



the 9th International Conference on

Renewable Fuels, Combustion and Fire **FCE'25**

December 22-24, 2025, Hammamet, Tunisia



Detailed Scientific Program

Monday, December 22

14:00 14:45	REGISTRATION	
14:45 15:15	Opening Ceremony	Ceremony Chair: Prof. Ridha Ennetta
	Keynote 1: Prof. Nafiz KAHRAMAN <i>On-Site Hydrogen Generation and Utilization as a Solution to Storage Challenges</i>	Chair: Prof. Hakan Serhad Soyhan
16:00 16:30	Photo and Welcoming Coffee break	
16:30 17:15	Keynote 2: Prof. Hakan Serhad SOYHAN <i>Toward Standardized Firefighting Protocols for Electric Vehicle Fires: A Systematic Review and Integrated Framework</i>	Chair: Prof. Ridha ENNETTA

Tuesday, December 23

09:00 09:45	Keynote 3: Prof. Amal ELLEUCH <i>Advances in Biomass Valorization Pathways</i> Chair: Prof. Nafiz KAHRAMAN
09:45 10:45	Oral session 1: Computational combustion Session Chair: Prof. Monia GUIZA
09:45-10:00	(id19): Murat Hacı , Optimization of Flow Velocities of Combustion Gases in Heating Pipes of a Commercial Cooking Oven.
10:00-10:15	(id02): Fikret Kir , Evaluation of WMFSS with Water Additive for Lithium-Ion Battery Fire.
10:15-10:30	(id15): Cem Eren Özçelik , CFD and Experimental Comparison of Hydrogen Flame in a High-Speed Burner Using a Conical Swirler
10:30-10:45	(id27): Zouhaier Boutar , Experimental investigation of a domestic LPG stove performance and pollutant emissions through novel flame shield arrangements.
10:45 11:00	Coffee break
11:00 12:30	Oral session 2: Computational combustion Session Chair: Dr. Mehrez GASSOUMI
11:00-11:15	(id08): Samuel Molima , Multiphase Combustion Modeling of Ammonia–Diesel RCCI Engines Using RANS, DES, and LES Turbulence Models.
11:15-11:30	(id05): Ilhem Yahya , Effect of Palm Oil Biodiesel Blends on Emissions and Performance of a Diesel Electric Generator.
11:30-11:45	(id24): Chafaa Nsibi , Catalytic pyrolysis of biofuels blended from olive mill solid wastes and pine saw- dust: A sustainable approach to waste management.
11:45-12:00	(id17): Lakhal Fatma Ezzahra , Combustion of NH ₃ –CH ₄ blunt in a Coaxial Swirl Burner: Experimental and Numerical Investigation.
12:00-12:15	(id03): Fakher Hamdi , Effect of Hydrogen and Palm Oil Biodiesel Blends on Emissions and Performance of a Diesel Electric Generator: Optimization Using Taguchi Approach.
12:15-12:30	(id16): Zitani Brahim , Comparative study of SIICE performances fueled with gasoline and LPG.
12:30 14:00	Lunch
14:45 17:00	Free activity

Wednesday, December 24

09:00 10:30	Oral session 3: ONLINE Session Chair: Dr. Fathi HAMD
09:00-09:15	(id14): Ayşe Nur Pirinççi , Impact of a Porous Channel on Combustion Characteristics in a Micro-Combustor.
09:15-09:30	(id26): Karaca Hüseyin , Synthesis and Characterization of Cu ₂ OMgO, Cu ₂ OZnO, and Cu ₂ OMgOZnO Catalysts Using the Conventional Chemical Precipitation Method.
09:30-09:45	(id12): Volkan Sabri KÜL , Investigation of Changes in Diesel Combustion by Sending Aluminium, Stearic Acid-Coated Aluminium, Titanium Oxide and Boron Particles as a Premix with Air from the Engine Intake Manifold to the Combustion Chamber.
09:45-10:00	(id25): Karaca Hüseyin , Structural and Morphological Characterization of Cu ₂ O-Based Catalysts Synthesized Using the Fehling Method.
10:00-10:15	(id10): Acikgoz Salih , Investigation of dust explosion in food silos.
10:15-10:30	(id11): Ayed Mustapha , Experimental assessment of combustion Quality, fuel consumption, and efficiency of a diesel Engine fueled by D95 Green Diesel Blend issued from Co-pyrolysis of Polypropylene and Almond Shell.
10:30-10:45	(id33): Esenay Arsalan , Effects of Hydrogen and Carbon Dioxide Additive CNG Blends on Fuel Consumption and Emission Parameters in a Compression Ignition Engine
10:30 11:00	Poster session & Coffee break
	(id01): Fathi Hamdi , An extended multi-regime flamelet model for ammonia/diesel fueled combustion.
	(id04): Kahina Rekkal , Enzymatic Synthesis and Fuel Characterization of Biodiesel from Waste Cooking Oil with Candida antarctica Lipase
	(id09): BENARIMA Abdelhakim , Thermal carbonization of date pits for activated carbon production and water treatment applications.
	(id21): Warda Ben Atia , Numerical Study of the Impact of Swirled Hole Orientation on Thermal Efficiency and Flame Stabilization in LPG Gas Stoves.
	(id22): Fatma Kriâ , Improving the Performance of a Conventional PV System: Introduction of a Horizontally Grooved Heat Exchanger.
	(id23): Lakhal Fatma Ezzahra , Hydrogen-Fired Crucible Furnace for Decentralized Aluminum Recycling: Design, Sizing, and CFD simulation.
	(id28): Ilham Yahya , Performance and Emission Analysis of Hydrogen-Enriched Palm Biodiesel Blends in a Diesel Generator
	(id29): Warda Ben Attia , Investigating the Role of Heating Height in Gas Stove Burner Performance
	(id30): Samuel Molima , Numerical Modeling of Ammonia–Diesel RCCI Engine Combustion Using RANS, DES, and LES Turbulence Models.
	(id31): Takwa Hamdi , Numerical Assessment of Hydrogen-Enriched Methanol Dual-Fuel CI Combustion.
	(id32): Kods Hamda , Iron dust Combustion in a Spherical Chamber: A Numerical Study.
11:00 12:15	Oral Session 4: Reactor/Oven combustion Session Chair: Dr. Fakher HAMD
11:00-11:15	(id07): Takwa Hamdi , Combustion and Emissions Characteristics of a Dual-Fuel CI Engine under Varying Hydrogen Energy and Equivalence Ratios: A Computational Study.
11:30-11:45	(id06): Kods Hamda , Numerical Modeling of Iron Powder Combustion in a 20-L Spherical Reactor.
11:45-12:00	(id13): Ibtihel Souissi , Comparative Numerical Study of Solid Oxide Electrolysis Cell (SOEC) Modelling in Aspen Plus and Python.
12:00-12:15	(id20): Mehrez Gassoumi , Numerical Analysis of Diesel Engine Combustion Fed with Sunflower-Oil Biodiesel Blends.
12:15 12:30	Closing Ceremony Ceremony Chair: Prof. Hakan Serhad Soyhan
12:30 14:00	Lunch