



The Combustion Institute

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2018 Iran Section of The Combustion Institute Report

Section Website: <http://ici.org.ir>

Section Chair: Kiumars Mazaheri

List section officers and board members with titles:

- President: Prof. Kiumars Mazaheri, Tarbiat Modares University (TMU)
- Vice President: Ali Salavatizadeh, PhD, (University of Tehran)
- Treasurer: Mohammad Shamsavari, PhD, (Sharif University of Technology)
- Member: Hojat Ghassemi, PhD, (Iran University of Science and Technology)
- Member: Hossain Soury, PhD, (Maleke Ashtar University Technology)
- Member: Hamed Zeynivand, MSc, (Sharif University of Technology)
- Member: Masoud Aydi Atarzadeh, PhD, (Amirkabir University of Technology)

Members of the Iran Section:

Active Members 350
Non-Student Members
Student Members

Section meetings and workshops since 2016 with date and attendance information:

Fuel and Combustion Conference of Iran

The Fuel and Combustion Conference of Iran is one of the premier events in Iran in the field of combustion industry that is being held biennially with the collaboration of national universities, research centers, NGOs and industries. This conference is a worthy forum for the experts from both academia and industry to exchange ideas and present the latest achievements in combustion and related topics.

The Seventh Fuel and Combustion Conference of Iran (FCCI-2018), was held in Sharif University of Technology in Feb 13-14, 2018. The conference was successful with more than 350 participants. A total of 89 peer reviewed papers, three keynote speeches (from Sweden, Netherland, and Iran), four educational workshops, and four forums about industrial aspects and difficulties of combustion were presented during this conference. The conference website is available at <http://fcci-2018.conf.sharif.edu>.

Annual Meeting

The ICI had its 2015 biannual meeting at Tarbiat Modares University on 18th of February 2017. The meeting attracted many ICI members in addition to researchers from local universities and institutions. A forums was planned about the role of combustion technologies in CO₂ and pollutants reduction. In addition, according to a good custom, the ICI appreciated two life members of university and industry.

List other activities (e.g. section journals, projects, working groups, school for students, etc.)

Research Journal

The journal of "Fuel and Combustion," is accredited by the Iranian Ministry of Science and Technology. This Journal is a peer-reviewed journal covering all areas in combustion science in Persian language with English abstract. The mission of the journal is to publish high quality work from experimental, theoretical, and computational investigations on combustion science. At the beginning this journal had been published two issues per year. Since autumn 2017 it is promoted

to a quarterly journal. All articles published by journal are made accessible online immediately upon publication, without subscription charges or registration barriers. Its website address is www.jfnc.ir.

Newsletters

ICI newsletter aims to be a platform for spreading the work of ICI members, and to be the place where Iranians who are active in combustion areas can read what is not readily found elsewhere. ICI newsletter contains related news, trending research, discussion and debate contributions, general articles regarding combustion, opinions, a question regarding combustion technology (with a gift for the best answer) and controversial topics in this field. This newsletter is in Persian and is published four issues per year. A digital archive of all issues can be accessible online via ICI website; <http://ici.org.ir/fa/Content/45/>.

Festival of "Flame Photograph"

The 4th Festival of Flame Photograph was held in February 2017. It is a biannual festival which is organized by the student branch of ICI. The 4th festival attracted more than 50 photos for review by the festival organization committee. The ICI encouraged selected photos based on their scientific contribution and artwork quality.

National Festival on Inventions and Patents in Fuel and Combustion

The 2nd National Festival on Inventions and Patents in Fuel and Combustion held in February 2017. More than 30 patents and 15 inventions are received by the festival organization. After a precise review process, four patents and four inventions were selected and presented at the festival exhibition. The ICI encouraged top three patents and one invention at the festival. In addition, ICI negotiated for receiving national support for these patents. Finally, the selected patents are funded by the National Elites Foundation.

Holding sessions

Many planning sessions are arranged by ICI. In last two years the following session were held by ICI:

- Board of the directors (monthly)
- Committee of burner
- Editorial board of journal of "Fuel and Combustion,"
- Committee of inventions
- Committee of trainings

Workshops

Several workshops were presented by ICI, including:

- Computational Fluid Dynamic (CFD) of reacting flow using FLUENT (several times)
- Simulation of reacting flow using OpenFOAM open source software (several times)
- Simulation of flow dynamics and heat transfer using OpenFOAM open source software
- Simulation of Non-premixed combustion using Fluent software
- Challenges and solutions for standard and quality of burners
- Burners and fuel transfer system in steel industries.
- New technologies of burners and combustion systems
- Energy audit in buildings
- Condensing boilers and its application in energy saving

Lectures by ICI:

- Some technical speeches are presented in universities and industrial companies by elite experts. The topics are included the some main combustion-based challenges in the contrary such as energy conservation in different industries, optimized industrial burners, computational simulations of different combustion phenomena.

Other Activities:

- Preparing the ICI ten-year roadmap for 2015-2025
- Corporation agreement with Iranian Engine Scientific Association
- Supporting the related Domestic Conferences
- Awarding best Thesis and Projects in combustion field
- Introducing a candidate for international combustion institute board member election.
- Organizing of fuel and combustion exhibition, 2017

List awards given by section with details:

No awards given.