# WORLD FUEL CELL CONFIERENCE

December 12-15, University of California, Irvine | Hybrid in-person/virtual format | https://www.iahe-fcd.org/wfcc2022

## **CONFERENCE OBJECTIVES**

The 2022 World Fuel Cell Conference (WFCC) is a multi-disciplinary conference that covers the latest developments and advancements in fuel cells, from fundamentals, to advanced materials, design, engineering, products and applications. It will be of particular value and interest to those in the relevant fields.

#### **VENUE**

The hybrid in-person/virtual conference will be held in Irvine, CA at the University of California. UCI is ranked among the nation's top 10 public universities for the seventh year in a row by U.S. News & World Report. U.S. News also lists the campus at No. 2 for social mobility for a second consecutive year.

#### **CONFERENCE FORMAT**

The conference will be held in a hybrid in-person/virtual format and composed of the following events and activities:

- General contributed abstracts/papers presented orally in technical sessions and/or by posters
- Keynote abstracts/papers presented by invited speakers
- Tutorials about fuel cell and hydrogen related technology by inviting leading researchers

## ABSTRACT/PAPER SUBMISSION

The submissions to the conference are in two formats:

- Abstract only (no paper submission required and presentation only), or
- Full Paper (for consideration in Best Paper Award and/or special issues of peer-reviewed international journals)

### **IMPORTANT DATES**

Submission of Abstract (presentation only) or Full Paper (presentation & publication) - August 1, 2022-October 15, 2022

Notification to Authors - October 31, 2022

Submission of Revised Abstract/Paper (where applicable) – November 30, 2022

Registration Deadline - November 15, 2022

#### THREE COMPETITIONS

Three Competitions are included in the event:

- (1) Best Paper Award
- (2) Best Student Presentation Award
- (3) 3 Minute Thesis (3MT) Competition

# **TOPICS**

The conference invites you to submit abstract/paper in all areas of Fuel Cell Technology, including but not limited to:

#### Theme 1: Fuel Cell

- Types of fuel cell: PEMFC, DMFC, SOFC, PAFC, AFC
- Materials and components: catalysts and their supports, GDLs, MPLs, EAs, bipolar plates, membranes, ionomers
- Modelling design, optimization: materials, cells, stacks, systems
- Applications: mobile, stationary, portable, specials

#### Theme 2: Hydrogen

- H2 production: Electrolysis (PEMEC, SOEC), reforming, photolysis, anaerobic
- H2 storage: compressed gas, cyogenic liquid, metal hydride, chemicals, container
- H2 transport: trucking, pipeline, railway, ship
- H2 infrastructure: fueling station, distribution centers

#### **Theme 3: Inter-connection**

- Hydrogen economy: BEV vs. FCEV, Hybrids, polygen
- On board H2 storage
- Lifecycle analysis: round trip efficiency of H2 & electricity generation, environmental impact assessment
- Renewable energy resource coupling: SOFC-SOEC, PEMFC-PEMEC

**CO-ORGANIZERS** 











## **CONFERENCE CHAIR**

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William Gary, Cynthia Dieudonne, Jennifer Wilkens, Iryna Zenyuk, Yun Wang, Jack Brouwer

## **PUBLICATION**

Some selected quality papers, after proper respective view, will be recommended for publication in special issues of several prestigious international journals, but primarily will be for the International Journal of Hydrogen Energy.

## **REGISTRATION FEE**

Online (early bird): \$150 student, \$300 regular In-person (early bird): \$300 student, \$650 regular

After September 30, \$200 student, \$450 regular After September 30, \$350 student, \$750 regular