# ICP 2019
# INTERNATIONAL CONFERENCE ON POLYGENERATION

## 1ST ANNOUNCEMENT

**5th International Conference on Polygeneration (ICP 2019)**

May 15–17, 2019
I2CNER, Kyushu University, Fukuoka, Japan

**ORGANIZER:**
ICP 2019 Organizing Committee

**CO-ORGANIZERS:**
International Institute for Carbon-Neutral Energy Research (WPI-I2CNER), Kyushu University

**CONFERENCE WEB-SITE:**
**http://therme.mech.kyushu-u.ac.jp/ICP2019.html**

**CONFERENCE OUTLINE**
The main objective of the polygeneration concept is to create a sustainable energy society based on a combination of energy savings, efficient use of fossil fuels and increasing the use of renewable energy. The polygeneration approach focuses on the basis of delivering more than one form of energy to the final user. The energy supplied to the system could be provided by conventional sources, including fossil fuels, renewable energy or a combination of them. For example: electricity, heating, cooling and dehumidification can be simultaneously delivered from one polygeneration plant. Polygeneration are highly energy integrated systems covering conventional cogeneration, trigeneration, as well as technologies for producing fuels and other valuable sub-products such as potable water and dry air, among others.

**HISTORY OF ICP**
ICP2007, Tarragona, Spain
ICP2011, Tarragona, Spain
ICP2015, Chennai, India
ICP2017, Cuernavaca, Mexico

We hope to have stimulating and lively discussion exchanging ideas on polygeneration science and technologies in Fukuoka.

**VENUE**
I2CNER Building, Ito Campus, Kyushu University
http://www.kyushu-u.ac.jp/I2CNER/

**SCOPE**
The fifth International Conference on Polygeneration, (ICP 2019) primarily aims at bringing together scientists and experts in polygeneration systems based on both renewables and conventional fuels. In addition to these systems, the following related technological advancements are included: fuel cells, heat pumps, sorption systems as well as other energy conversion and/or storage systems. Furthermore, common concerns including materials reactivity, heat and mass transfer, durability, stability under high-temperature and severe conditions, and system economic analysis, will be considered. The scope is to provide researchers with different aspects of multi-dimensional processes in energy conversion and to promote a multidisciplinary interexchange of ideas across subjects.

**TOPICS**
The following list of topics illustrates the scope of the conference.
1. Advanced cogeneration technologies such as IC engines, micro gas turbines, fuel cells, Stirling engines, super critical $CO_2$ cycles, ORC, Kalina cycles, etc.
2. Biofuel technologies
3. Biomass combustion/biomass gasification
4. Combined cooling and drying technologies
5. District heating and cooling networks
6. Durability and operationally at high temperatures and severe conditions
7. Energy and environmental studies
8. Energy storage systems
9. Energy systems in buildings
10. Heat and mass transfer analysis
11. Heat pumps
12. Heat transformers
13. Hydrogen based technologies: production, storage and carrier systems
14. Life cycle analysis and techno-economic studies
15. Low carbon technologies
16. Materials for electric and thermal energy conversion and storage
17. Polygeneration of energy and Energy Integration
18. Solar thermal applications
19. System reliability (corrosion, reactor sealing, reaction selectivity, etc.)
20. Thermophysical properties of working fluids
21. Trigeneration systems for energy services and water - desalination and water treatment process / technologies
22. Other relevant subjects

**CALL FOR PAPERS**
Extended abstract(s) related to the above topics are invited and the submission deadline is November 15, 2018.

**EXTENDED ABSTRACT SUBMISSION**
Two pages extended abstract with concise objective, key results and a brief conclusion should be submitted electronically to:
http://therme.mech.kyushu-u.ac.jp/ICP2019.html
Author(s) should indicate the intended topics from the provided list.

**IMPORTANT NOTE:**
- Extended abstracts are to be submitted in MS Word (.doc) through the conference webpage.
- Presentations of the technical papers will be in English either orally or by poster.
- Selected papers will be published in agreed-upon SCI international journals after reviewing.

**DEADLINES**

| | |
|---|---|
| Submission of extended abstract: | November 15, 2018 |
| Notice of review outcome: | January 15, 2019 |
| Submission of revised extended abstract: | February 15, 2019 |
| Notice of acceptance: | March 01, 2019 |

**CONFERENCE FEE***
Registration Fees per person (By March 15, 2019):

ICP 2019 INTERNATIONAL CONFERENCE ON POLYGENERATION

| | |
|---|---|
| Regular: | 55,000 JPY |
| Student: | 38,000 JPY |
| Accompanying person**: | 15,000 JPY |

Late Registration per person (including onsite registration):

| | |
|---|---|
| Regular: | 65,000 JPY |
| Student: | 50,000 JPY |

Conference proceedings (book and USB memory), welcome reception, coffee and complementary meals will be provided.

*Every paper is required to be registered. If an author would like to submit more than one paper, each accepted paper needs to be registered separately.
**Accompanying person will not receive conference proceedings.

## PATRONS

Prof. Alberto Coronas
Universidad Rovira I Virgili, Spain
Prof. S. Srinivasa Murthy
Indian Institute of Science, India
Prof. Yasuyuki Takata
Kyushu University, Japan

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Kyushu University, Japan
E-mail: saha.baran.bidyut.213@m.kyushu-u.ac.jp

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Kyushu University, Japan
E-mail: whiroaki@mech.kyushu-u.ac.jp

### General Secretary

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Kyushu University, Japan
E-mail: y-hama@mech.kyushu-u.ac.jp

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Kyushu University, Japan
E-mail: kyaw.thu.813@m.kyushu-u.ac.jp

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Solar Platform of Almeria, CIEMAT, Spain

## ATTRACTIVE PLACES IN FUKUOKA

Fukuoka City is located in the northern part of Kyushu, bordered on three sides by mountains and opening into the Japan Sea to the north. The climate is comparatively mild. With geographical proximity to the Korean Peninsula and the Asian continent, Fukuoka City boasts more than 2000-year history of international exchange as a trading port.

### Dazaifu Tenmangu Shrine

This shrine worships Michizane Sugawara as "God of Scholarship". In 901, Michizane was suddenly demoted from Udaijin (Minister of the Right) to an official of Dazaifu, and died in this place two years after. The Dazaifu Tenmangu shrine was built at his final resting place. The present main shrine (important cultural asset) was built in 1591.