \_\_\_\_\_

Organization: \_\_\_\_\_

Business address: \_\_\_\_\_

City: \_\_\_\_\_ Zip/Postal Code: \_\_\_\_\_

State or Province: \_\_\_\_\_ Country: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**B. Type of Participant**

Participant: 30,000 yen ( )

Accompanying person: 10,000 yen ( )

Student: 5,000 yen ( )