

International Symposium on Materials for Chemistry and Engineering (IMCE 2017)

Organized by: Institute for Materials Chemistry and Engineering, Kyushu University
Network Joint Research Center for Materials and Devices
Dynamic Alliance Project for Open Innovation Bridging Human, Environment, and Materials of MEXT

Co-organized by: Research and Education Center of Carbon Resources, Kyushu University
Green Asia Education Center, Kyushu University
Research and Education Center for Advanced Energy Materials, Devices, and Systems, Kyushu University

DATE: Feb. 3rd (FRI), 2017

VENUE: Chikushi Hall (C-CUBE) 1st & 3rd Floors, Chikushi Campus, Kyushu University

IMCE Institute for Materials Chemistry and Engineering
Kyushu University



北海道大学・東北大学・東京工業大学・大阪大学・九州大学の共同研究ネットワーク

物質・デバイス領域
共同研究拠点

Network Joint Research Center for Materials and Devices

北海道大学・東北大学・東京工業大学・大阪大学・九州大学の共同研究ネットワーク

人・環境と物質をつなぐイノベーション創出

ダイナミック・アライアンス

Dynamic Alliance for Open Innovation Bridging Human, Environment and Materials



Kyushu University Program for Leading Graduate Schools
Advanced Graduate Program in
Global Strategy for

Green Asia



Research and Education Center
for Advanced Energy
Materials, Devices, and Systems
Kyushu University

Kyushu University

Institute for Materials Chemistry and
Engineering

744 Motooka, Nishi-ku, Fukuoka 819-0395, Japan



Atsushi Takahara

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December 6th, 2016

Welcome Remarks

Dear Colleagues,

We are very pleased to announce that **International Symposium on Materials for Chemistry and Engineering (IMCE 2017)** will be held at Chikushi Hall (C-Cube, 1F), Kyushu University in Kasuga city of Fukuoka prefecture, Japan, on Feb. 3rd, 2017.

This symposium covers areas that are included to

- (1) Materials for energy, environmental, bio, and IT, etc.
- (2) Chemistry for the above items
- (3) Engineering for the above items
- (4) Economy and policy for the above items

We really appreciate your great passion and support, and welcome your attendance to the IMCE 2017.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Atsushi Takahara'.

Atsushi Takahara,

Director of Institute for Materials Chemistry and Engineering, Kyushu University

PI, International Institute for Carbon-Neutral Energy Research (I²CNER), Kyushu University

President of the Society of Polymer Science, Japan.

Member, The Science Council of Japan

IMCE 2016 Organization

Organizer:

Professor Atsushi Takahara (Director of IMCE, Kyushu University, Japan),
director-imce@cm.kyushu-u.ac.jp

Professor Junichiro Hayashi (Vice Director of IMCE, Kyushu University, Japan),
junichiro-hayashi@cm.kyushu-u.ac.jp

Advisory board:

G1: Prof. Hirotsugu Kikuchi (IMCE, Kyushu University)

G2: Prof. Shigeto Okada (IMCE, Kyushu University)

G3: Prof. Masaru Tanaka (IMCE, Kyushu University)

Office:

Professor Seong-Ho Yoon
yoon@cm.kyushu-u.ac.jp

Symposium Details

Important deadlines

Submission of Presentation Application & Registration Forms:

December 17th, 2016

Submission of Two-page abstract (Oral) and One-page abstract (Poster):

December 22nd, 2016

E-mail to yoona@cm.kyushu-u.ac.jp

nakabayashi@cm.kyushu-u.ac.jp

*** All of forms and formats are attached at the end of this announcement.**

Symposium place:

C-Cube in Chikushi Campus of Kyushu University

1st floor: Oral Presentation, 3rd floor: Poster Presentation

6-1 Kasuga-Koen, Kasuga-si, Fukuoka, 816-8580, Japan

http://www.mm.kyushu-u.ac.jp/lab_04/campus_map_eng.pdf

ACCESS

By Car

- The campus can only be entered from the Kasuga Gate on the Kasuga Park side.
(The location of Kasuga Gate :Center left on the Campus map)

By JR

- Alight at Kagoshima Main Line Onojo Station (Rapid train station)
- Approximately 10 to 15 minutes from Hakata Station

By Nishitetsu (Private railway)

- Alight at Nishitetsu Tenjin-Omuta Line Shirakibaru Station, and walk for 15 minutes.
- Approximately 25 minutes from Tenjin.

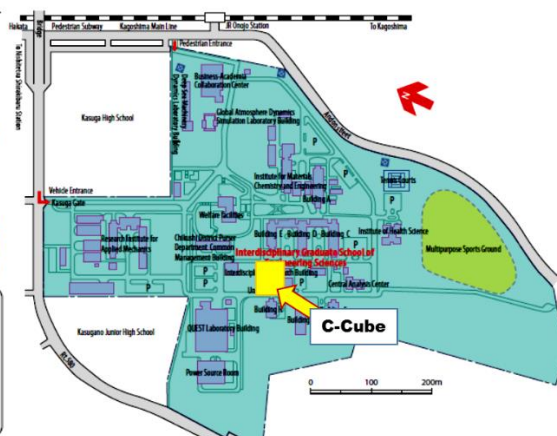
From Fukuoka Airport

- Approximately 30 minutes by taxi.
- Alight at Hakata subway station and connect on to JR Kagoshima Main Line.
- Alight at Tenjin subway station and connect on to Nishitetsu Tenjin-Omuta Line.

INTERDISCIPLINARY GRADUATE SCHOOL OF ENGINEERING SCIENCES KYUSHU UNIVERSITY

6-1 Kasuga-kouen, Kasuga 816-8580, Japan
Phone: 092-583-7502 Fax: 092-583-7060
inquiry@tj.kyushu-u.ac.jp
<http://www.tj.kyushu-u.ac.jp/>

Applied Science for Electronics and Materials	092-583-7612	office@asem.kyushu-u.ac.jp
Molecular and Material Sciences	092-583-7547	jimu@mm.kyushu-u.ac.jp
Advanced Energy Engineering Science	092-583-7562	jim@aees.kyushu-u.ac.jp
Energy and Environmental Engineering	092-583-7581	deee@ence.kyushu-u.ac.jp
Earth System Science and Technology	092-583-7558	jimu@esst.kyushu-u.ac.jp



Registration:

Registration is required for all participants. Please send the filled registration form.

Invitation letter for visa application:

If you need an invitation letter for your visa application, please fill all the necessary items in the form and send it to Professor Seong-Ho Yoon by E-mail (yoons@cm.kyushu-u.ac.jp).

If you have any questions, please feel free to contact Professor Seong-Ho Yoon. Associate Professor Jin Miyawaki, and Assistant Professor Koji Nakabayashi.

E-mail: yoons@cm.kyushu-u.ac.jp

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Fax: +81-92-583-7897

Floor Map

C-Cube 1st and 3rd floors

February 3rd, 2017

1. 09:00-18:20: All Oral lectures will be presented in C-Cube conference room on 1st floor in Chikushi Campus.
2. 11:25-12:25: Poster session at C-Cube 3rd floor in Chikushi Campus.
3. 12:25-13:30: Lunch at C-Cube meeting room on 3rd floor in Chikushi Campus (tentative).
4. 19:00-21:00: Banquet at Hotel (Hotel Centraza Hakata).

Presentation Guide

Equipment

1. A projector with a laptop will be installed for projection of your Power Point file.
 - Speakers shall submit his/her Power Point file during the registration, not just before lecture.
 - Acceptable Power Point file version: Microsoft Office 2002/2003/2007/2010/2013/2016.
2. Laser pointer will be provided.

Oral lecture

1. Abbreviation of lectures
Oral lecture → OL
 2. Presentation timescale
OL: 45 min including Q&A (alarm sounds at 35 and 40 min)
 3. Chairperson will lead lectures.
- * **Abstract of Oral Presentation is two page including author's profile. (Please refer attached Format 3.)**

Poster presentations

1. Abbreviation of poster presentation → PP
 2. Poster size: A0 size (841 mm × 1189 mm)
 3. Presenters shall attach his/her poster paper on the panel in Poster lobby on 3rd floor in C-Cube from 9:00 to 15:45 on Feb. 3rd.
 4. Official poster session is from 11:25 to 12:25 on Feb. 3rd.
 5. Poster panel with pins.
- * **Abstract of Poster Presentation is one page. (Please refer attached Format 4.)**
- * **2 posters given by students are planned to be awarded.**

Program

Oral Session

Time	Title	Presenter
09:00-09:10	Opening Address	Director Atsushi Takahara
G1 Session Chair: Prof. Hirotsugu Kikuchi		
09:10-09:55	【OL01】 G1 Plenary Lecture Photonic Bandgaps and Lasers in Chiral Liquid Crystal Materials	Professor Chia-Rong Lee (National Cheng Kung University, Taiwan)
09:55-10:40	【OL02】 G1 Keynote Lecture Sugar Chain Modified Graphene FET for Detection of Influenza Virus	Professor Kazuhiko Matsumoto (Osaka University, Japan)
10:40-11:25	【OL03】 G1 Keynote Lecture Multi-dimensionally Assembled Metallic Nanoparticles and Their Applications	Professor Kaoru Tamada (Kyushu University, Japan)
Poster Session Chair: Dr. Jin Miyawaki		
11:25-12:25	Posters (to go to the next page)	
12:25-13:30	Lunch	
G2 Session Chair: Prof. Shigeto Okada		
13:30-14:15	【OL04】 G2 Plenary Lecture Thermal Degradation of Solid Electrolyte Interphases on the Negative Electrodes of Lithium-ion Batteries	Professor Seung Mo Oh (Seoul National University, Korea)
14:15-15:00	【OL05】 G2 Keynote Lecture Template Synthesis of Graphene-based Porous Carbons for Energy Applications	Professor Takashi Kyotani (Tohoku University, Japan)
15:00-15:45	【OL06】 G2 Keynote Lecture Structural Analysis of Synthetic Carbons Based on Hierarchical Domain Model	Professor Seong-Ho Yoon (Kyushu University, Japan)
15:45-15:55	Coffee Break	
G3 Session Chair: Prof. Masaru Tanaka		
15:55-16:40	【OL07】 G3 Plenary Lecture Nanofibers and Human Adipose Stem Cell-derived Extracellular Matrix Enhance Angiogenesis	Professor Jiashing Yu (National Taiwan University, Taiwan)
16:40-17:25	【OL08】 G3 Keynote Lecture Self-assembled Nanoparticles as Photonic and Biological Nanomaterials	Professor Kuniharu Ijiri (Hokkaido University, Japan)
17:25-18:10	【OL09】 G3 Keynote Lecture Development of Smart Polymers and Nanodevices for Innovative Medicine	Professor Nobuhiro Nishiyama (Tokyo Institute of Technology, Japan)
18:10-18:20	Closing Remarks	Vice-director Jun-ichiro Hayashi

* 19:00–21:00 Banquet at Hotel Centraza Hakata (JR Ohnojo St. 18:36→JR Hakata St. 18:48)

Poster Session

Poster No.	Title of Poster	Presenter
PP01	Characterization of the Migration Mechanisms of Tumor Cells on Blood-compatible Polymers	Mr. Meng-Yu Tsai
PP02	Regulation of Cellular Behavior on Biocompatible Polymers Containing Intermediate Water	Mr. Shunya Irie
PP03	Effect of Pressurized Stabilization on the Mechanical Properties of Mesophase Pitch-derived Carbon Fiber	Mr. Hiroki Shimanoe
PP04	A Study of Micron-sized Pore Formation in Self-assembled Ag Nanoparticle 2D Sheet	Ms. Haruka Takekuma
PP05	Two-Dimensional Metal Nanoparticles Substrate For High Resolution Fluorescence Imaging	Ms. Shihomi Masuda
PP06	Cathode Properties and Thermal Stability of Li-excess $\text{Li}_2\text{MnTiO}_4$ for Li-ion Batteries	Mr. Yuki Kawamura
PP07	Cathode Performances of Disordered Rocksalt-type MgMnO_2 for Aqueous Mg-ion Battery	Mr. Ryo Sakamoto
PP08	Charge-discharge Reaction Mechanism of SnS Anode for Na-ion Batteries	Ms. Kyoko Momosaki
PP09	Crucial Role of NH_3 Addition on Hydrothermal Zinc Oxide Nanowires Growth	Mr. Daiki Sakai
PP10	Discrimination of Intramolecular Ketone Group Position by Zinc Oxide Nanowires Surface	Mr. Akihide Inoue
PP11	Discrimination of Aldehyde Molecules with Different Chain Length by Adsorption and Desorption Phenomena at Oxide Nanowire Surfaces	Ms. Chie Nakamura
PP12	True Vapor-Liquid-Solid Process Prevents Unintentional Doping of Single Crystalline SnO_2 Nanowires	Mr. Hiroshi Anzai
PP13	Rational Concept for Reducing Growth Temperature of Vapor-Liquid-Solid Metal Oxide Nanowire Growth	Mr. Zetao Zhu
PP14	Field-induced Slow Magnetic Relaxation in an Octa-coordinated Fe(II) Complex	Mr. Guo-Ling Li
PP15	Evaluation of Encapsulation Property of Nano Carbon in Helical Syndiotactic Poly(methyl methacrylate) Brush	Mr. Masanao Sato
PP16	Universal Design Concept for Designing Single Crystalline Oxide Nanowires Growth	Dr. Kazuki Nagashima

PP17	All-nanocellulose Nonvolatile Resistive Switching Memory	Dr. Kazuki Nagashima
PP18	Spatiotemporal Nanoscale Thermal Management for Ultra Low Energy Consumed Oxide Nanowire Sensor	Dr. Kazuki Nagashima
PP19	Preparation of Inorganic Oxide Nanofibers Using Carbon Nanofibers as a Template	Dr. Koji Nakabayashi
PP20	Photomechanical Motion of Aromatic Diimide Molecules	Dr. Kenta Goto
PP21	Development of π -expanded Axial Chiral Dopants for Chiral Liquid Crystals	Dr. Hiroki Higuchi
PP22	An Azulene-Fused Tetracene Diimide with a Small HOMO-LUMO Gap	Dr. Fumito Tani
PP23	Catalyst Design of Vaska-type Iridium Complexes for Highly Efficient Synthesis of p-conjugated Enamines from Carboxamides	Dr. Atsushi Tahara
PP24	Non-Precious-Metal Catalytic Systems Involving Iron/Cobalt Carboxylates and Isocyanides/NHCs for Alkene Hydrosilylation	Dr. Atsushi Sanagawa
PP25	Molecular Theory of Adhesion	Prof. Kazunari Yoshizawa
PP26	Extraction of Rubbery Material from Plant Produced Emulsion by use of Ionic Liquids	Dr. Yoshiaki Takahashi
PP27	Solvent Free Oxidative Coupling Polymerization of 3-hexylthiophene in the Presence of FeCl ₃ Particles	Dr. Tomoyasu Hirai
PP28	Synthesis and Applications of Versatile Click Reaction Device "DACN"	Dr. Yuuya Kawasaki
PP29	Bongkreikic Acid Facilitates Glycolysis in Cultured Cells Resulting from Mitochondrial Dysfunction	Dr. Arihiro Kano
PP30	Mechanotransduction and Redox Signaling in Stem Cells	Dr. Thasaneeya Kuboki

* 11:25–12:25 Poster session at C-Cube 3F Lobby

[Format 1] Presentation Application Form

Please send the filled form to Prof. Seong-Ho Yoon by email (yoon@cm.kyushu-u.ac.jp) by **Dec. 17th, 2016**. Please feel free to contact Prof. Seong-Ho Yoon, if you have any questions.

Presentation Application Form

Presentation title:
Author(s):
Name and email address of corresponding author:
Affiliation:
Presentation style (Please delete either one of the two.): Oral / Poster

[Format 2] Registration Form

Please send the filled form to Prof. Seong-Ho Yoon by email (yoon@cm.kyushu-u.ac.jp) by **Dec. 17th, 2016**. Please feel free to contact Prof. Seong-Ho Yoon, if you have any questions.

Registration Form

Name: Mr./Ms. (First)	(Last)	(Middle initial)
Passport No. (if you are foreigner):		
Date of birth (month/day/year):		
Company or organization:		
Professional title or position:		
Email address:		
Work address:		
Mailing address (No. and street or box No.):		
City:	State:	
ZIP code:	Country:	
Phone No.:	Fax No.:	

[Format 3] Format of 2 page-abstract (including Professional Profile) for Oral Presentation

Please send your abstract to Prof. Seong-Ho Yoon by email (yoon@cm.kyushu-u.ac.jp) by **Dec. 22nd, 2016**. Please feel free to contact Prof. Seong-Ho Yoon, if you have any questions.

Your Paper's Title Starts Here: Please Center

use Helvetica (Arial) 14

Author Name (Please write full name; Last is surname, please underline the presenter.)

Full address of first author, including country

E-mail

Keywords: List the keywords covered in your paper. These keywords will also be used by the publisher to produce a keyword index.

For the rest of the paper, please use Times Roman (Times New Roman) 12

Summary. This document explains and demonstrates how to prepare your camera-ready manuscript. The best is to read these instructions and follow the outline of this text. The text area for your manuscript must be 17 cm wide and 25 cm high (6.7 and 9.8 inches, resp.). Do not place any text outside this area. Use good quality, white paper of approximately 21 x 29 cm or 8 x 11 inches (please do not change the document setting from A4 to letter). Your manuscript will be reduced by approximately 20% by the publisher. Please keep this in mind when designing your figures and tables etc. **The maximum number of pages is two.**

Organization of the Text

Section Headings. The section headings are in boldface capital and lowercase letters. Second level headings are typed as part of the succeeding paragraph (like the subsection heading of this paragraph).

Page Numbers. Do *not* print page numbers: Please number each sheet toward the middle near the bottom (outside the typing area) with a soft pencil.

Tables. Tables (refer with: Table 1, Table 2, ...) should be presented as part of the text, but in such a way as to avoid confusion with the text. A descriptive title should be placed above each table. The caption should be self-contained and placed *below or beside* the table. Units in tables should be given in square brackets [meV]. If square brackets are not available, use curly {meV} or standard brackets (meV).

Figures. Figures (refer with: Fig. 1, Fig. 2, ...) also should be presented as part of the text, leaving enough space so that the caption will not be confused with the text. The caption should be self-contained and placed *below or beside* the figure. Generally, only original drawings or photographic reproductions are acceptable. Only very good photocopies are acceptable. Utmost care must be taken to *insert the figures in correct alignment with the text*. Half-tone pictures should be in the form of glossy prints. If possible, please include your figures as graphic images in the electronic version. For

best quality the pictures should have a resolution of 300 dpi (dots per inch).

Equations. Equations (refer with: Eq. 1, Eq. 2, ...) should be indented 5 mm (0.2"). There should be one line of space above the equation and one line of space below it before the text continues. The equations have to be numbered sequentially, and the number put in parentheses at the right-hand edge of the text. Equations should be punctuated as if they were an ordinary part of the text. Punctuation appears after the equation but before the equation number, e.g.

$$c^2 = a^2 + b^2.$$

(1)

Literature References

References are cited in the text just by square brackets [1]. Two or more references at a time may be put in one set of brackets [3,4] and [3-5]. The references are to be numbered in the order in which they are cited in the text and are to be listed at the end of the contribution under a heading *References*, see our example below.

References

- [1] Dj.M. Maric, P.F. Meier and S.K. Estreicher: Mater. Sci. Forum Vol. 83-87 (1992), p. 119
- [2] M.A. Green: *High Efficiency Silicon Solar Cells* (Trans Tech Publications, Switzerland 1987).
- [3] Y. Mishing, in: *Diffusion Processes in Advanced Technological Materials*, edited by D. Gupta Noyes Publications/William Andrew Publising, Norwich, NY (2004), in press.
- [4] G. Henkelman, G.Johannesson and H. Jónsson, in: *Theoretical Methods in Condensed Phase Chemistry*, edited by S.D. Schwartz, volume 5 of *Progress in Theoretical Chemistry and Physics*, chapter, 10, Kluwer Academic Publishers (2000).
- [5] R.J. Ong, J.T. Dawley and P.G. Clem: submitted to *Journal of Materials Research* (2003)
- [6] P.G. Clem, M. Rodriguez, J.A. Voigt and C.S. Ashley, U.S. Patent 6,231,666. (2001)

Name of speaker:

Education:

19XX B. Sc., Kyushu University, Fukuoka, Japan

19XX Ms. Sc., Kyushu University, Fukuoka, Japan

19XX Dr. Sc., Kyushu University, Fukuoka, Japan

Professional career: (staff only)

19XX Postdoc, Kyushu University, Fukuoka, Japan

19XX Assist. Prof., Kyushu University, Fukuoka, Japan

19XX Prof., Kyushu University, Fukuoka, Japan

Awards/other information: (if any)

19XX XXX Award, XXX society, Fukuoka, Japan

Digital photo image of
speaker
5cm*4cm

[Format 4] Format of 1 page-abstract for Poster Presentation

Please send your abstract to Prof. Seong-Ho Yoon by email (yoon@cm.kyushu-u.ac.jp) by **Dec. 22nd, 2016**. Please feel free to contact Prof. Seong-Ho Yoon, if you have any questions.

**LECTURE TITLE FOR 2014 INTERNATIONAL SYMPOSIUM
CENTERED, ALL CAPITALS, 12-PT ARIAL (OR HELVETICA) BOLD**

Given_name FAMILY_NAME

Department of Chemical Engineering, Faculty of Engineering, Kyushu University, Fukuoka 819-0395, Japan

Author_name@xxxxx.kyushu-u.ac.jp

This template has been prepared for authors of papers to be presented at the International Symposium of Integrated Research and Education Center for Energy Conversion, Storage, Saving, and Transport Technologies at Kyushu University, Fukuoka, Japan. Authors are requested to prepare their own manuscript using this template to achieve uniformity in the Abstract book.

Leave one blank line after the title.

The Authors' name and the affiliation(s) including the corresponding e-mail address are in 10-pt Times New Roman and centered.

Leave one blank line between the affiliation(s) and the main body.

The text should be written in 10-pt Times New Roman, single (12 pt) line spacing, left and right justified.

The paragraphs should not be indented.

Please send the **electronic copy of your abstract as a PDF file** to the e-mail address <yoon@cm.kyushu-u.ac.jp> by **December 22nd, 2016**. If you meet a difficulty for conversion into the PDF file format, the MS-Office format (DOC or DOCX file) is acceptable.

References

If any, please include introductory references for non-specialists.

The references should be brought together at the end of the main body of your abstract, and numbered in the order of their appearance in the text.

Numerals for references are given in square brackets.

In the reference list, journals [1], books [2], and edited multi-author books [3] should be cited in accordance with the examples shown below.

- [1] R.K. Singh, D.-G. Lee, *J. Electron. Mater.* **25** (1996) 137.
- [2] D. Palik, *Handbook of Optical Constants of Solids II*, Academic Press, New York, 1991.
- [3] G. Turrel, P. Dhamelincourt, in: J.J. Laserna (Ed.), *Modern Techniques in Raman Spectroscopy*, Wiley, Chichester, 1996, p.109.