

# Wednesday morning, room 1

## Low-Emission Combustion Technologies

Authors	Poster number	Title	Topics
Awad Hazem (1), Abo-Amsha Khalil, Ahmed Umair, Chakraborty Nilanjan	436699	A Direct Numerical Simulation based comparison between homogenous and inhomogeneous mixture MILD combustion	Low-Emission Combustion Technologies
Jacobs Sascha (1), Methling Torsten (1), Kathrotia Trupti (1), Köhler Markus (1)	440572	A novel semi-empirical approach of a FLOX®-based combustion system for micro gas turbines	Low-Emission Combustion Technologies
Luong Minh Bau (1), Im Hong G. (2)	440884	A statistical analysis of developing detonation process in an NTC-fuel/air mixture with temperature inhomogeneities under engine	Low-Emission Combustion Technologies
Ariemma Giovanni Battista (1), Sorrentino Giancarlo (1), Sabia Pino (1), De Joannon Mara (1), Ragucci Raffaele (1)	441019	Ammonia/Hydrogen blends MILD Combustion	Low-Emission Combustion Technologies
Busson Elsa (1), Mühlbach Meinhard (2), Schmitz Nico (1), Wüning Joachim G. (2), Pfeifer Herbert (1)	437867	An experimental study on the flexible use of hydrogen as fuel in radiant tubes for steel annealing lines	Low-Emission Combustion Technologies
Yahou Tarik (1) (2), Schuller Thierry (2), Dawson James R (1)	436394	Analysis of the ignition dynamics of H <sub>2</sub> -enriched flames using high speed PIV/OH-PLIF	Low-Emission Combustion Technologies
Pers Hugo (1) (2), Aniello Andrea (1), Morisseau Frederic (2), Schuller Thierry (1)	436507	Autoignition: a flashback initiation mechanism in hydrogen-enriched laminar premixed burners	Low-Emission Combustion Technologies
Koegl Matthias (1), Delwig Moritz (1), Zigan Lars (1)	436000	Characterization of Eosin as dye for thermometry and film thickness measurements based on laser-induced fluorescence	Low-Emission Combustion Technologies
Van Rooij Niek, Shoshyn Yuri (1), De Goey Philip (2)	440623	Characterization of iron particle temperatures in a 200kW boiler system	Low-Emission Combustion Technologies
Giesler Linda (1), Schmitz Nico (1), Pfeifer Herbert (1), Cresci Enrico (2), Wüning Joachim G. (2)	436630	Characterization of primary combustion in multistage flameless oxidation	Low-Emission Combustion Technologies
Cimino Stefano (1), Coppola Antonio (1), Massa Fiorella (2), Scala Fabrizio (2)	440254	Chemical Looping CO <sub>2</sub> Capture and Catalytic Methanation in a Lab-Scale Twin Fluidized Bed System using Dual Function Materials	Low-Emission Combustion Technologies
Gokalp Iskender (1), Mutlu Nefise, Kandasamy Jayaraman	441036	Continuous Hydrogen Production by Aluminum Hydrolysis	Low-Emission Combustion Technologies

# Wednesday morning, room 2

## Gas-Phase Reaction Kinetics

Authors	Poster number	Title	Topics
Zhu Yuxiang, Curran Henry, Zhou Chong-Wen (1) (2)	440674	A comprehensive chemical kinetic modeling study of ammonia and ammonia/hydrogen combustion	Gas-Phase Reaction Kinetics
Belghiti Asmae (1), Mahmoudi Marwa (1), Catoire Laurent (1), Diévert Pascal (1)	436524	A High temperature kinetic model for Di Ethyl Ether (DEE) pyrolysis and oxidation from ab initio calculations	Gas-Phase Reaction Kinetics
Kovács Márton (1), Papp Máté (1), Tamás Turányi (1), Nagy Tibor (2)	443082	A novel active parameter selection strategy for the efficient optimization of combustion mechanisms	Gas-Phase Reaction Kinetics
Sebbar Nadia (1), Bockhorn Henning (1), Trimis Dimosthenis (1)	436005	A Numerical Investigation of Polycyclic Aromatic Hydrocarbon Reactions with Oxygen: Thermochemistry and kinetics similarities	Gas-Phase Reaction Kinetics
Luu Tan-Phong (1), Darabiha Nasser (1), Fiorina Benoît (1)	440964	A parametric study of the optimization process applied to virtual schemes	Gas-Phase Reaction Kinetics
Ren Xuan (1), Li Yang (1)	436177	A Theoretical Study on the Combustion Kinetics of Monomethylhydrazine: Systematic Calculation of H-Atom Abstraction	Gas-Phase Reaction Kinetics
Wildenberg Alina (1), Döntgen Malte (1), Nolte Adrian (1), Heufer Karl Alexander (1)	436243	Acetone pyrolysis and infrared spectroscopy	Gas-Phase Reaction Kinetics
Girhe Sanket (1), Snackers Alexandra (1), Lehmann Terence (1), Loffredo Francesca (1), Glaznev Roman (1), Beeckmann Joachim (1), Pitsch Heinz (1)	436564	Ammonia/Hydrogen Combustion: Comprehensive Quantitative Evaluation of Chemical Kinetic Mechanisms and Improvement	Gas-Phase Reaction Kinetics
Brackmann Christian (1), Alekseev Vladimir A. (1), Liu Xin (1), Nilsson Elna J. K. (1)	440972	An experimental and detailed kinetic study of nitric oxide formation in ammonia/DME flames of variable composition	Gas-Phase Reaction Kinetics
Capriolo Gianluca (1), Issayev Gani, Zhu Xuren, Guiberti Thibault	435308	An experimental and modeling study of OH( $2\Sigma^+$ ) formation in NH <sub>3</sub> /H <sub>2</sub> counterflow flames.	Gas-Phase Reaction Kinetics
Gao Xiang, Tian Zhen-Yu (1), Zhang Ya-Ning	440938	An experimental and modeling study on the 1,3,5-trimethylbenzene oxidation at elevated pressure	Gas-Phase Reaction Kinetics
Lindner Fabian (1) (2), Braun-Unkhoff Marina (2), Naumann Clemens (2), Kathrotia Trupti (2), Methling Torsten (2), Köhler Markus (2), Riedel Uwe (3)	438523	An Experimental Speciation Study on the Pyrolysis and Oxidation of the Oxygenated Fuels DME, OME1, and OME2 in a Single-Pulse	Gas-Phase Reaction Kinetics

# Wednesday morning, room 3

## Laminar Flames

## Turbulent Flames

Authors	Poster number	Title	Topics
Hesse Raik (1), Glaznev Roman (1), Schwenzer Christian (1), Babushok Valeri (2), Linteris Gregory (2), Pitsch Heinz (1), Beeckmann Joachim (1)	440856	A Microgravity Flame Speed Study on Refrigerant Mixtures of 2,3,3,3-Tetrafluoropropene (R-1234yf) and Difluoromethane (R-32)	Laminar Flames
Jundie Chen (1), Lubrano Lavadera Marco (1) (2), Konnov Alexander (1)	434794	An experimental and modeling study on the laminar burning velocities of ammonia/oxygen/argon mixtures	Laminar Flames
Glaznev Roman (1), Hesse Raik (1), Schwenzer Christian (1), Girhe Sanket (1), Lehmann Terence (1), Pitsch Heinz (1), Beeckmann Joachim (1)	440921	Analysis of Radiation and Buoyancy Induced Uncertainty of Ammonia Flames	Laminar Flames
Domínguez-González Alba (1), Martínez-Ruiz Daniel (1), Sánchez Perez Antonio (2)	436568	Asymptotic and numerical descriptions of a quasi-planar lean hydrogen-air premixed circular flame	Laminar Flames
Daou Joel (1), Rajamanickam Prabakaran	440729	Asymptotic theory of thick reaction zone premixed flames in small-scale periodic flows	Laminar Flames
Fruzza Filippo (1), Chu Hongchao (2), Lamioni Rachele (1), Grenga Temistocle (2), Galletti Chiara (1), Pitsch Heinz (2)	440866	Characterization of flashback and blow-off limits of hydrogen/natural-gas premixed flames in slit burners	Laminar Flames
Mahmoudi Marwa (1), Belghiti Asmae (1), Diévar Pascal (1), Catoire Laurent (1)	436523	Effect of CO <sub>2</sub> dilution on the laminar burning velocity of premixed methane/air flame: Experimental and numerical study	Laminar Flames
Nicolas Alexander (1), Padhiary Abhijit (1), Zentgraf Florian (2), Dreizler Andreas (2), Peterson Brian (1)	441001	A Lagrangian view of flame-vortex interaction during turbulent side-wall quenching using high-speed LIF and PIV	Turbulent Flames
Millan-Merino Alejandro (1), Taileb Said, Tayyab Muhammad, Zhao Song, Boivin Pierre	438295	Asymptotic Equilibrium 1-step mechanism: Validation through turbulent flame cases	Turbulent Flames
Gokalp Iskender (1), Boncu Emre, Karaca Mehmet	441032	Characterization of a Partially Premixed Swirl Flame Burner using OpenFoam Simulations with a Global Chemical Kinetics Mechanism	Turbulent Flames
Solmaz Mehmet Burak (1), Arslan Halil (1), Pelit Mustafa (1), Uslu Sitki (2)	436870	Dynamic OH* Visualization of a Dual Side Inlet Ramjet Combustor	Turbulent Flames
Chu Hongchao (1), Berger Lukas (1), Gauding Michael (1), Pitsch Heinz (1)	436515	Effects of dilatation and turbulence on tangential strain rate of premixed hydrogen and iso-octane flames under engine conditions	Turbulent Flames

# Wednesday morning, room 4

## Low-Emission Combustion Technologies

Authors	Poster number	Title	Topics
Bioche Kévin (1), Bricteux Laurent (2), Blondeau Julien (3)	435537	Current discrepancies in the numerical modelling of NH <sub>3</sub> /H <sub>2</sub> /air combustion kinetics: effect on swirled burner large eddy simulations	Low-Emission Combustion Technologies
Philipp Marius (1), Schmitz Nico (1), Pfeifer Herbert (1)	437981	Development of a Low-Emission Combustion Concept for Hydrogen in Multi-Fuel-Burners	Low-Emission Combustion Technologies
D'Alessio Francesco (1), Lapenna Pasquale Eduardo (1), Creta Francesco (1)	435841	Direct numerical simulation of thermodynamically unstable lean NH <sub>3</sub> /H <sub>2</sub> -air flames	Low-Emission Combustion Technologies
Diepstraten Nick (1), Quan Reyes Diego (1), Ballatore Alessandro (2), Van Oijen Jeroen (2)	440908	DNS, LES and RANS modeling of argon-argon and hydrogen-argon mixing layers: Towards accurate modeling of hydrogen combustion	Low-Emission Combustion Technologies
Nemitallah Medhat (1), Abdelhalim Ahmed, Abdelhafez Ahmed	430752	Effect of combining stratification with hydrogen enrichment on the stability and structure of premixed CH <sub>4</sub> -air flames	Low-Emission Combustion Technologies
Lacour Corine (1), Torres Oscar (1), Lefebvre Franck (1), Honoré David (1), Houidi Sarra (2), Lebasle Olivier (2), Poirier Catherine (3)	439704	Effect of hydrogen addition on highly turbulent flames produced by industrial burners	Low-Emission Combustion Technologies
Höltkemeier-Horstmann Jacqueline (1), Som Athul (1) (2), Markus Detlev (1), Essmann Stefan (1)	436793	Effect of pre-chamber stoichiometric ratio on turbulent hot jet ignition of ultra-lean hydrogen/air mixtures	Low-Emission Combustion Technologies
Nardi Salvatore (1), Esposito Stefania (2), Berger Lukas (1), Cameron Florence (1), Yihua Ren (3), Feller Bernd (4), Pitsch Heinz (1)	440903	Effects of H <sub>2</sub> content and injection scheme on CH <sub>4</sub> -H <sub>2</sub> -air flames and pollutant formation in a swirled, radially multi-staged, multi-	Low-Emission Combustion Technologies
Li Mengdi (1) (2), Zhu Denghao (1), Fernandes Ravi (1), Moshhammer Kai (1)	436443	Experimental and kinetic modeling study of ammonia/ethane mixtures in a rapid compression machine and a jet-stirred reactor	Low-Emission Combustion Technologies
Du Yifan (1), Solène Berard (2), Glarborg Peter (1), Wu Hao (1)	437023	Experimental and kinetic modeling study of NO-reburning by simulated plastic pyrolysis gas	Low-Emission Combustion Technologies
Leicher Jörg (1), Biebl Marcel, Giese Anne, Görner Klaus	436074	Experimental and simulation investigations of the combustion of blends of ammonia with hydrogen and natural gas in industrial non-	Low-Emission Combustion Technologies

# Wednesday morning, room 5

## Fire Research

### Multi-Physics Phenomena

Authors	Poster number	Title	Topics
Mosiria Dickson (1), Varea Émilien, Patte-Rouland Béatrice, Coppalle Alexis	441269	A study of the burning behavior of wood cribs in a small-scale mechanically ventilated compartment	Fire Research
Saggese Chiara (1), Mehl Marco (2), Cuoci Alberto (2), Locaspi Andrea (2), Sun Wenyu (1)	439785	Application of detailed chemical kinetics to the numerical study of wildland and urban fuels combustion and emissions	Fire Research
Morrisset David (1), Schmidt Laura (1), Law Angus (1), Hadden Rory (1)	439675	CARBON MONOXIDE AND CARBON DIOXIDE GENERATION OF TIMBER DURING PYROLYSIS, FLAMING, AND CHAR OXIDATION	Fire Research
Ferraro Federica (1), Stagni Alessandro (2), Scholtissek Arne (1)	440671	Detailed-chemistry simulations and analysis of a partially premixed side-wall quenching flame diluted with a flame retardant	Fire Research
Montero Yessica (1), Mosiria Dickson (2), Sautet J.C. (2), Coppalle Alexis (2)	438143	Effect of fuel type on carbon monoxide and particle emissions in a small-scale mechanically ventilated compartment	Fire Research
Ben Zenou Julie (1), Vicquelin Ronan (1)	436718	Acceleration of premixed H <sub>2</sub> -Air-Steam Flames when accounting for thermal radiation	Multi-Physics Phenomena
Rakhi Rakhi (1), Günther Vivien (2), Franken Tim (1), Mauss Fabian (1)	440343	Dry reforming of methane over nickel: Development of a detailed surface reaction mechanism using thermodynamic analysis	Multi-Physics Phenomena
Collins Joshua (1), Padhiary Abhijit (1), Ojo Anthony O. (1), Escofet-Martin David (2), Peterson Brian (1)	440529	Effect of wall heat flux on flame temperature profiles during side-wall quenching using advanced diagnostics	Multi-Physics Phenomena
Zhang Fanggang (1), Wang Juan (1)	436329	Heterogeneous and homogeneous combustion of n-decane over Co <sub>3</sub> O <sub>4</sub> -based catalysts in a small-scale burner	Multi-Physics Phenomena
Wang Stéphane (1), Bechane Yacine (1) (2), Darabiha Nasser (1), Fiorina Benoît (1)	437511	Low-order modeling of the efficiency of flame ignition by Nanosecond Repetitively Pulsed discharges	Multi-Physics Phenomena

## Wednesday morning, room 6

# Detonation, Explosion, and Supersonic Combustion

## Spray, Droplet, and Supercritical Combustion

Authors	Poster number	Title	Topics
Mohammadkhani Amirhossein (1), Garan Niclas	440932	Applicability of a low-resolution URANS Simulation for Deflagration to Detonation Transition Prediction in a Pulse Detonation Combustor	Detonation, Explosion, and Supersonic Combustion
Fdida Nicolas (1), Le Pichon Thomas (1), Vincent-Randonnier Axel (2), Dorval Nelly (3), Brossard Christophe (3)	439959	Characterization of a kerosene liquid jet injected in a high temperature Mach 2 supersonic crossflow	Detonation, Explosion, and Supersonic Combustion
Alicherif Mhedine (1) (2), Chatelain Karl (1) (2), Rojas Chavez Samir (1) (2), Lacoste Deanna (1) (2)	435868	Evolution of the induction length within the cell cycle measured by simultaneous nitric oxide planar laser-induced fluorescence and soot-	Detonation, Explosion, and Supersonic Combustion
Oh Yoojin (1), Ahn Jeongwoo (1), Jeon Boram (1), Choi Myeung Hwan (1), Park Sungwoo (1)	441645	Experimental study of Detonation characteristics with orifice DDT device	Detonation, Explosion, and Supersonic Combustion
Cecere Donato (1), Giacomazzi Eugenio (1)	436660	3D-DNS of Supercritical CH <sub>4</sub> /O <sub>2</sub> /CO <sub>2</sub> Non-Premixed Turbulent Oxy-Combustion at 300 bar	Spray, Droplet, and Supercritical Combustion
Gokalp Iskender (1), Ece Hamdiye, Mutlu Nefise, Celik Gokhan, Ozcimen Didem, Bostyn Stephane	441047	A Comparative Study on the Hydrothermal Carbonization of Orange Pomace and Sewage Sludge	Spray, Droplet, and Supercritical Combustion
Paes Francisco Carlos, Privat Romain (1), Jaubert Jean-Noël (1), Sirjean Baptiste (2)	439756	A new model to predict thermodynamic properties of molecules and free-radicals; new horizons for the modelling of liquid oxidation and	Spray, Droplet, and Supercritical Combustion
Plácido Paulo (1), Alviso Dario (2), Dos Santos Rogério (1)	436346	A Reduced Chemical Kinetic Mechanism for Supercritical Combustion of Gasoline Surrogate/Ethanol Blends Using Real Gas	Spray, Droplet, and Supercritical Combustion
Both Ambrus (1), Rodriguez Marc (2), García-Tíscar Jorge (2), Broatch Alberto (2), Mira Daniel (1)	438555	Analysis of flame dynamics and lift-off of a n-heptane spray flame in a confined configuration using large-eddy simulations	Spray, Droplet, and Supercritical Combustion
Asrardel Mohamad (1), Poonawala Taha (1), Muelas Álvaro (1), Ballester Javier (1)	436043	Assessment of Experimental Artifacts in Evaporation Tests on Isolated, Suspended Droplets	Spray, Droplet, and Supercritical Combustion

# Wednesday morning, room 7

## Diagnostics

## Propulsion

Authors	Poster number	Title	Topics
Zheng Yutao (1), Hochgreb Simone (1), Weller Lee (2)	436103	3D flame surface characteristic measurement in turbulent Bunsen flames via scanning and orthogonal cross-planar techniques	Diagnostics
Brunzendorf Jens (1), Höltkemeier-Horstmann Jacqueline, Markus Detlev	440801	266 nm Laser-Induced Fluorescence Reference Spectra of Acetone and Other Tracers with Wavelength and Intensity Calibration	Diagnostics
Zigan Lars (1) (2), Ulrich Hannah, Koegl Matthias	440018	Advances in planar droplet sizing in sprays based on laser-induced fluorescence and Mie-scattering	Diagnostics
Ulrich Hannah (1) (2), Zigan Lars (1) (2)	436257	Characterization of a Dye Mixture for Two-Color Laser-Induced-Fluorescence Thermometry in Ethanol, Butanol and Water Droplets	Diagnostics
Chaudhary Avinash (1), Godard Gilles (2), Vieille Benoit (3), Barbe Fabrice (4), Keller Clément (5), Grisch Frédéric (6), Xavier Pradip (7)	438012	Characterization of manganese-activated magnesium fluorogermanate with regards to surface phosphor thermometry in	Diagnostics
Remiddi Arianna (1), Schintu Davide, Cavalieri Davide, Indelicato Giuseppe (1), Lapenna Pasquale Eduardo (1), Creta Francesco (1)	437316	A tabulated multi-physics numerical framework for thermal characterization in rocket combustion chambers	Propulsion
Lamioni Rachele (1), Mazzotta Luca (2), D'Alessio Francesco (3), Cerutti Matteo (4), Romano Christian (4), Creta Francesco (3), Borello Domenico (2),	439306	Ammonia to help decarbonization in gas turbine	Propulsion
Rajendram Soundararajan Preethi (1), Durox Daniel (1), Renaud Antoine (1), Candel Sébastien (1)	433496	An alternate method for measuring heat release rate fluctuations from technically premixed flames	Propulsion
Latour V éranika (1), Durox Daniel (1), Renaud Antoine (1), Candel Sébastien (1)	436110	An Experimental and Theoretical Study of Acoustically Weakly Transparent Injectors	Propulsion
Paniez Hugo (1), Magnes Herv é (1), Marragou Sylvain (1), Selle Laurent (1), Poinot Thierry (1), Schuller Thierry (1)	439952	Analysis of thermo-acoustic instabilities in dual swirled coaxial hydrogen injector	Propulsion
Ramalho Leite Caio (1), Br équigny Pierre (1), Bor ée Jacques (2), Foucher Fabrice (1)	440634	Cycle-to-cycle variation analysis in gasoline baseline port-fuel injection hydrogen-fueled spark-ignition engines at ultra-lean	Propulsion

## Wednesday morning, room 8

# Soot, Nanomaterials, and Large Molecules

Authors	Poster number	Title	Topics
Liu Weitao (1), Kronenburg Andreas (1), Kirchmann Jonas (1), Gärtner Jan Wilhelm (1)	436849	A study of two-equation soot models in laminar and turbulent non-premixed ethylene flames	Soot, Nanomaterials, and Large Molecules
Do Hong Quan (1), Ngo Linh Dan (1) (2), Carpentier Yvain (2), Mercier Xavier (1), Therssen Eric (1)	440844	Absolute soot volume fraction measurement by laser induced incandescence calibration in sooting turbulent diffusion flame	Soot, Nanomaterials, and Large Molecules
Arumapperuma Geveen (1), Attili Antonio (2)	440523	Analysis and modelling of PAHs in turbulent non-premixed sooting flames	Soot, Nanomaterials, and Large Molecules
Quadarella Erica (1), Guo Junjun (1), Im Hong G. (1)	440506	Assessment of multiple branches in flamelet-progress-variable model in turbulent nonpremixed sooting flames	Soot, Nanomaterials, and Large Molecules
Bauer Florian J. (1) (2), Braeuer Phillipp A. B. (1) (2), Wilke Marius W. R. (1), Faderl Sebastian R. (1), Grauer Samuel J. Grauer (2) (3), Will Stefan (1) (2)	437354	Broadband extinction and Raman spectroscopy measurements to investigate optical properties of soot particles in premixed flames	Soot, Nanomaterials, and Large Molecules
Do Hong Quan (1), Therssen Eric (1), Tran Luc-Sy (1), Sood Kanika (1), Giarracca-Mehl Lucia (2), Mercier Xavier (1)	440522	Characterization of the impact of ethanol on the formation of soot particles in gasoline turbulent diffusion flames	Soot, Nanomaterials, and Large Molecules
Giudici Clarissa (1), Serse Francesco (1), Nobili Andrea (1), Bracconi Mauro (1), Pelucchi Matteo (1), Maestri Matteo (1), Cuoci Alberto (1)	439978	Chemical kinetics of hydrocarbon pyrolysis for hydrogen and value-added materials production	Soot, Nanomaterials, and Large Molecules
Littin Mijail (1) (2), Yon Jérôme (1), Guillaume Lefevre (1), Fuentes Andrés (2), Mazur Marek (1)	436461	Coupling Extinction and Angular Static Light Scattering measurements for the characterization (2D) of soot nanoparticles in	Soot, Nanomaterials, and Large Molecules
Guillaume Lefevre (1), Littin Mijail (1), Mazur Marek (1), Yon Jérôme (1)	436412	Development of a multi-wavelength optical cavity embeddable on UAV for the characterization of soot particles in smoke plumes during	Soot, Nanomaterials, and Large Molecules

# Wednesday morning, room 9

## Numerical Combustion

Authors	Poster number	Title	Topics
Rasspe-Lange Lukas (1), Latz Filip (1), Solbach Florian (1), Hemprich Carl (2), Roskosch Dennis (2), Leonhard Kai (1)	440975	A Computer-Aided Molecular Design Approach for Safe and Sustainable Refrigerants and Fire Extinguishing Agents	Numerical Combustion
Un Tin-Hang (1), Navarro-Martinez Salvador (1)	440905	A High-order Compressible Eulerian Stochastic Fields Solver with Adaptive Mesh Refinement	Numerical Combustion
Savarese Matteo (1) (2), Giuntini Lorenzo (3), Malpica Galassi Riccardo (1), Iavarone Salvatore (1), Parente Alessandro (1)	438085	A joint Uncertainty Quantification and Chemical Reactor Network framework for the robust design of innovative ammonia combustion	Numerical Combustion
Andres Lopez Jose Luis (1), Consalvi Jean-Louis (2), Zhao Song (3), Coraggio Giovanni (4), Said Fouad (4), Boivin Pierre (1)	440924	A large scale industrial furnace Lattice-Boltzmann study	Numerical Combustion
Rekkas-Ventiris Georgios (1), Duarte Alfredo (2), Deak Nicholas (2), Kincaid Nicholas (3), Pepiot Perrine (3), Bisetti Fabrizio (2), Bellemans Aurélie (1)	440532	A novel machine-learning based lumping approach for the reduction of large kinetics mechanism for plasma-assisted combustion	Numerical Combustion
Stempka Jakub (1), Tyliszczak Artur (1)	441039	A numerical study on flame control in triangular jets by means of axial velocity forcing	Numerical Combustion
Guan Wei (1) (2), Abdelsamie Abouelmagd (1), Chi Cheng (1), He Zhixia (2), Thévenin Dominique (1)	435701	A reduced chemical kinetic mechanism for ammonia/dimethyl-ether combustion	Numerical Combustion
Castellanos Luisa (1) (2) (3), Freitas Rodolfo (2) (3), Parente Alessandro (2) (3), Contino Francesco (1)	436023	A time-lag autoencoder reduced-order model to predict combustion chemical kinetics	Numerical Combustion
Gosset Antoine (1) (2), Suarez Jimmy (1) (2), Courtiaud Sébastien (1), Selle Laurent (2)	435998	An integral model for the numerical computations of aluminum flames	Numerical Combustion

# Wednesday afternoon, room 1

## Low-Emission Combustion Technologies

Authors	Poster number	Title	Topics
Fotiadis Kyriakos (1), Asimakopoulou Akrivi (1), Baltzopoulou Penelope, Kastrinaki Georgia, Koutsonikolas Dimitris (1), Karagiannakis George (1),	440954	Experimental Characterization of a Novel Foam Burner Design for the Low-Excess Enthalpy Combustion of Very Lean Syngas Mixtures	Low-Emission Combustion Technologies
Meynet Nicolas (1), Grandin Guy-Alexandre (2), Gobin Carole (3), Lefebvre Franck (4), Honoré David (5)	435722	Experimental characterization of hydrogen impact on the flame structure and NOx emissions inside a semi-industrial furnace	Low-Emission Combustion Technologies
Palomeque Santiago Rubén (1), Rubio Rubio Mariano (1), Sánchez Sanz Mario (1)	435755	Experimental evidence of the multiplicity of stationary solutions in ultra-lean hydrogen flames	Low-Emission Combustion Technologies
Ditaranto Mario (1), Saanum Inge (1)	433753	Experimental investigation of high pressure combustion of decomposed ammonia blends	Low-Emission Combustion Technologies
Spano Sara (1), Savarese Matteo, Parente Alessandro, Contino Francesco, Jeanmart Hervé	440533	Experimental investigation of oxy-fuel combustion in a HCCI engine	Low-Emission Combustion Technologies
Sankowski Lukas (1), Wünning Christopher (1), Schmitz Nico (1), Pfeifer Herbert (1)	436613	Experimental investigations of a prototype high-velocity burner in flame and flameless operation for different H <sub>2</sub> -admixtures to natural	Low-Emission Combustion Technologies
Guiberteau Clément (1) (2), Honoré David (1), Marcano Niomar (2), Cessou Armelle (1), Tsiava Rémi (2)	441104	Experimental study of the progressive decarbonation of oxycombustion from methane to hydrogen	Low-Emission Combustion Technologies
Ezendeeva Diana (1), Al Hadi Zeinab (1), Tang Hao (1), Dally Bassam (1), Magnotti Gaetano (1)	441015	Flame structure of partially cracked ammonia stabilized over a bluff-body burner	Low-Emission Combustion Technologies
Pacheco Gonçalo (1), Coelho Pedro (1), Lorena Margarida (2), Mendes Miguel (1)	437336	Fuel-flexible H <sub>2</sub> /Natural gas burner for industrial systems	Low-Emission Combustion Technologies
Bauer Esra (1), Kaiser Sebastian A. (1)	440753	Ignition and combustion characteristics of OME <sub>3-5</sub> and n-dodecane investigated via multispectral imaging in an optical compression-	Low-Emission Combustion Technologies

# Wednesday afternoon, room 2

## Gas-Phase Reaction Kinetics

Authors	Poster number	Title	Topics
Le Boursicaud Marc (1), Zhao Song (1), Consalvi Jean-Louis (2), Boivin Pierre (1)	432342	An improved model for hazardous hydrogen ignition prediction	Gas-Phase Reaction Kinetics
Citrangolo Destro Fabiola (1), Fournet Rene (1), Warth Valérie (1), Glaude Pierre-Alexandre (1), Sirjean Baptiste (1), Bounaceur Roda	433794	Automatization of theoretical kinetic data generation for tabulated TS models building	Gas-Phase Reaction Kinetics
Darido Joseph (1), Bounaceur Roda (2), Le Dreff Céline (3), Battin-Leclerc Frédérique (2)	436525	CFD study of a domestic wood heating appliance with simplified chemistry	Gas-Phase Reaction Kinetics
Dewerth Mats-Ole (1), Gonchikzhapov Munko (1), Kasper Tina (1)	440132	Combustion of phosphine: A comparison of experimental data and simulation	Gas-Phase Reaction Kinetics
Morsch Philipp (1), Heufer Karl Alexander (1)	435733	Comparative experimental study of the C2 to C5 carboxylic acids – neat and in mixture with ethylene	Gas-Phase Reaction Kinetics
Do Hong-Quan, Lefort Benoîte (1), Serinyel Zeynep (2) (3), Le Moyne Luis (4), Dayma Guillaume (2) (3)	437904	Comparative study of the high-temperature autoignition of cyclopentane and tetrahydrofuran	Gas-Phase Reaction Kinetics
Kovács Márton (1), Schuszter Henrik (1), Papp Máté (1), Zsély István Gyula (1), Turányi Tamás (1)	437295	Comparison of Recent Acetone Combustion Mechanisms Based on Large Amount of Experimental Data	Gas-Phase Reaction Kinetics
Breuer Manuel (1), Heufer Karl Alexander (1)	436002	Consistent global modeling approach for the autoignition of linear alkanes	Gas-Phase Reaction Kinetics
Puri Amedeo (1), Dinelli Timoteo (1), Alessandro Pegurri (1), Stagni Alessandro (1)	440606	Data-driven, class-based optimization methodology for the kinetic modeling of oxymethylene ethers (OME1-4) combustion	Gas-Phase Reaction Kinetics
Sood Kanika (1), Gosselin Sylvie (1), Lizardo-Huerta Juan-Carlos (1), El Bakali Abderrahman (1), Seifali Abbasabadi Mehrdad (2), Decoensel Nathalie (2), M. O. (1), G. (1), T. (1)	440513	Detection of Oxygenated Aromatics in Atmospheric Anisole Flames	Gas-Phase Reaction Kinetics
Pegurri Alessandro (1), Dinelli Timoteo (1), Stagni Alessandro (1)	440540	Developing a compact kinetic model for dimethoxymethane (DMM) combustion through a novel chemical lumping method	Gas-Phase Reaction Kinetics
Veillet Roméo (1) (2), Venot Olivia (2), Bounaceur Roda (1), Glaude Pierre-Alexandre (1), Sirjean Baptiste (1)	439385	Development and extended validation of a C0-C2 reaction mechanism including nitrogen and sulfur combustion chemistry	Gas-Phase Reaction Kinetics

# Wednesday afternoon, room 3

## Laminar Flames

## Turbulent Flames

Authors	Poster number	Title	Topics
Muntean Victor (1), Flores-Montoya Enrique (1) (2), Martínez-Ruiz Daniel (1)	436100	Effect of heat losses on the thermoacoustic coupling regions of premixed flames in tubes	Laminar Flames
Flores-Montoya Enrique (1), Masset Pierre-Alexandre (2), Schuller Thierry (1), Selle Laurent (1)	436121	Effect of hydrogen enrichment on the flame stabilization in 3D printed metallic PMB	Laminar Flames
Sampath Ramgopal (1), Moeck Jonas (1)	441050	Effect of stratification on the combustion behavior and acoustic response of bluff body stabilized laminar ammonia hydrogen flames	Laminar Flames
Villenave Nicolas (1), Foucher Fabrice (1), Bréquigny Pierre (1), Chen Jyh-Yuan (2), Dibble Robert W. (2)	440267	Experimental and numerical investigation of laminar burning velocity from ultra-lean hydrogen/air flames	Laminar Flames
Gokalp Iskender (1), Kiyamaz Tahsin Berk, Gumruk Semra, Yazici Bora	441051	Experimental and Numerical Investigation on Spherically Expanding Laminar Natural Gas-Air Flames with Hydrogen Addition	Laminar Flames
Huo Yanan (1), Dias Véronique (1), Jeanmart Hervé (1)	436711	Experimental and Numerical Kinetic Study of OME1 and OME2 Combustion in Low-Pressure Laminar Flames	Laminar Flames
Delort Nicolas (1), Herbinet Olivier (1), Bounaceur Roda (1), Battin-Leclerc Frédérique (1)	435971	Experimental and numerical study of laminar burning velocity of neat oxygenated aromatics	Laminar Flames
Ghabi Ahlem (1), Escot Bocanegra Pablo, Robert Eric, Boushaki Toufik	435428	Effects of microsecond pulsed discharge plasma on biogas combustion: Stabilization, flame behavior, and pollutant emissions	Turbulent Flames
Eichhorn Lars (1), Sanders Dennis (2), Siwczak Niklas (3), Scharf Roland (3), Oehlert Karsten (2), Dinkelacker Friedrich (1)	440569	Experimental and numerical investigation of heat transfer within an H <sub>2</sub> -O <sub>2</sub> burner with flame-internal water evaporation	Turbulent Flames
Troiani Guido (1)	440742	Experimental dataset of H <sub>2</sub> /CH <sub>4</sub> -air Bunsen flames: interplay of intrinsic instabilities and turbulence.	Turbulent Flames
Coquin Victor (1), Vandiel Alexis, Godard Gilles, Taddeo Lucio, Cabot Gilles, Renou Bruno	436351	Experimental study of the influence of hydrogen addition on a turbulent partially premixed methane-air flame.	Turbulent Flames
Li Tao (1), Stellmann Simon (1), Geyer Dirk (2), Dreizler Andreas (1)	438407	Flame curvature and surface density of piloted premixed hydrogen/ammonia/nitrogen jet flames with increasing Karlovitz	Turbulent Flames

# Wednesday afternoon, room 4

## Gas-Phase Reaction Kinetics

Authors	Poster number	Title	Topics
Saadana Mohamed (1), Robin Vincent (1), Oueslati Hanen (1), Peyrichon Guillaume (1), Al Zayed Zeina (2), Batiot Dupeyrat Catherine (2), Preußker Matthias (1), Schmacka Jeannine (1), Heufer Karl Alexander (1)	437554	Development of a numerical modeling strategy for joint experimental/simulation analysis of plasma/catalysis interactions	Gas-Phase Reaction Kinetics
Smith Lewin Caroline (1), Herbinet Olivier (1), Battin-Lelcerc Frédérique (1), Garcia Gustavo (2), Arnoux Philippe (1), Tran Luc-Sy (3), Vanhove Guillaume (3), Wang Cong (1), Yang Mo (1), Yang Jiuzhong (2), Zhao Long (2), Wang Juan (1)	435763	Experimental and kinetic modeling study of EtOH+N <sub>2</sub> O as potential rocket propellants	Gas-Phase Reaction Kinetics
Shrestha Krishna Prasad (1), Eckart Sven (2), Giri Binod Raj (3), Kohl Emanuel (2), Mauss Fabian (4), Krause Hartmut (2)	435628	Experimental and Kinetic Modeling Study of Ozone-Initiated Oxidation of 1-Hexene in a Jet-Stirred Reactor Through GC-MS and	Gas-Phase Reaction Kinetics
Cenedese Giorgia (1) (2), Mohamed Ahmed (3) (4), Serinyel Zeynep (5) (6), Foucher Fabrice (7), Dayma Guillaume (5) (6), Curran Henry (3) (4)	441038	Experimental and Kinetic Study on Low Temperature Oxidation of n-Butylbenzene Initiated by n-Decane	Gas-Phase Reaction Kinetics
Minwegen Heiko (1), Breuer Manuel (1), Glorian Julien (2), Baschung Barbara (2), Heufer Karl Alexander (1)	439905	Experimental and modeling study of methyl tertiary-butyl ether and ethyl acetate – laminar burning velocity measurements	Gas-Phase Reaction Kinetics
Büttgen Rene (1), Maffei Luna Pratali (2), Caruso Stefano (2), Cislighi Gianmarco (2), Pelucchi Matteo (2), Heufer Karl Alexander (1)	440614	Experimental and modeling study on the ignition delay times of di-n-propyl and di-iso-propyl ethers in diluted mixtures	Gas-Phase Reaction Kinetics
Meziane Ismahane (1), Herbinet Olivier (1), Battin-Leclerc Frédérique (1)	436563	Experimental Determination of the Decomposition Rate Parameters of Amyl-Nitrite	Gas-Phase Reaction Kinetics
Methling Torsten (1), Kathrotia Trupti (1), Zinsmeister Julia (1), Richter Sandra (1), Melder Jens (1), Naumann Clemens (1), Oßwald Patrick (1), Köhler Markus (1)	440967	Exploring the reactivity of oxygenated aromatic hydrocarbons (OAHCs) in an RCM: Isomers of C <sub>7</sub> H <sub>8</sub> O investigated and compared	Gas-Phase Reaction Kinetics
Werner Fabienne (1) (2), Naumann Clemens, Braun-Unkhoff Marina, Kathrotia Trupti, Methling Torsten, Köhler Markus, Riedel Uwe	436242	First experimental study of the low-temperature oxidation of the three isomers of cresol	Gas-Phase Reaction Kinetics
Soukht Saraee Hossein (1), Hughes Kevin, Pourkashanian Mohamed	440528	Generation of Hybrid Chemistry Models for Jet Fuels by Optimisation Methods	Gas-Phase Reaction Kinetics
	440528	H-Abstraction Reactions in DME, DEE and OME1: Examining Correlations between Activity and Structure	Gas-Phase Reaction Kinetics
	435741	High-fidelity combustion properties modeling of aviation kerosene with the aid of surrogate construction and a simplified gas-phase	Gas-Phase Reaction Kinetics

# Wednesday afternoon, room 5

## Fire Research

Authors	Poster number	Title	Topics
Miao Helen (1), Chen Z, Huang Z	440998	Effect of Hydrogen on Flammability Limits of Ethane/Propane and Air Mixtures	Fire Research
Di Giorgio Florent (1), Galizzi Cédric (1), Kuhni Manuel (1)	439980	Experimental study of fire propagation along a vertical wall in a lab scale device	Fire Research
Abdulrahman Shehu (1), Cablé Axel, Chetehouna Khaled (1), Kadoche Maurice (2)	440944	Experimental study on the performance of a novel vacuum sprinkler system for application to cultural heritage buildings: a case study on the case of the Great Mosque of Cordoba	Fire Research
Xiong Gang (1), Barlow Robert (2), Zeng Dong (1), Wang Yi (1)	438086	Extinction of buoyant turbulent diffusion flames under reduced oxygen concentrations	Fire Research
Coppalle Alexis (1), Vahe Jonathan, Bourbigot Serge, Bensabath Tsilla, Tang Mingwei, Rogaume Thomas, Batiot Benjamin, Girardin Bertrand, Pignatelli-Bonifazi Paolo	440138	Fire RESistaNce of External Thermal Insulation Composite Systems	Fire Research
Wang Hui-Ying (1) (2), Acherar L (3), Coudour B (3), Garo Jp (4)	431783	Impact of Water Mist on Fire Extinguishment in Mechanically Ventilated Compartment as a Function of Inlet Vent Rate	Fire Research
Alasiri Abdulrahman (1) (2), Aravind B (1) (2), Lacoste Deanna (1) (2)	436497	Influence of acoustic network on the extinction of laminar conical flames	Fire Research
Junjunan Soleh (1), Robinet Antonin (1), Chetehouna Khaled (1), Cable Axel (2), Oger Antoine (3), Gascoin Nicolas (1), Bura Romie (4) (5)	440253	Influence of fuel height and ventilation speed on the behavior of an engine compartment pool fire	Fire Research
Snegirev Alexander (1), Merci Bart (1), Maragos Georgios (1)	436070	The effect of volatile oxidation kinetics on counterflow flame propagation over a combustible surface	Fire Research

## Wednesday afternoon, room 6

# Detonation, Explosion, and Supersonic Combustion

## Spray, Droplet, and Supercritical Combustion

Authors	Poster number	Title	Topics
Barnouin Provence (1), Bach Eric (2), Paschereit C. (3), Gutmark Ephraim (4), Bohon Myles (2)	440824	Extended Low-Order Model for Detonation Velocity Suppression in Rotating Detonation Combustors	Detonation, Explosion, and Supersonic Combustion
Wen Xiao (1), Shen Xiaobo, Fu Wenju, Liu Haifeng	436049	Flame acceleration, detonation limit and heat loss for hydrogen-oxygen mixture at cryogenic temperature of 77 K	Detonation, Explosion, and Supersonic Combustion
Su Jingyi (1), Zhang Huangwei (2), Chen Zheng (1)	440098	Head-on collision between a detonation and a shock wave in n-heptane/air mixtures with droplets	Detonation, Explosion, and Supersonic Combustion
Millan-Merino Alejandro (1), Taileb Said, Veiga-López Fernando, Melguizo-Gavilanes Josue, Boivin Pierre	438297	How to reduce detonation chemistry and preserve the cellular structure?	Detonation, Explosion, and Supersonic Combustion
Choi Myeung Hwan (1), Park Sungwoo (1), Koo Jaye (1)	441643	Breakup and Combustion Characteristics of Wall Collision Jet in Crossflow	Spray, Droplet, and Supercritical Combustion
Kapusta Łukasz Jan (1), Boruc Łukasz (1), Bachanek Jakub (1), Rogóż Rafał (1), Teodorczyk Andrzej (1)	440675	Droplet size distribution in low-pressure sprays formed by a two-hole injector under flash-boiling and cross-flow conditions	Spray, Droplet, and Supercritical Combustion
Kuvshinov Maxim (1), Lecordier Bertrand (2), Renou Bruno (3), Hochgreb Simone (4)	440915	Effect of Droplets on Propagation of Strained Premixed Laminar Flames	Spray, Droplet, and Supercritical Combustion
Parant Gaël (1), Zimmer Laurent (1), Richecoeur Franck (1)	437998	Effect of fuel properties on the stabilization of a monodisperse spray flame	Spray, Droplet, and Supercritical Combustion
Bao Hesheng (1), Van Oijen Jeroen (1), Somers Bart (1)	437193	Effect of turbulent mixing on ignition behavior of high-pressure spray	Spray, Droplet, and Supercritical Combustion
Wang Yu (1), Maes Noud (1), Bao Hesheng (1), Somers Bart (1)	436017	Evaluation of the ignition delay of fuel spray combustion using a two-stage Lagrangian model	Spray, Droplet, and Supercritical Combustion

# Wednesday afternoon, room 7

## Diagnostics

## Propulsion

Authors	Poster number	Title	Topics
Žvar Baškovič Urban (1), Seljak Tine (1), Katrasnik Tomaz (2)	441049	Closed-loop combustion control for internal combustion engines	Diagnostics
Iapaolo Francesca (1), Cozzi Fabio (1)	440869	Density gradient measurement of a premixed hydrogen-air flame with Background Oriented Schlieren technique	Diagnostics
Blaise Antoine (1), Buisson Quentin (1), Petit Sylvain (2), Xavier Pradip (1)	436038	Detection of multiple flame fronts using a disparity algorithm in a context of flame-cooling air interaction	Diagnostics
Sidiropoulos Evaggelos (1) (2), Seeger Thomas (1) (2), Meißner Christian (1) (2), Schneider Henrik (3), Dreizler Andreas (3)	436502	Determination of temperature profiles in turbulent pulverized solid fuel flames	Diagnostics
Braeuer Phillipp A. B. (1) (2), Schmidt Nikolas (1), Bauer Florian J. (1) (2), Will Stefan (1) (2)	440551	Determination of the gas temperature and relative gas composition in a premixed hydrogen flame by point-wise pure rotational Raman	Diagnostics
Patat Clément (1), Blaisot Jean-Bernard (1), Domingues Éric (1), Baillot Françoise (1)	441031	Dynamics of swirl-stabilised spray flames at various locations of a forced standing transverse acoustic field	Propulsion
Panthi Niraj (1), Alramadan Abdullah (2), Magnotti Gaetano (1)	440820	Effect of hydrogen addition on methane combustion in a heavy-duty optical engine	Propulsion
Volkov Konstantin (1), Gulevskis Arturas	439892	Emissions Control and Estimation of Engine Fuel Composition with Residual Gas Parameters	Propulsion
De Jesus Vieira Maria Clara (1), Sotton Julien (1), Bellenoue Marc (2), Strozzi Camille (2)	436510	Experimental characterization of ignition events in CVC-like conditions	Propulsion
Milea Andrei-Silviu (1), Perrier Aurélien (1) (2), Caceres Marcos (1), Vandel Alexis (1), Godard Gilles (1), Renard Fabien (3), Duchaine Patrick (4), Richard Stéphane (4)	439964	Experimental investigations of innovative Low-NOx Low-Soot injector concepts for the Spinning Combustion Technology	Propulsion
Wirtz Jonathan (1), Cuenot Benedicte (1) (2), Riber Eléonore (1)	437811	Fuel effect in a swirl-stabilized spray burner	Propulsion

## Wednesday afternoon, room 8

# Soot, Nanomaterials, and Large Molecules

Authors	Poster number	Title	Topics
Ogata Yuri (1), Franzelli Benedetta (1), Veynante Denis (1), Abdelsamie Abouelmagd (2), Thévenin Dominique (2), Fox Rodney (3)	436783	Direct Numerical Simulations of TiO <sub>2</sub> nanoparticles flame synthesis subjected to a homogeneous isotropic turbulent field	Soot, Nanomaterials, and Large Molecules
Littin Mijail (1) (2), Demarco Rodrigo (2), Escudero Felipe (2), Guillaume Lefevre (1), Yon Jérôme (1), Mazur Marek (1), Fuentes Andrés (2)	440673	Effects of soot coalescence process on a non-premixed Jet A-1 coflow flame using a sectional particle dynamics model	Soot, Nanomaterials, and Large Molecules
Kelesidis Georgios (1), Nagarkar Amogh (1), Trivanovic Una (1), Pratsinis Sotiris (1)	441045	Eliminating soot emissions from jet fuel combustion	Soot, Nanomaterials, and Large Molecules
Guy Geoffrey (1), Betrancourt Christopher (1), Franzelli Benedetta (1)	436735	Evolution of soot maturity and size in a laminar diffusion CH <sub>4</sub> /air flame using the two separated pulses LII method	Soot, Nanomaterials, and Large Molecules
Choudhari Aditya (1), Mulla Irfan (1)	440817	Experimental study on the influence of hydrogen addition on soot volume fraction in atmospheric laminar premixed flames	Soot, Nanomaterials, and Large Molecules
He Ruining (1), Li Yang (2)	436178	Experimental Study on the Pyrolysis and Soot Formation Characteristics of JP-10 Jet Fuel	Soot, Nanomaterials, and Large Molecules
Darvehi Pegah (1), Minutolo Patrizia, D'Anna Andrea, Commodo Mario	440923	Flame-Formed Carbon Nanoparticles for Sensing and Capacitive Applications	Soot, Nanomaterials, and Large Molecules
Coudray Alexandre, Riber Eléonore (1), Cuenot Benedicte (1)	436800	Hybrid approach for modelling Polycyclic Aromatic Hydrocarbons (PAHs) in Large Eddy Simulation (LES) of soot emission	Soot, Nanomaterials, and Large Molecules
Nanjaiah Monika (1), Wollny Patrick (1), Cwiek Piotr (1), Lalanne Matthieu R (2), Cohen Maayan (3), Horodi Noam (2), Rahinov Igor (2), Wlokas Irenaeus (1) (4)	440657	Impact of H <sub>2</sub> /O <sub>2</sub> Flame Equivalence Ratio on the Early Particle Formation and Evolution	Soot, Nanomaterials, and Large Molecules

# Wednesday afternoon, room 9

## Numerical Combustion

Authors	Poster number	Title	Topics
Trinca Antonio (1), Patrizi Daniele (1), Vilardi Giorgio (1)	440988	CFD modelling of the gasification of vegetable oils in a flameless combustion chamber	Numerical Combustion
Ciesielska Agnieszka (1), Klimanek Adam (2)	440899	Comparison of the standard EDC and PaSR EDC models for modeling of MILD combustion of H <sub>2</sub> in O <sub>2</sub> -H <sub>2</sub> O mixtures	Numerical Combustion
Vivenzo Marco (1), Kaddar Driss (2), Grenga Temistocle (1), Ferraro Federica (2), Hasse Christian (2), Pitsch Heinz (1)	440791	Development and evaluation of an approach to accelerate reaction kinetics evaluation in CPU-based CFD solvers through GPUs	Numerical Combustion
Procacci Alberto (1) (2), Renaud Antoine (3), Coussement Axel (1) (2), Parente Alessandro (1) (2)	439774	Development of the reduced-order model of a turbulent swirling flame for the detection of instabilities using non-linear modal analysis	Numerical Combustion
Gaucherand Jessica (1) (2), Coulon Victor (2), Poinot Thierry (2) (3), Netzer Corinna (4), Løvås Terese (4), Laera Davide (2) (5)	436050	Direct numerical simulation of premixed turbulent ammonia/hydrogen-air flames.	Numerical Combustion
Karpowski T. Jeremy P. (1), Ferraro Federica (1), Scholtissek Arne (1), Hasse Christian (1)	440835	Effect of domain decomposition on neural network performance for chemistry closure	Numerical Combustion
Gossel Lisanne (1), Fricke Mathis (1), Bothe Dieter (1)	439713	Enhanced Modeling of Back Mixing in Chemical Reactor Networks	Numerical Combustion
Thakkar Kartikkumar (1), Sheshadri Sreedhara (1)	440855	Estimation of Wiebe Function Parameters using Artificial Neural Network for the Prediction of Combustion Characteristics of an	Numerical Combustion
Stock Antoine (1), Lartigue Ghislain (1), Moureau Vincent (1)	440928	Feature-based Adaptive Mesh Refinement of reactive flows using Principal Component Analysis	Numerical Combustion

# Thursday morning, room 1

## Low-Emission Combustion Technologies

Authors	Poster number	Title	Topics
Magnes Hervé (1), Marragou Sylvain (1), Amiard-Hudebine Gabriel (2), Selle Laurent (1), Poinsot Thierry (1), Freyst Eric (2), Schuller Thierry (1)	440854	Impact of Ignition Location on Flame Stabilization Above a Dual Swirl Hydrogen Air Injector	Low-Emission Combustion Technologies
Wiseman Scott (1), Tomlin Alison (1), Michelbach Christian (1), Li Hu (1)	435996	Influence of Advanced Biofuel Blending with Diesel on the Heat Release, Combustion and Gaseous Emissions Characteristics of a	Low-Emission Combustion Technologies
Wiseman Scott (1), Li Hu (1), Tomlin Alison (1)	435994	Influence of Blending Advanced Biofuel Mixtures with Diesel on Emissions from a Compression Ignition Engine	Low-Emission Combustion Technologies
Gong Yu (1), Liu Weiyue (1), Snape Nikhil (1), Marquis Andrew J (1), Jones William P (1)	436869	LES of Hydrogen Enriched Methane Jet Flame in Cross Flow	Low-Emission Combustion Technologies
Hickey Brendan (1), Srivastava Shubham (2), Smirnov Valeriy (2), Zijlstra Gerrit (3), Mcdonell Vincent (1)	440857	Low Emissions Domestic Water Heating Using 100% Hydrogen	Low-Emission Combustion Technologies
Brachi Paola (1), Coppola Antonio (1), Del Duca Vincenzo (2), Salatino Piero (1) (2), Scala Fabrizio (1) (2)	440654	Machine Learning Prediction of Torrefaction and Pyrolysis Performance of Lignocellulosic Biomass	Low-Emission Combustion Technologies
Kumar Kundan (1), Mulla Irfan (1)	440603	Mixing field measurement in a non-reacting flow of a model Rich-Quench-Lean combustor	Low-Emission Combustion Technologies
Bjørgen Karl Oskar Pires (1), Borsheim Nina, Løvås Terese	440664	Momentum flux measurements of liquid injection of ammonia using a GDI injector	Low-Emission Combustion Technologies
Eckart Sven (1), Raschke Lars (1), Krause Hartmut (1)	438696	Natural gas-hydrogen flames under the influence of changing wall conditions: Numerical and experimental investigation in a pilot plant	Low-Emission Combustion Technologies
Dupuy anthony <anthony.dupuy@cerfacs.fr>, Rabello De Castro ricardo <ricardo.rabello@univ-orleans.fr> (1), Brequigny pierre <pierre.brequigny@univ-	439737	Comparison of combustion process of ammonia internal combustion engine: Premixed and RCCI combustion	Low-Emission Combustion Technologies
Vigarinho De Campos Daniel (1), Guiberti Thibault F. (1), Lacoste Deanna A. (1)	436612	NOx Emissions in Stratified Dual-Swirl Ammonia-Hydrogen Flames	Low-Emission Combustion Technologies
Ban Marko (1), Jurić Filip (2), Baleta Jakov (3), Vujanović Milan (2)	441017	Numerical Assessment of Ammonia/Methane Combustion in Burners Using Tabulated Laminar Flame Speed and Autoignition	Low-Emission Combustion Technologies

## Thursday morning, room 2

# Gas-Phase Reaction Kinetics

Authors	Poster number	Title	Topics
Nativel Damien (1), Marvin Sens (2), Irenäus Wlokas (2), Fikri Mustapha (1), Kempf Andreas M. (2), Schulz Christof (1)	439989	Homogeneous and inhomogeneous ignition of propane in shock tube: Experiments, modeling, and simulations	Gas-Phase Reaction Kinetics
Nolte Adrian (1), Heufer Karl Alexander (1)	436239	Ignition delay time measurements and detailed kinetic modeling of 2,2-dimethoxypropane	Gas-Phase Reaction Kinetics
Aljohani Khalid (1), Abd El-Sabor Mohamed A., Lu Haitao, Curran Henry, Sarathy Mani, Farooq Aamir	440960	Impact of Ethanol Additions on Gasoline Autoignition: High-to-Low Temperature Regimes and Elevated Pressures	Gas-Phase Reaction Kinetics
Martin Passad (1), Nilsson Elna J. K. (1), Ryde Frej (1), Alekseev Vladimir (1)	440562	Important Pathways for Premixed n-heptane Extinction	Gas-Phase Reaction Kinetics
Zhai Yitong (1), Samaras Vasilios G. (1), Sarathy S. Mani (1)	440814	Isoprene autoxidation and aerosol formation: new sights from cool-flame region to the atmosphere	Gas-Phase Reaction Kinetics
Benrabah Ryma (1), Le Minh Duy (1), Fages Timothée (1), Veillet Roméo (1) (2), Fournet Rene (1), Glaude Pierre-Alexandre (1), Sirjean Baptiste (1)	438034	Kinetic modeling of the impact of n-decane aging on its combustion characteristics	Gas-Phase Reaction Kinetics
Roux Boris (1), Simon Y (2), Poëuf S (3), Bouchez M (3), Lechevallier M (3), Glaude Pierre-Alexandre (2), Sirjean Baptiste (2), Fournet Rene (2)	437208	Kinetic study of the pyrolysis of cumene	Gas-Phase Reaction Kinetics
Döntgen Malte (1), Wildenberg Alina (1), Heufer K. Alexander (1)	433437	Laser Absorption Shock Tube Measurements of C1 to C4 n-Alkyl Formate Pyrolysis	Gas-Phase Reaction Kinetics
Kopp Wassja A. (1), Schmalz Felix (1), Wildenberg Alina (2), Heufer Karl Alexander (2), Leonhard Kai (1)	441002	Low-Temperature Oxidation of Dioxolane: Pathways and Rate Constants from In Silico Methods	Gas-Phase Reaction Kinetics
Horváth László (1), Dong Shijun (2), Saggese Chiara (3), Papp Máté (4), Pitz William J. (5), Curran Henry J. (6), Turányi Tamás (4), Nagy Tibor (7)	443080	Mechanism reduction-assisted kinetic parameter optimization for the n-pentanol chemistry of the NUIGMech multifuel combustion	Gas-Phase Reaction Kinetics
Buntin Denis (1), Tartakovsky Leonid (1) (2)	441027	Multi-stage heat release of polyoxymethylene dimethyl ether 1 (PODE1): Insights into ultra-lean low-temperature auto-ignition	Gas-Phase Reaction Kinetics
Caravaca-Vilchez Jesús (1), Preußker Matthias (1), Heufer Alexander (1)	436248	n-Butane oxidation: Experimental and modeling speciation study in a rapid compression machine	Gas-Phase Reaction Kinetics

# Thursday morning, room 3

## Laminar Flames

## Turbulent Flames

Authors	Poster number	Title	Topics
Bréquigny Pierre (1), Soule Adnane (2), Mounaïm-Rousselle Christine (1), Dayma Guillaume (2), Halter Fabien (2)	431574	Experimental and numerical study of the laminar burning velocity of biogas-ammonia-air premixed flames	Laminar Flames
Schlinger Paul (1), Jazkow Waldemar (1), Weis Christof (1), Habisreuther Peter (1), Stelzner Björn (1), Trimis Dimosthenis (1)	440679	Experimental determination of the laminar burning velocity of methane-oxygen-flames stabilized with cylindrical burners at various	Laminar Flames
Kdouh Doha (1), Gosselin Sylvie (1), Lamoureux Nathalie (1), Sood Kanika (1), Do Hong Quan (1), Gasnot Laurent (1), Tran Luc-Sy (1)	440813	Experimental study of the impact of oxygenated fuels on pollutant emissions in flame conditions	Laminar Flames
Mansouri Zakaria (1), Eastwick Carol (1)	440885	Exploring the trapped vortex concept for laminar H <sub>2</sub> -air flames at micro-scale to enable ultra-lean combustion	Laminar Flames
Fruzza Filippo (1), Lamioni Rachele (1), Mariotti Alessandro (1), Salvetti Maria Vittoria (1), Galletti Chiara (1)	440865	Flashback phenomenon in hydrogen-fueled perforated burners: quantification of uncertainties and sensitivity to parameters	Laminar Flames
Kavari Hamid (1), Lapenna Pasquale Eduardo (1), Mira Daniel (2), Creta Francesco (1)	440563	Flow features induced by thermo-diffusive instability: comparison between two-dimensional and three-dimensional flames	Laminar Flames
Glaznev roman <r.glaznev@itv.rwth-aachen.de> (1), Halter fabien <fabien.halter@cnsr-orleans.fr> (2) (3), Schwenzer christian	441025	Experimental Laminar Flame Speed Study of Nitrogen-diluted Diethoxymethane/Oxidizer Mixtures under Microgravity	Laminar Flames
Wawrzak Agnieszka (1), Boguslawski Andrzej (1), Tyliczszak Artur (1)	441023	Hydrogen flame lifting due to global instability triggered by annular counterflow	Turbulent Flames
Ahmed Umair (1), Chakraborty Nilanjan (1), Klein Markus (2)	438862	Influence of the variation in laminar burning velocity to friction velocity ratio on turbulent premixed flame-wall interaction within turbulent	Turbulent Flames
Gokalp Iskender (1), Guleryuz Dilay, Allouis Christophe	441024	Investigations on Lean Turbulent Premixed Hydrogenated Flames	Turbulent Flames
Zitouni Seif (1), Bréquigny Pierre, Mounaïm-Rousselle Christine	440570	Local Flame Speed and Curvature of Turbulent Premixed Ammonia and Blends with Methane and Hydrogen flames in a Spherically	Turbulent Flames
Tang Hao (1), Hadi Zeinab, Guiberti Thibault, Magnotti Gaetano (1)	440992	Local flame structure analysis in H <sub>2</sub> /N <sub>2</sub> -air bluff-body flames with multi-mode combustion characteristics	Turbulent Flames

# Thursday morning, room 4

## Laminar Flames

Authors	Poster number	Title	Topics
Daou Joel (1), Rajamanickam Prabakaran, Kelly Aiden	440728	Formation of diffusion flame streets due to Taylor dispersion	Laminar Flames
Balossier Yves (1), Boivin Pierre (1), Almarcha Christophe (2)	440815	Hydrogen Flame shape within Hele-Shaw cell	Laminar Flames
Faghanpourganji Hamed (1), Kornilov Viktor (1), Van Oijen Jeroen (1), Lopez Arteaga Ines (1)	440939	Identification of thermoacoustic behavior of multiple perforation pattern via Transfer Function composition approach	Laminar Flames
Eckart Sven (1), Shrestha Krishna P. (2), Giri Binod R. (3), Kohl Emanuel (1), Krause Hartmut (1)	438693	Insight into premixed diethoxymethane flames: laminar burning velocities, temperatures and emissions behavior	Laminar Flames
Lehmann Terence (1), Berger Lukas (1), Gauding Michael (1), Girhe Sanket (1), Creta Francesco (2), Dally Bassam (3), Pitsch Heinz (1)	436383	Intrinsic Flame Instabilities in Laminar Ammonia/Hydrogen Flames: Effects of Hydrogen-Fraction and Equivalence Ratio	Laminar Flames
Lamioni Rachele (1), Lapenna Pasquale Eduardo (2), Creta Francesco (2), Galletti Chiara (1)	439131	Intrinsic flame instabilities in perforated burners: numerical simulations of interacting flames	Laminar Flames
Schneider Michael (1), Bauer Maurus (1), Habisreuther Peter (2), Weis Christof (1), Stelzner Björn (3), Trimis Dimosthenis (3)	440670	Investigation of the laminar burning velocity of premixed H <sub>2</sub> -air flames highly diluted with exhaust gas using the heat-flux burner	Laminar Flames
Neeraj Tanya (1), Khodsiani Mohammadhassan (2), Hosseini Seyed Ali (3) (4), Fond Benoit (2) (5), Namdar Reza (6), Varnik Fatholah (6), Thevenin Dominique (4)	436842	Modeling premixed flame front propagation in packed bed geometries	Laminar Flames
Cheng Xinwei (1), Scribano Gianfranco (2)	433803	Modelling of soot and NO emissions for methane-air and methane-ethanol co-flow laminar diffusion flames with ozone addition	Laminar Flames
Poncet Sandy (1), Colin Olivier (1), Truffin Karine (1), Mehl Cédric (1)	439922	Modified diffusion model adapted to non-unity Lewis number mixtures for low flame stretch using thickened flame model	Laminar Flames
Cerutti Quentin, Ribert Guillaume (1), Domingo Pascale	443174	Numerical simulation of laminar hydrogen/air flames	Laminar Flames
Ustun Cihat Emre (1), Valera Medina Agustin (2), Paykani Amin (1)	435890	Prediction of Laminar Burning Velocity of NH <sub>3</sub> /H <sub>2</sub> /air Mixtures Using Machine Learning	Laminar Flames
Daou Joel (1), Rajamanickam Prabakaran	440726	Premixed flame stability under shear-enhanced diffusion: effect of the flow direction	Laminar Flames

# Thursday morning, room 5

## Solid Fuel Combustion

Authors	Poster number	Title	Topics
Finke Jannis (1), Sewerin Fabian (1)	436821	A combined PBE-CFD approach for modelling the formation and dispersion of oxide smoke in homogeneous aluminum combustors	Solid Fuel Combustion
Wartha Eva-Maria (1), Bösenhofer Markus (1) (2), Matthias Kiss (2), Harasek Michael (1)	436067	Analysis of Coal Moderate or Intense Low-Oxygen Dilution (MILD) Combustion	Solid Fuel Combustion
Bernigaud Pierre (1), Davidenko Dmitry (1), Catoire Laurent (2)	436748	Analysis of Heterogeneous Combustion Processes in AP/HTPB Composite Propellants with Detailed Kinetics	Solid Fuel Combustion
Dorscht Maximilian (1) (2), Koschnick Konrad (1) (2), Böhm Benjamin (2), Dreizler Andreas (2), Geyer Dirk (1)	436119	Atomic Analysis of Iron Particles and Their Oxides by Laser Induced Breakdown Spectroscopy	Solid Fuel Combustion
Feliz Guillermina, Acevedo Pahola, Lacour Corine (1), Coppalle Alexis	440590	Biomass degradation under a controlled heat flux	Solid Fuel Combustion
Prime H. (1), Shoshyn Y. (1), Hermanns R.T.E. (1), De Goey L.H.P. (1)	437136	Characterising Iron Powder Combustion using an Inverted Bunsen Flame	Solid Fuel Combustion
Dübal Sören (1), Berkel Leon Loni (2), Debiagi Paulo (2), Nicolai Hendrik (2), Hasse Christian (2), Hartl Sandra (1)	440612	Chemical reactor network modeling of a laboratory-scale solid fuel combustion chamber	Solid Fuel Combustion
Salcedo-Puerto Orlando (1), Mendoza-Martinez Clara (1), Vakkilainen Esa (1)	436635	Cocoa production chain residues: Assessment of thermochemical valorization routes for biofuels production	Solid Fuel Combustion
Śliz Maciej (1), Czerwińska Klaudia (1), Wilk Małgorzata	440031	Combustion performance of hydrochars from the hydrothermal co-carbonization of sewage sludge and organic waste	Solid Fuel Combustion
Seeger Jan (1), Grunwald Jan (2), Taschek Marco (1), Apfelbacher Andreas (3)	436604	Comparison of the emission characteristics of a CI engine fueled by thermo-catalytic reformed bio Diesel with respect to reference Diesel	Solid Fuel Combustion
Tóth Csenge Emese (1), Muránszky Gábor (2), Nagy Gábor (1)	440889	The Investigation of Waste Tire Pyrolysis Under Laboratory Conditions	Solid Fuel Combustion

## Thursday morning, room 6

# Detonation, Explosion, and Supersonic Combustion

# Spray, Droplet, and Supercritical Combustion

Authors	Poster number	Title	Topics
Zambare Anand (1), D. Narasimhamurthy Vagesh (1), Skjold Trygve (2), Hisken Helene (3)	436409	Hydrogen Explosion Modeling using Porosity/Distributed Resistance (PDR) approach	Detonation, Explosion, and Supersonic Combustion
Cellier Antony (1), Duchaine Florent (1), Poinot Thierry (1) (2), Okyay Gizem (3), Leyko Matthieu (3), Pallud Maxime (4)	437290	Large Eddy Simulation of lithium-ion vent gas explosions: effect of wall heat loss on tulip flame formation and propagation	Detonation, Explosion, and Supersonic Combustion
Vanbersel Benjamin (1), Meziat Ramirez Francis Adrian (1) (2), Vermorel Olivier (1), Jaravel Thomas (1), Douasbin Quentin (1), Dounia Omar (1)	435801	Large Eddy Simulations of a H <sub>2</sub> -air explosion in a obstacle-laden chamber using Adaptive Mesh Refinement.	Detonation, Explosion, and Supersonic Combustion
Ezekwesili Roseline (1), Bellenoue Marc (2), Strozzi Camille (3), Bohon Myles (1)	436955	Numerical investigation of the combustion modes resulting from the auto-ignition of hot spots in hydrogen air mixtures	Detonation, Explosion, and Supersonic Combustion
Poonawala Taha (1), Asrardel Mohamad (2), Muelas Álvaro (2), Ballester Javier (2)	436039	Evaporation of Suspended Heavy Oil/1-Pentanol Droplets in Flame-like Conditions	Spray, Droplet, and Supercritical Combustion
Chazelle Téodor (1), Duhem-Duvilla Louis (1), Lespinasse Florian (1), Idlahcen Saïd (1), Blaisot Jean-Bernard (1), Barviau Benoit (1), Ribert Guillaume (1), Gauthier Yvan (1), Nohel Fanny (1), Gauthier Yvan (1)	437321	Experimental investigation of supercritical injection	Spray, Droplet, and Supercritical Combustion
Pecquery François (1), Moureau Vincent (1), Cailler Maud (2), Merlin Cindy (3)	441028	FIMF: A filtered-interface multi-fluid approach coupled with the conservative level set method for LES of two-phase heat transfer	Spray, Droplet, and Supercritical Combustion
Ben Houidi Moez (1), Wu Hao (1), Aljohani Bassam (1) (2), Du Jianguo (1), Mohan Balaji (3), Alramadan Abdullah (3), Cenker Emre (3), Roberts William L. (1)	440593	Hydrogen jet characterization using conventional GDI injectors	Spray, Droplet, and Supercritical Combustion
Gonchikzhapov Munko (1), Kasper Tina (1)	439953	Influence 2-ethylhexanoic acid on flame structure of an ethanol SpraySyn flame	Spray, Droplet, and Supercritical Combustion
Klevansky Benjamin Wulf (1), Bauer Florian J. (1) (2), Will Stefan (1) (2)	440556	Investigating the dependency of the LIF/Mie droplet sizing method for different tracer dyes regarding polarization and detection angle	Spray, Droplet, and Supercritical Combustion

# Thursday morning, room 7

## Diagnostics

## Propulsion

Authors	Poster number	Title	Topics
Aldanawi Mostafa (1), Legros Sylvain, Barviau Benoit (1), Grisch Frédéric (1)	440502	Development of fs-LIF for the measurement of NO concentration in non-reactive and reactive flows	Diagnostics
Lin Po Hung (1), Li Yueh-Heng (1), Huang Chao-Wei (1)	441000	Effects of N <sub>2</sub> O decomposition on soot generation of ethylene/air/nitrogen inverse diffusion flames by detecting LII signals	Diagnostics
Khodsiani Mohammadhassan (1), Beyrau Frank (1), Fond Benoît (1) (2)	437338	Flame-particle interaction inside a packed bed of cooled particles	Diagnostics
Zhu Denghao (1), Parambath Hariprasad (1), Nadiri Solmaz (1), Qu Zhechao (1), Shu Bo (1), Fernandes Ravi (1), Agarwal Sumit (2)	435376	Ignition delay time and laser absorption measurements of CO during LNG/H <sub>2</sub> oxidation in a shock tube	Diagnostics
Richardet Lucas (1) (2), Bardi Michele (1), Lecompte Matthieu (1), Brocchetto Vincent (1), De Persis Stephanie (2)	440864	Innovative experimental set up to characterize Lithium-ion batteries thermal runaway	Diagnostics
Matino Alessandra (1), Bellenoue Marc, Sotton Julien, Viguier Christophe, Richard Stéphane	437463	High frequency investigation of helicopter engine ignition kernel properties for varying initial pressure and mixture.	Propulsion
Decker thomas <thomas.decker@onera.fr> (1), Devillers robin <robin.devillers@onera.fr> (1), Gallier stany <stany.gallier@ariane.group> (2)	435604	Experimental visualization of rapid aluminum oxidation close to a solid-propellant burning surface	Propulsion
Lesaffre Thomas (1), Wirtz Jonathan (1), Riber Eléonore (1), Cuenot Benedicte (1)	436324	Impact of wall heat flux on the LBO prediction	Propulsion
Cottenot Camille (1), Bellenoue Marc (2), Batonneau Yann (3), Boust Bastien (4), Beauchet Romain (5)	440973	Influence of Pt/Al <sub>2</sub> O <sub>3</sub> catalyst heat treatment on its resistance toward highly concentrated hydrogen peroxide decomposition	Propulsion
Petit Sylvain (1) (2), Grisch Frédéric (2), Boukhalfa Mourad (2), Xavier Pradip (2)	436007	Investigation of the flame dynamics during flame - cooling air film - wall interaction processes by simultaneous PIV, OH-PLIF and	Propulsion
Un Tin-Hang (1), Navarro-Martinez Salvador (1)	440904	Large Eddy Simulation of a Lean Hydrogen Aeronautical Combustor	Propulsion
Bhairapurada Karthik (1), Millan-Merino Alejandro (1), Zhao Song (1), Denet Bruno (2), Boivin Pierre (1)	436016	Noise generation due to annihilation of Hydrogen Flames	Propulsion

## Thursday morning, room 8

# Soot, Nanomaterials, and Large Molecules

Authors	Poster number	Title	Topics
Jalain Renaud (1) (2), Bonnety Jérôme (1) (3), Matynia Alexis (1), Legros Guillaume (1) (4)	436048	Influence of sub-atmospheric pressure and mass flow rate on sooting propensity in ethylene laminar non-premixed coflow flame	Soot, Nanomaterials, and Large Molecules
Yi Junghwa (1), Betrancourt Christopher (1), Darabiha Nasser (1), Franzelli Benedetta (1)	440131	Interpretation of the Laser-Induced Emissions of TiO <sub>2</sub> nanoparticles in Flame Synthesis	Soot, Nanomaterials, and Large Molecules
Saggese Chiara (1), Chatterjee Tanusree (1), Wagnon Scott W. (1)	438214	Kinetic modeling of soot formation in counterflow flames of surrogate fuel components	Soot, Nanomaterials, and Large Molecules
Baik Seung-Jin (1), Nanjiah Monika (1), Wollny Patrick (1), Wlokas Irenaeus (1), Kempf Andreas (1)	440240	Large Eddy Simulation of Nanoparticle Synthesis in Ethanol / 2EHA Spray Flames	Soot, Nanomaterials, and Large Molecules
Elias Jessy (1), Faccineto Alessandro (1), Vezin Hervé (2), Mercier Xavier (3)	439781	Laser induced fluorescence and electron paramagnetic resonance for the characterization of aromatic species and resonant stabilized	Soot, Nanomaterials, and Large Molecules
García-Oliver Jose-Maria, Pastor Jose-Manuel (1), Olmeda Ivan, Kalbhor Abhijit, Van Oijen Jeroen (2), Mira Daniel (3)	440568	LES of a pressurized sooting RQL-like combustor with a computationally efficient discrete sectional method coupled to	Soot, Nanomaterials, and Large Molecules
Nobili Andrea (1), Stagni Alessandro, Faravelli Tiziano	440645	Modelling the effect of dimethyl ether on soot formation in laminar flames	Soot, Nanomaterials, and Large Molecules
Dasappa Shruthi, Camacho Joaquin (1)	436475	Nanostructure of carbon nanoparticles formed in high-temperature premixed flames	Soot, Nanomaterials, and Large Molecules
Cuoci Alberto (1), Frassoldati Alessio (1), Giudici Clarissa (1), Pelucchi Matteo (1), Serse Francesco (1), Passoni Raffaello (2), Rosa Massimo (2)	440316	Numerical modeling of Chemical Vapor Infiltration (CVI) with detailed chemistry for production of carbon brake discs	Soot, Nanomaterials, and Large Molecules

# Thursday morning, room 9

## Numerical Combustion

Authors	Poster number	Title	Topics
Kenar Doğu Hazar (1), Şahin Ali Fuat (2), Özyörük Yusuf (2), Karaca Mehmet (2)	436846	Flow Investigation in a Channel Reactor Using Chemically Reacting Boundary Layer Equations	Numerical Combustion
Chen Ziyin (1), Ballossier Yves (1), Millan-Merino Alejandro (1), Almarcha Christophe (2), Boivin Pierre (1)	440834	Heat losses in Hele-Shaw burner with lattice Boltzmann solver	Numerical Combustion
Pedersen Krister Aaen (1), Lewandowski Michał T. (1), Pasternak Michał (2), Løvås Terese (1)	437037	Identification of N <sub>2</sub> O region in an ammonia/n-heptane dual-fueled compression ignition engine using numerical simulations	Numerical Combustion
Both Ambrus (1), Mira Daniel (1), Lehmkuhl Oriol (1)	440584	Identification of turbulent combustion regimes from large-eddy simulations	Numerical Combustion
Papageorgiou Dimitrios (1), Katsinos Alexandros (1), Kavroulakis Ioannis (1), Frouzakis Christos Emmanouil (2), Rigopoulos Stelios (3), Tomboulides Ananias (1)	441003	Implementation and validation of soot models in the spectral element code Nek5000	Numerical Combustion
Dan Aranya (1), Esposito Stefania (2), Pehlivanlar Benjamin (3), Günther Marco (3), Pitsch Heinz (1)	440980	Injection modeling and combustion simulation of a direct-injection hydrogen engine	Numerical Combustion
Meloni Roberto (1), Babazzi Giulia (1), Valera Medina Agustin (2), Pucci Egidio (1), Castellani Simone (3), Andreini Antonio (3)	440616	Investigation of the pressure effect onto the NO <sub>x</sub> emission of a perfectly premixed NH <sub>3</sub> -H <sub>2</sub> flame through the validation of a	Numerical Combustion
Meister Jakob, Wu Hao, Glarborg Peter (1)	436814	Investigation of thermophoretic modeling for ash deposition in biomass combustion	Numerical Combustion
Stendardo Elisa, Kamal Mustafa Muhammad (1), Coussement Alex (1), Parente Alessandro (1), Blondeu Julien (2), Bricteux Laurent (3), Bioche Kévin (4)	440656	Large Eddy Simulations of hydrogen combustion in a reverse flow micro gas turbine burner	Numerical Combustion

# Thursday afternoon, room 1

## Low-Emission Combustion Technologies

Authors	Poster number	Title	Topics
Giuntini Lorenzo (1), Savarese Matteo, Galletti Chiara, Parente Alessandro	436009	Numerical design of a rich-lean micro-Gas Turbine combustor for ammonia fueling	Low-Emission Combustion Technologies
Karvounis Panagiotis (1), Theotokatos Gerasimos (1)	441343	Numerical investigation of diesel – methanol dual-fuel marine engine performance and emissions utilising high methanol fractions	Low-Emission Combustion Technologies
Afshar Ghasemi Keivan (1), Emberson David (1)	440901	Numerical investigation of the behavior of liquid ammonia in a direct injector	Low-Emission Combustion Technologies
Rysgaard Mathias Boe (1), Nakhaei Mohammadhadi (2), Pedersen Morten Nedergaard (2), Glarborg Peter (1), Jensen Peter Arendt (1)	436642	Numerical simulations and experimental measurements of NO reduction in a cement calciner by co-firing alternative fuel pyrolysis	Low-Emission Combustion Technologies
Piscopo Alessandro (1) (2), Yousefzad Farrokhi Farshid (1) (2), Parente Alessandro (1), De Paepe Ward (2)	440744	Numerical study of the impact of H <sub>2</sub> in a CH <sub>4</sub> -fuelled micro Gas Turbine combustion chamber	Low-Emission Combustion Technologies
Babazzi Giulia (1), Giannini Nicola (1), Meloni Roberto (1), Lemmi Gianmarco (2), Nassini Pier Carlo (2), Andreini Antonio (2)	440733	ON THE IMPACT OF THE EGR ON TO THE OPERABILITY LIMITS OF A HEAVY DUTY GT COMBUSTOR: A CFD INVESTIGATION	Low-Emission Combustion Technologies
Ariemma Giovanni Battista (1), Sorrentino Giancarlo (1), Sabia Pino (1), De Joannon Mara (1), Ragucci Raffaele (1)	441021	Performance of Biomass pyrolysis products MILD combustion in a cyclonic burner	Low-Emission Combustion Technologies
Csemány Dávid (1), Hirják Árpád Botond (1), Nagy Attila (2), Guba Attila (2), Józsa Viktor (1)	436300	PIV measurement of distributed combustion without air dilution	Low-Emission Combustion Technologies
Rousselle Christine (1), Desgroux Pascale (2), Lamoureux Nathalie (3), El Baba Nour, Guignolle Mehdi	439734	Potential of water addition in ammonia spark ignition engines	Low-Emission Combustion Technologies
Volkov Konstantin (1), Gulevskis Arturas (1)	439890	Ignition and Combustion of Air/Fuel Mixture Induced by Microwave Subcritical Streamer Discharge	Low-Emission Combustion Technologies
Ballotti Andrea (1), Langone Leonardo (1), Andreini Antonio (1)	440890	Prediction of NO <sub>x</sub> Emissions of Lean Lifted Spray Flames With Chemical Reactors Network	Low-Emission Combustion Technologies
Sanchez Bahoque Gabriela (1), Van Oijen Jeroen (1)	436225	Preferential diffusion behavior of turbulent premixed hydrogen combustion	Low-Emission Combustion Technologies

# Thursday afternoon, room 2

## Gas-Phase Reaction Kinetics

Authors	Poster number	Title	Topics
Manna Maria Virginia (1), Sabia Pino, Ragucci Raffaele, De Joannon Mara	441014	NH <sub>3</sub> effect on CH <sub>4</sub> oxidation regimes and chemical kinetics	Gas-Phase Reaction Kinetics
Naess Thomas (1), Riber Eléonore (1), Cuenot Benedicte (1) (2)	441042	Numerical prediction of nitric oxide formation in a turbulent n-heptane spray flame using Large Eddy Simulation	Gas-Phase Reaction Kinetics
Gahfif Mohamed (1), Panaget Thomas (1), Fenard Yann (1), Pillier Laure (1), Vanhove Guillaume (1)	435637	On the kinetics behind the coupling between alkene ozonolysis and cool flames	Gas-Phase Reaction Kinetics
Saab Marwa (1), Vanhove Guillaume (1), Fenard Yann (1)	436285	On the reactivity of TMM in the low-temperature range of combustion	Gas-Phase Reaction Kinetics
Bierkandt Thomas (1), Gaiser Nina (1), Frietsch Marcel Erik (1), Oßwald Patrick (2), Köhler Markus (1)	440193	Oxidation and pyrolysis study of 1,8-cineole and limonene by molecular-beam mass spectrometry in an atmospheric-pressure flow	Gas-Phase Reaction Kinetics
Wen Miao, Jia Jing-Yang, Yao Yong-Zheng, Tian Zhen-Yu (1)	440946	Oxidation of propane with a jet-stirred reactor at elevated pressure	Gas-Phase Reaction Kinetics
Su Guan-Yu (1), Tian Dong-Xu (1), Xu Yu-Feng (1), Braun-Unkhoff Marina, Tian Zhen-Yu (2)	440949	Oxidation study of 1,3-butadiene at 12 atm	Gas-Phase Reaction Kinetics
Michelbach Christian (1), Tomlin Alison (1)	435993	Predicting the Combustion Behaviour of Tailorable Advanced Biofuel Blends Using Automatically Generated Mechanisms	Gas-Phase Reaction Kinetics
Bai Xin (1), Li Yang (1)	436180	Probing the Combustion Kinetics of 2-Hydroxyethylhydrazine (HEH): A Theoretical Study of H-atom Abstraction Reactions	Gas-Phase Reaction Kinetics
Karan Alka (1), Dayma Guillaume (2) (3), Chauveau Christian (4), Halter Fabien (4)	434737	Quantitative Analysis of NH <sub>2</sub> * in Premixed Ammonia-Air Flames	Gas-Phase Reaction Kinetics
Kovács Márton (1), Szanthoffer András György (1), Valkó Éva (1), Zhang Peng (1), Papp Máté (1), Nagy Tibor (2), Zsély István Gyula (1), Turányi Tamás (1)	440662	Recent advancements in the Reaction kinetics branch of the ReSpecTh Information System	Gas-Phase Reaction Kinetics
Lewandowski Michał (1), Netzer Corinna (1), Løvås Terese (1)	438481	Reduction of ammonia/n-heptane detailed chemical kinetic mechanism for ICE conditions	Gas-Phase Reaction Kinetics

# Thursday afternoon, room 3

## Laminar Flames

## Turbulent Flames

Authors	Poster number	Title	Topics
Kurdyumov Vadim (1), Fernandez-Galisteo Daniel, Jimenez Carmen	436246	Premixed flames in narrow heated channels of circular cross-section: steady-state solutions, their linear stability analysis and dynamics	Laminar Flames
Faghih Mahdi (1), Valera Medina Agustin (2), Paykani Amin (3)	439134	Radiation Effect in Spherically Propagating Ammonia-Air Flames at Elevated Pressures and Temperatures	Laminar Flames
Faghanpourganji Hamed (1), Kojourimanesh Mohammad (1), Kornilov Viktor (2), Van Oijen Jeroen (1), Lopez Arteaga Ines (3)	440941	Reconstruction of Downstream Acoustics from Two Separate SISO Measurements of Flame	Laminar Flames
Al Kassar Sofiane (1), Grant Jem (1), Berger Lukas (2), Remiddi Arianna (3), Lapenna Pasquale Eduardo (3), Creta Francesco (3), Pitsch Heinz (2),	440907	Simulation of thermodiffusive instabilities in hydrogen flames with tabulated chemistry	Laminar Flames
Schwenzer Christian (1), Hesse Raik (1), Glaznev Roman (1), Babushok Valeri (2), Linteris Gregory T. (2), Pitsch Heinz (1), Beeckmann Joachim (1)	440999	Simultaneous Particle Image Velocimetry and Schlieren Measurements of Slow-burning Flames	Laminar Flames
Breicher Adrian (1) (2), Shuguo Shi (1) (2), Wagner Jakob (1), Barlow Robert (3), Dreizler Andreas (2), Geyer Dirk (1)	440953	Experimental Investigation of thermo-diffusive instabilities on polyhedral H <sub>2</sub> -CH <sub>4</sub> Bunsen flames	Laminar Flames
Shuguo Shi (1) (2), Breicher Adrian (1) (2), Schultheis Robin (2), Hartl Sandra (1), Barlow Robert S. (3), Dreizler Andreas (2), Geyer Dirk (1)	437972	Structures of laminar lean premixed H <sub>2</sub> /CH <sub>4</sub> /air polyhedral flames: effects of H <sub>2</sub> content	Laminar Flames
Vastier Laura (1), Nagaraju Sharath (1), Bleyer Alexandre (2), Bentaib Ahmed (2), Chaumeix Nabiha (1)	440867	Study of flammability domain of H <sub>2</sub> /CO/O <sub>2</sub> /N <sub>2</sub> /CO <sub>2</sub> mixtures at conditions representative in the late phase of a severe accident in a PWR	Laminar Flames
Yu Liang (1), Aravind Balakrishnan (1), Lacoste Deanna (1)	436195	Mitigating thermoacoustic instabilities of a high-pressure swirl combustor by self-coupling strategy	Turbulent Flames
Liu Xin (1), Mukundakumar Nithin (1), Bastiaans Rob (1)	441044	Modelling on NH <sub>3</sub> /H <sub>2</sub> Combustion with LES-FGM Method	Turbulent Flames
Basnet Suman (1), Bukar Muhammad (2), Wu Bin (2), Magnotti Gaetano (2)	440977	Near-field study of oxy-methane non-premixed jet flame at elevated pressure	Turbulent Flames
Xu Boyan (1), Bastiaans Rob	441048	Numerical simulation study on the effect of hydrogen addition on turbulent jet in crossflow ammonia-air flame	Turbulent Flames
Jamshidiha Mahdi (1), Kamal Muhammad Mustafa (2) (3), Coussement Axel (2) (3), Parente Alessandro (2) (3)	440945	OH* Chemiluminescence in Turbulent, Nonpremixed Hydrogen Flames	Turbulent Flames

# Thursday afternoon, room 4

## Solid Fuel Combustion

Authors	Poster number	Title	Topics
Wu Tao (1), Singh Vidushi (1), Estève Alain (2), Rossi Carole (2)	440920	In-detail elaborating the way of titanium in thermite reactions	Solid Fuel Combustion
Shaddix Christopher (1), Haynes Brian (2)	440684	Influence of Spontaneous Surface Oxide Decomposition on High Temperature Carbon Oxidation Rates	Solid Fuel Combustion
Abdallah Muhammed (1), Shoshin Yuriy (1), Finotello Giulia (1), De Goey Philip (1)	440511	Iron particle ignition in hot coflow	Solid Fuel Combustion
Fedoryk Michal (1), Stelzner Björn (1), Harth Stefan (1), Trimis Dimosthenis (1)	440608	Laminar burning velocity measurements and stability map determination of Fe-N <sub>2</sub> /O <sub>2</sub> mixtures in a tube burner	Solid Fuel Combustion
Sepman Alexey (1), Wennebro Jonnas, Fernberg Johannes, Wiinikka Henrik	435557	Laser-Based Diagnostics of Carbon and Oxygen Release during Pilot-Scale Biomass Gasification	Solid Fuel Combustion
Qiu Yue (1), Feng Sheng (2), Xu Shijie (2), Bai Xue-Song (2), Nilsson Elna J. K. (1)	437459	Modelling of single micro-sized aluminum particle burning in steam incorporating gas and surface reactions	Solid Fuel Combustion
Bhunia Shyamal (1), Poonawala Abdul Kadir (2), Chowdhury Arindrajit (3), Kumbhakarna Neeraj (4)	440103	Modelling study on biomedical waste combustion in a small-scale fixed-bed reactor using the Euler-Euler approach	Solid Fuel Combustion
Samba Paixan (1), Roulet Marjorie (1), Lamari Assia (2), Condé Fatou (1), Sidoli Pauline (3), Cagnon Benoît (1), De Persis Stephanie (2)	440982	Numerical and experimental study of the thermal degradation of lignocellulosic materials from regional agricultural residues.	Solid Fuel Combustion
Hemamalini S.S. (1), Guhathakurta Swagnik, Van Oijen Jeroen (2), Cuenot Benedicte (1) (3), Mi Xiaocheng (1) (4)	437339	On the Interaction between Burning Iron Particles and Turbulence: A Study via Mesoscale-resolved Simulations	Solid Fuel Combustion
Copik Paulina (1), Szlęk Andrzej (2), Ditaranto Mario (3)	437153	Oxy- incineration of the municipal solid waste in a moving grate boiler	Solid Fuel Combustion
Hegedüs Balázs (1), Dobo Zsolt (1), Palotás Árpád Bence (1)	439250	Plastic waste, as a source of alternative fuel	Solid Fuel Combustion

# Thursday afternoon, room 5

## Solid Fuel Combustion

Authors	Poster number	Title	Topics
Yang Won (1), Kim Seong-II (1), Chae Taeyoung (1), Lee Jaewook (1), Lim Minsub (1), Lee Youngjae (1), Kwon Oh Chae (2)	440219	Development of a smart management system for a grate-type solid waste incineration plant	Solid Fuel Combustion
Torres-Mercado Oscar (1), Colorado Andrés (1), Maya Luisa (1), Karam Jousef (1), Amell Andrés (1), Chica Edwin (1), Unfried Jimmy (2)	440963	Energy use of ruminal material from cattle slaughter plants	Solid Fuel Combustion
Dinh Truong (1), Dobo Zsolt (1), Kovacs Helga (1)	436191	Enrichment of valuable metals from contaminated biomass into combustion solid remains	Solid Fuel Combustion
Krinski Ingrid (1), Leite Vinícius (2), Och Stephan (3), Mariani Viviana (4)	440089	Evaluation of transesterification via methyl and ethyl routes in production, and characterization of biodiesel from spent coffee	Solid Fuel Combustion
Chae Taeyoung (1), Yang Won (1), Lee Jaewook (1), Jongmi Lee, Shhyun Beak, Junhwa Chi	430641	Experimental study of coal/ammonia co-firing using 80kWth single burner combustion system	Solid Fuel Combustion
Delcourt François (1), Izerroukyene Abdelkader (1), Delacourt Eric (1) (2), Coppalle Alexis (3), Morin Céline (1) (2), Therssen Eric (4)	437823	Experimental study of gaseous pollutant and PM emissions from wood pellets combustion in a domestic boiler	Solid Fuel Combustion
Ravi Aravind (1), De Goey Philip, Van Oijen Jeroen	436605	Flame speed and flame structure of hybrid methane iron air flames	Solid Fuel Combustion
Śliz Maciej (1), Czerwińska Klaudia (1), Lombardi Lidia (2), Wilk Małgorzata (1)	437177	Hydrothermal co-carbonization of sewage sludge and lignocellulosic biomass in the perspective of the Life Cycle Assessment	Solid Fuel Combustion
Halter Fabien (1), Glasziou Valentin, Keck Hugo, Legros Guillaume, Chauveau Christian	438165	Ignition of Aluminum Particles	Solid Fuel Combustion
Žnidarčič Anton (1), Seljak Tine (1)	441041	Improving temperature prediction and associated NH <sub>3</sub> volatilization from sewage sludge particle	Solid Fuel Combustion
Sebe Emese (1), Tóth Csenge Emese (1), Kállay András Arnold (1)	440228	Thermogravimetric Analysis of Hungarian Refuse Derived Fuel Under Inert Atmosphere	Solid Fuel Combustion

# Thursday afternoon, room 6

## Solid Fuel Combustion

### Spray, Droplet, and Supercritical Combustion

Authors	Poster number	Title	Topics
Yhuel Emile, Ribert Guillaume (1), Domingo Pascale	443172	Numerical simulation of laminar premixed hydrogen-air flames in interaction with a shock in a semi-close channel	Detonation, Explosion, and Supersonic Combustion
Bermudez De La Hoz Jose (1), Rudy Wojciech (1), Khair Allah Shamma (1), Teodorczyk Andrzej (1)	436396	Numerical Simulation of Transition to Detonation Due to Shock Wave Focusing in a 90-deg wedge	Detonation, Explosion, and Supersonic Combustion
Kissel Florian (1), Ribert Guillaume (1), Domingo Pascale (1)	435714	Numerical simulation of two-phase combustion in supersonic flows	Detonation, Explosion, and Supersonic Combustion
Hernández Sánchez Raúl (1), Denet Bruno (1)	433726	Numerical study of a 1D model for DDT at the tip of a flame in narrow channels	Detonation, Explosion, and Supersonic Combustion
Monnier Florian (1), Le Calvez Yoann (2), Duhem-Duvilla Louis (1), Ribert Guillaume (1)	435713	Large-Eddy Simulation of LOx-CH4 supercritical flames	Spray, Droplet, and Supercritical Combustion
Desclaux Anthony (1), Hespel Camille (2), Mounaïm-Rousselle Christine (2)	439746	Liquid Ammonia injection on single hole injector: effect of initial conditions on flash boiling process	Spray, Droplet, and Supercritical Combustion
Kardos Réka Anna (1), Rácz Erika (1), Csemányi Dávid (1), Maly Milan (2), Jedelsky Jan (2), Józsa Viktor (1)	441007	Measurement and evaporation modeling of JP-8, diesel, and biodiesel sprays under hot conditions	Spray, Droplet, and Supercritical Combustion
Prenting Markus Michael (1), Underberg Martin (2), Dreier Thomas (1), Endres Torsten (1), Schnurre Sophie (2), Schulz Christof (1)	436607	Multi-line NO-LIF gas-temperature imaging in a pilot scale spray flame for nanoparticle synthesis	Spray, Droplet, and Supercritical Combustion
Kang Jeongseok (1), Sung Hong-Gye (2)	440951	Multiphase LES Analysis on Hydro-reactive Fuel Combustion with Water Injection	Spray, Droplet, and Supercritical Combustion
Geiger Leonardo (1), Fdida Nicolas (1), Dorey Luc-Henry (1), Dumouchel Christophe (2), Blaisot Jean-Bernard (3), Vingert Lucien (1), Fournier Martin (4)	439308	Multiscale image analysis of primary atomization in cryogenic liquid rocket engines	Spray, Droplet, and Supercritical Combustion

# Thursday afternoon, room 7

## Diagnostics

## Propulsion

Authors	Poster number	Title	Topics
Horvath Raphael (1), Comandini Andrea (2), Chaumeix Nabiha (2), Nagaraju Sharath (2), Hugi Andreas (1)	440229	Investigating reactive species in a high repetition rate miniature shock tube using microsecond dual comb infrared spectroscopy	Diagnostics
West Niclas (1)	441106	LINE Temperature Perturbation Measurements with NO LIF and Intensified Cameras	Diagnostics
Theotokatos Gerasimos (1), Patil Chaitanya, Konstantinos Milioulis	441344	Marine engines combustion diagnostics employing machine learning	Diagnostics
Röder Markus (1), Pietsch Philipp (2), Unterberger Andreas (3), Martins Fabio (3), Giese Anne (1), Mohri Khadijeh (3) (4) (5)	434760	Multi-Camera System for 3D Tomographic Reconstruction of Chemiluminescence in Industrial-Scale High-Temperature	Diagnostics
El Moussawi Abbas (1) (2) (3), Endres Torsten (1) (2) (3), Karaminejad Sadrollah (1) (2) (3), Menser Jan (1) (2) (3), Dreier Thomas (1) (2) (3), Schulz Christof (1) (2)	436305	Multi-line laser-induced fluorescenc temperature imaging with LIFSim 4.0	Diagnostics
Hellard Pierre (1), Gaillard Thomas (1), Davidenko Dmitry (1), Zitoun Ratiba (2), Vidal Pierre (2)	437209	Numerical investigation of the effects of friction and heat transfer on RDE operation	Propulsion
Yadav Vikas (1), Ghani Abdulla (1)	441037	Prediction of field data for premixed combustion with physics-informed neural networks	Propulsion
Patat Clément (1), Alhaffar Abdallah (1), Delorme Thomas (1), Blaisot Jean-Bernard (1), Domingues Éric (1), Baillot Françoise (1)	441020	Response of interacting swirl-stabilised spray flames at a pressure antinode of a standing transverse acoustic field	Propulsion
Vaysse Nicolas (1), Durox Daniel (1), Rajendram Soundararajan Preethi (1), Vicquelin Ronan (1), Candel Sébastien (1), Renaud Antoine (2)	437005	Structure and light emission of swirling flames produced by pure hydrogen injection in cross-flow	Propulsion
Milea Andrei-Silviu (1), Perrier Aurélien (1) (2), Caceres Marcos (1), Godard Gilles (1), Cayre Alain (2), Collin-Bastiani Félix (2), Cabot Gilles (1), Grisch Frédéric (1)	439967	Study of the formation and oxidation of soot particles in an aeronautical RQL combustor at high pressure by advanced laser	Propulsion
Casel Mario (1), Ghani Abdulla (1)	436376	Thermoacoustic System Design Utilizing Exceptional Points	Propulsion

## Thursday afternoon, room 8

# Soot, Nanomaterials, and Large Molecules

Authors	Poster number	Title	Topics
Vachaparambil Kurian J. (1), Panjwani Balram (2)	435990	On developing a post processing approach to investigate PAH evolution for industrial applications	Soot, Nanomaterials, and Large Molecules
Xu Yu-Feng, Su Guan-Yu, Braun-Unkloff Marina, Tian Zhen-Yu (1)	440950	Oxidation study of a two-fuel compound mixture of acetylene and 1,3-butadiene	Soot, Nanomaterials, and Large Molecules
Yu Xu-Peng, Wang Du, Tian Dong-Xu, Tian Zhen-Yu (1)	440947	Revisit to the benzene oxidation at elevated pressure with a JSR	Soot, Nanomaterials, and Large Molecules
Herzler Jürgen (1), Nativel Damien (1), Fikri Mustapha (1), Schulz Christof (1)	440000	Shock tube study on the effect of oxygenated species on the pyrolysis and fuel-rich oxidation of CH <sub>4</sub> in the context of	Soot, Nanomaterials, and Large Molecules
Joret Maxime (1), Idlahcen Said (2), Mazur Marek (1), Yon Jérôme (3)	440646	Spectral and angular analysis of non-linear optical response for soot exposed to femtosecond laser light	Soot, Nanomaterials, and Large Molecules
Wang Qi (1), Sarathy S. Mani (1)	438145	The Direct Chemical Effect of Ammonia on the Formation of Aromatics in Counterflow Flames: An ab initio Study	Soot, Nanomaterials, and Large Molecules
Shao Can (1), Fikri Mustapha, Endres Torsten, Schulz Christof	440757	Time-resolved UV-visible absorption spectroscopy of young soot particles during toluene pyrolysis in a shock tube	Soot, Nanomaterials, and Large Molecules
Aurora Maffina (1), Candel Sébastien (1), Franzelli Benedetta (1)	440128	Validation of state-of-the-art LES model for soot prediction in turbulent premixed flames: a focus on oxidation processes	Soot, Nanomaterials, and Large Molecules

# Thursday afternoon, room 9

## Numerical Combustion

Authors	Poster number	Title	Topics
Dillon Samuel (1) (2), Mercier Renaud (1), Fiorina Benoît (2)	440564	Large-eddy-simulation of non-premixed hydrogen combustion using the filtered tabulated chemistry approach	Numerical Combustion
Caban Lena (1), Tyliszczak Artur (1)	441016	LES-ADM modelling of auto-ignition and flame propagation in a periodic time-evolving nitrogen-diluted hydrogen jet	Numerical Combustion
Neumann Marius (1), Morsch Philipp (1), Heufer Karl Alexander (1)	440578	Machine Learning Regression of Ignition Delay Times and First Stages	Numerical Combustion
Zhang Jingyuan (1), Bjørgen Karl Oskar Pires (1), Netzer Corinna (1), Løvås Terese (1)	440979	Machine learning-assisted predictions of soot distributions from luminosity images for renewable fuels	Numerical Combustion
Ozden Aysu (1) (2) (3), Donato Laura (1) (2) (4), Procacci Alberto (1) (2), Malpica Galassi Riccardo (1) (2), Contino Francesco (3), Parente Alessandro (1) (2)	440263	Multi-Fidelity Reduced Order Model Development of a Combustion Furnace	Numerical Combustion
Stockinger Claudius (1), Alamian Rezvan (1), Hadjadj Abdellah (1), Nieken Ulrich (2), Chinnayya Ashwin (3), Safdari Shadloo Mostafa (1)	440936	Multi-relaxation time LBM model for coke combustion in porous media	Numerical Combustion
Miri Seyedhessamedin (1), Bijarchi Mohammad Ali (1)	438648	Numerical Modelling of In-Situ Combustion for Enhancing Oil Recovery	Numerical Combustion
Füzesi Dániel (1), Trindade Marcelo (2), Csemány Dávid (1), Nagy Attila (3), Guba Attila (3), Józsa Viktor (1)	436583	Numerical simulation of NH <sub>3</sub> /H <sub>2</sub> blends in an experimental swirl burner	Numerical Combustion
Lamba Sandeep (1)	440956	On formulation of mixing parameter for a multi-fuel-feed combustion system modelling using two-mixture fraction approach in FGM	Numerical Combustion

# Friday morning, room 1

## Low-Emission Combustion Technologies

Authors	Poster number	Title	Topics
Coppola Antonio (1), Ruggiero Roberto (2), Scala Fabrizio (1) (2), Urciuolo Massimo (1)	440658	Process-Intensification on Methane Production from Biomass-Derived Syngas	Low-Emission Combustion Technologies
Tumidajski Jakub (1), Adamczyk Wojciech (1), Ciesielska Agnieszka (1), Sładek Sławomir (1), Szlęk Andrzej (1), Klimanek Adam (1)	440206	Recognition of MILD combustion regimes in diluted hydrogen oxy-combustion	Low-Emission Combustion Technologies
Szwajca Filip (1), Wisłocki Krzysztof (1), Skobiej Kinga (1)	440883	Spark discharge indexes of various electrode geometry for better ignition of lean gaseous fuel mixtures	Low-Emission Combustion Technologies
Sampat Rishikesh (1), Schrijer Ferry (1), Gangoli Rao Arvind (1)	440687	Stabilisation and Emissions Characteristics of CH <sub>4</sub> -H <sub>2</sub> blends in a premixed Jet stabilised Combustor	Low-Emission Combustion Technologies
Leroy Maxime (1) (2), Mirat Clément (1), Renaud Antoine (1), Puggelli Stefano (2), Zurbach Stéphan (2), Vicquelin Ronan (1)	440896	Structure and NO <sub>x</sub> emissions of stratified hydrogen-air flames stabilized on a coaxial injector	Low-Emission Combustion Technologies
Ossman Hicham, Strozzi Camille, Sotton Julien, Bellenoue Marc (1)	440550	Subsonic Combustion Regime Transition under Controlled Thermal Gradient Conditions: an experimental and numerical study	Low-Emission Combustion Technologies
Bergamini Neill (1) (2), Jeanmart Hervé, Pochet Maxime, Berger Benjamin, Contino Francesco	441499	Technical-economic analysis of a tar tolerant HCCI engine operated with unscrubbed biomass syngas	Low-Emission Combustion Technologies
Cecere Donato (1), Giacomazzi Eugenio (1), Carpenella Simone, Stagni Alessandro	436658	The effect of hydrogen and exhaust gas recirculation on NO <sub>x</sub> formation in laminar and turbulent CH <sub>4</sub> /Air flames at 25 bar	Low-Emission Combustion Technologies
Rosec Žiga (1), Kutrašnik Tomaž (1), Seljak Tine (1)	440984	Transition to distributed combustion with paraffinic and highly oxygenated fuels	Low-Emission Combustion Technologies
Galia Faingold (1), Lefkowitz Joseph (1)	437350	Well-stirred reactor with homogeneous plasma for development of chemical kinetic model of plasma, ammonia and air	Low-Emission Combustion Technologies

# Friday morning, room 2

## Gas-Phase Reaction Kinetics

Authors	Poster number	Title	Topics
Lalanne Matthieu (1), Fjodorow Peter, Mujaddadi Sheikh-Ahmed, Nanjaiah Monika, Cheskis Sergey, Herzler Juergen, Fikri Mustapha, Wlokas Irenaeus,	440981	Revisiting iron oxidation chemistry in synthesis flames: insights from shock tube studies with intracavity laser absorption spectroscopy	Gas-Phase Reaction Kinetics
Loffredo Francesca (1), Esposito Stefania (1), Buenaflor Miguel (1), Snackers Alexandra (1), Girhe Sanket (1), Pitsch Heinz (1)	441018	Skeletal Mechanism for Methanol Oxidation and Nitrogen Oxides Predictions: Application to Spark-Ignition (SI) Engines	Gas-Phase Reaction Kinetics
Nanjaiah Monika (1), Baik Seung-Jin (1), Kunstmann Babette (2), Kohns Maximilian (2), Hasse Hans (2), Kempf Andreas (1) (3), Wlokas Irenaeus (1) (3)	440669	Surrogate Reaction Mechanism of Ethanol and 2-Ethylhexanoic Acid Mixture for Spray Flame Based Nanoparticle Synthesis	Gas-Phase Reaction Kinetics
Szanthoffer András György (1), Zsély István Gyula (1), Kawka László (1), Papp Máté (1), Turányi Tamás (1)	436739	Testing of Reaction Mechanisms for the Combustion of NH <sub>3</sub> /H <sub>2</sub> Mixtures Using a Large Amount of Experimental Data	Gas-Phase Reaction Kinetics
Mohamed Ahmed (1) (2), Pathak Vaibhav (3), Panigrahy Snehasish (3), Hamdy Mohamed (1) (2), Curran Henry (1), Bourque Gilles (4) (5)	440648	The effect of the addition of nitrogen oxide on the oxidation of n-pentane: an experimental and modeling study	Gas-Phase Reaction Kinetics
Mocquard Clément (1), Laera Davide (2), Dombard Jérôme (1), Poinot Thierry (3)	440620	The extension of the thickened flame model (TFLES) for Large Eddy Simulations of auto-igniting flames in reheat systems	Gas-Phase Reaction Kinetics
Song Hwasup (1), Fenard Yann (2), Vanhove Guillaume (2)	435943	Reproducing the mild NTC behavior of cyclopentane with an updated kinetic model	Gas-Phase Reaction Kinetics
Onel Lavinia (1), Blitz Mark A. (2) (3), Seakins Paul W. (2)	436547	The Reaction of OH with Ethyl Formate; Site Specific Rate Coefficients and the Role of Chemical Activation	Gas-Phase Reaction Kinetics
Pratali Maffei Luna (1), Pelucchi Matteo, Cavallotti Carlo, Faravelli Tiziano	439122	Theoretical and kinetic investigation of the interaction of NO <sub>2</sub> with alkyl radicals	Gas-Phase Reaction Kinetics
Zhang Zhenyingnan (1), Li Ang (1), Ma Zheng (1), Zhu Lei (1), Huang Zhen (1)	440873	Theoretical and numerical study on enhanced ammonia oxidation and combustion aided by ozone addition	Gas-Phase Reaction Kinetics
Zimmermann Christian (1), Heufer K. Alexander (1), Döntgen Malte (1)	433435	Theoretical Characterization of 2-Methoxy-1,3-Dioxolane Pyrolysis	Gas-Phase Reaction Kinetics
Fages Timothée (1), Fournet Rene (1), Sirjean Baptiste (1), Glaude Pierre-Alexandre (1)	439990	TRF models for high generation data	Gas-Phase Reaction Kinetics

# Friday morning, room 3

## Laminar Flames

## Turbulent Flames

Authors	Poster number	Title	Topics
Jimenez Carmen (1), Kurdyumov Vadim	436250	Symmetric and non-symmetric configurations for lifted edge flames	Laminar Flames
Moccia Vincenzo (1), D'Alessio Jacopo (1)	440750	Syngas and Biogas as CH <sub>4</sub> Replacement: Combustion Properties and Technical Feasibility	Laminar Flames
Remiddi Arianna (1), Indelicato Giuseppe (1), Lapenna Pasquale Eduardo (1), Berger Lukas (2), Al Kassar Sofiane (3), Attili Antonio (3), Pitsch Heinz (2), Snegirev Alexander (1)	436904	Towards lean premixed hydrogen combustion modelling using a data-driven approach	Laminar Flames
Snegirev Alexander (1)	435939	Transient modes of radiative extinction and re-ignition of microgravity diffusion flames	Laminar Flames
Fernandez-Galisteo Daniel (1), Jimenez Carmen (1), Sánchez Antonio Luis (2), Kurdyumov Vadim (1)	434784	Ultra-lean hydrogen-air combustion in an excess-enthalpy burner	Laminar Flames
Cazères Quentin (1)	440836	Universal and reference-free definitions of equivalence ratio and mixture fraction for complex mixtures	Laminar Flames
Iaroslavtceva Nadezhda (1), Kronenburg Andreas (1)	436810	Prediction of Extinction and NO <sub>x</sub> Formation in Premixed Turbulent Flames Using Multiple Mapping Conditioning	Turbulent Flames
Ahmed Umair (1), Ghai Sanjeev (1), Liu Liyuan (1), Chakraborty Nilanjan (1)	436527	Statistical behaviour and closure of turbulent scalar flux during turbulent premixed flame-wall interaction within turbulent boundary	Turbulent Flames
Khamedov Ruslan (1) (2), Perez Francisco E. Hernandez (2), Im Hong (2)	440970	Structure and propagation characteristics of turbulent premixed NH <sub>3</sub> -H <sub>2</sub> O <sub>2</sub> flame	Turbulent Flames
Tian Lu (1) (2), Lindstedt Peter (1)	440906	The impact of turbulence-chemistry interactions in opposed jet turbulent flames	Turbulent Flames
Kantoch Robert (1), Wawrzak Agnieszka (1), Tyliczszak Artur (1)	441053	The impact of wavy-wall bluff-body on diffusion flame dynamics	Turbulent Flames
Boushaki Toufik (1), Shanbhogue Santosh (2), Ahlem Ghabi (3), Ahmed Abdelrahman (2), Ahmed Ghoniem (2)	441057	Turbulent premixed combustion of CH <sub>4</sub> -NH <sub>3</sub> in a swirl burner	Turbulent Flames

## Friday morning, room 4

# Spray, Droplet, and Supercritical Combustion

Authors	Poster number	Title	Topics
Lehnert Bastian (1) (2), Berrocal Edouard (2) (3), Wensing Michael (2) (1)	440754	Quantitative 3D reconstruction of Spray G considering multiple light scattering	Spray, Droplet, and Supercritical Combustion
Garcia-Oliver Jose M (1), Novella Ricardo, Pastor Jose M, Cao Jiawei	440718	Quasi-1D analysis of n-dodecane spray characteristics under reacting conditions	Spray, Droplet, and Supercritical Combustion
Rosec Žiga (1), Žvar Baškovič Urban (1), Ktrašnik Tomaž, Seljak Tine	440986	Spatially selective combustion control with inert and active components	Spray, Droplet, and Supercritical Combustion
Suedholt Benjamin (1), Juengst Niklas (1), Smallwood Greg J. (2), Kaiser Sebastian (1)	440701	Spatio-temporal evolution and statistics of thermally-induced secondary atomization in spray-flame synthesis	Spray, Droplet, and Supercritical Combustion
Pelé Ronan (1), Bréquigny Pierre (1), Hespel Camille (1), Mounaïm-Rousselle Christine (1), Belletre J (2)	440518	Spray Characteristics and Vaporization Process of Ammonia-Ethanol blends with a Current GDI Engine Injector	Spray, Droplet, and Supercritical Combustion
Boruc Łukasz (1), Kapusta Łukasz Jan (2), Teodorczyk Andrzej (2)	440557	Superheated water-methanol sprays formed under low injection pressure	Spray, Droplet, and Supercritical Combustion
Kazmierski Bartosz (1), Kapusta Łukasz Jan (1)	435476	The influence of turbulence modelling and meshing techniques on the early-stage development of impinging jets	Spray, Droplet, and Supercritical Combustion
Vegad Chetankumar (1), Ferrando D. (1), Huang L. X. (1), Idlahcen S. (1), Vandel A. (1), Gobin C. (1), Lefebvre F. (1), Renou B. (1), Godard G. (1), Cabot G. (1), Pignatelli B. (1)	439402	To characterize the dense regions at an early stage of atomization process in simplex swirl injector: two-photon laser-induced	Spray, Droplet, and Supercritical Combustion
Carvalho Santos Artur (1), Sacomano Filho Fernando Luiz (2), Vié Aymeric (1) (3)	441026	Towards a reference model for computing mass and heat transfer rates of multi- component droplets undergoing phase-change	Spray, Droplet, and Supercritical Combustion
Ni Shiyao (1), Hochgreb Simone (1)	439910	Two-dimensional Simulation of the Effect of Acetone Droplets on Premixed Laminar Counterflow Flames	Spray, Droplet, and Supercritical Combustion

# Friday morning, room 5

## Solid Fuel Combustion

Authors	Poster number	Title	Topics
Thijs L.C (1), Kritikos E (2), Giusti A (3), Ramaekers W.J.S (1), Van Oijen J.A (1), De Goey L.P.H (1), Mi X.C (1)	436184	A physics-based approach to modeling iron-particle combustion with information gained from molecular dynamics simulations	Solid Fuel Combustion
Tschamber Valérie (1), Leyssens Gontrand (2), Trouve Gwenaëlle (2), Moser Guillaume (1), Cartoixa Bruno (3), Postel Serge (4)	436598	Domestic Wood stove: Reduction of particulate and organic emissions with ceramic foam filters	Solid Fuel Combustion
Ning Daoguan (1), Li Tao (1), Böhm Benjamin (1), Dreizler Andreas (1)	440166	Multi-parameter optical diagnostic of single iron particle combustion in a hot laminar flow	Solid Fuel Combustion
Hebel Janik (1), Schneider Henrik (1), Böhm Benjamin (1), Dreizler Andreas (1)	436197	Particle velocity measurements of gas-assisted iron dust flames in a swirl stabilized combustion chamber	Solid Fuel Combustion
Wako Fekadu Mosisa (1), Pio Gianmaria (1), Salzano Ernesto (1), Amin Ashraf (2) (3), Farooqui Azharuddin (2) (3), Mahinpey Nader (2)	436061	Performance Assessment of Drop Tube Reactor for Biomass Fast Pyrolysis Using Process Simulator	Solid Fuel Combustion
Lupi Jacopo (1), Kelly Mark (1), O'Shea Ailís (1), Ghaani Mohammad Reza (1), Dooley Stephen (1)	440680	Quantum chemical modelling of hemicellulose fast pyrolysis: $\beta$ -D-xylopyranose as a structural motif	Solid Fuel Combustion
Nguyen Bich-Diep (1), Braig Daniel (1), Scholtissek Arne (1), Ferraro Federica (1), Hasse Christian (1)	435793	Simulation of single iron microparticles combustion with resolved boundary layer	Solid Fuel Combustion
Hulsbos Mark (1), Hermanns Roy (1), Bastiaans Rob (1), De Goey Philip (1)	436666	The Heat Flux Method adapted for hybrid iron-methane-air flames	Solid Fuel Combustion
Meyer Axel (1), Leyssens Gontrand (2), Schonnenbeck Cornelius (2), Schobing Julie (3) (4)	435617	Thermochemical recovery of pallet plank in a domestic wood stove: influence of the committed wood surface within the fireplace on	Solid Fuel Combustion
Kuhmann Marcel (1), Bouali Zakaria (1), Chinnayya Ashwin (1), Robin Vincent (1)	437613	Towards Modelling Single Iron Particle Combustion	Solid Fuel Combustion

# Friday morning, room 6

## Diagnostics

Authors	Poster number	Title	Topics
Chatelain Karl P. (1) (2), Alicherif Mhedine (1) (2), Rojas Chavez Samir B. (1) (2), Lacoste Deanna A. (1) (2)	435867	Optimizing the nitric oxide seeding for laser-induced fluorescence of nitric oxide in hydrogen detonations	Detonation, Explosion, and Supersonic Combustion
Leonov Sergey (1), Doucet Henri, Lax Philip	434202	Plasma-Enhanced Mixing and Ignition in Supersonic Flow: PLIF Visualization	Detonation, Explosion, and Supersonic Combustion
Zhang Jiabo (1), Shi Hao (1), Luong Minh Bau (1), Im Hong G. (1)	440816	Prediction of Knock Intensity for Primary Reference Fuels and Validation in an Optical SI Engine	Detonation, Explosion, and Supersonic Combustion
Monnier Vianney (1), Rodriguez Vincent (1), Vidal Pierre (2), Zitoun Ratiba (1)	436760	Three-dimensional detonation cells and transient dynamics: experimental results, and a predictive model	Detonation, Explosion, and Supersonic Combustion
Khair Allah Shamma (1), Rudy Wojciech (1), Bermudez De La Hoz Jose (1), Teodorczyk Andrzej (1)	436387	Transition to detonation in hydrogen-air and hydrogen-methane-air mixtures due to shock wave focusing in the 90-deg corner	Detonation, Explosion, and Supersonic Combustion
Martínez-Ruiz Daniel (1), Sánchez Antonio L. (2), Williams Forman A. (2)	436088	Two-way coupling effects in droplet-laden detonations	Detonation, Explosion, and Supersonic Combustion
Ovando Michael (1), Blaisot Jean-Bernard (1), Baillot Françoise (1)	441056	Nonlinear acoustic theoretical model considering acoustic transmissivity in the interior of a real fluid object.	Spray, Droplet, and Supercritical Combustion
Pestre Antoine (1), Riber Eléonore (1), Cuenot Benedicte (1)	436258	Numerical simulation of two-phase ignition at high altitude conditions	Spray, Droplet, and Supercritical Combustion
Son Min (1), Sander Tobias (1), Pfitzner Michael (1), Zigan Lars (1)	437885	Optical Characterization of Sub- and Transcritical Fuel Sprays using Shadowgraphy, Mie-scattering and Infrared Radiation Measurements	Spray, Droplet, and Supercritical Combustion
Escofet-Martin David (1), Carreres Marcos, Payri Raul	440504	Optical study of transcritical n-heptane injection under reacting and non-reacting environments	Spray, Droplet, and Supercritical Combustion

## Friday morning, room 7

# Detonation, Explosion, and Supersonic Combustion

# Spray, Droplet, and Supercritical Combustion

Authors	Poster number	Title	Topics
Karaminejad Sadrollah (1) (2), Dreier Thomas (2), Endres Torsten (2), Schulz Christof (2)	441034	Multi-line OH LIF gas-phase thermometry in a spray flame	Diagnostics
Rajamanickam Kuppuraj (1) (2), Mahuthannan Ariff (3), Idlahcen Said (2), Lecordier Bertrand (2), Lacour Corine (2), Cessou Armelle (2), Honoré David (2)	441110	Multi-scalar measurements in hydrogenated bluff-body stabilized turbulent flames using 1D spontaneous Raman scattering and OH - PLIF	Diagnostics
Xuan Guangtao (1), Fan Luming (2), Beyrau Frank (1), Fond Benoit (3)	439590	Near wall 2D Fluid temperature measurement based on Gaussian-fitting of individual phosphor tracer particle images	Diagnostics
Schmidt Nikolas (1), Bauer Florian (1) (2), Braeuer Phillipp (1) (2), Grauer Samuel (2) (3), Will Stefan (1) (2)	440996	NIR-emission spectroscopy for local temperature measurements in premixed hydrogen/air flames	Diagnostics
Hameete Jesse (1), Abdallah Muhammed (1), Homan Tess (1), Dam Nico (1), De Goey Philip (1)	436681	Particle resolved full color pyrometry measurements of iron particles	Diagnostics
Barviau Benoit (1), Legros Sylvain (2), Kulatilaka Waruna (3), Grisch Frédéric (2)	440503	Pure Rotational CPP-fs CARS for thermometry in flames	Diagnostics
Fritsche Chris (1), Hasche Anna (1), Birke Hannes (2), Eckart Sven (1), Krause Hartmut (1), Beeckmann Joachim (2)	440870	Quantitative planar OH laser-induced fluorescence investigations on hydrogen-methane flat flames: Experimental and numerical	Diagnostics
Dal Moro Riccardo (1) (2), Melison Fabio (2), Cocola Lorenzo (2), Barbiero Daniele (3) (4), Poletto Luca (2)	436771	Raman spectroscopy for detection of H <sub>2</sub> and N <sub>2</sub> in combustion diagnostic	Diagnostics
Ghate Kushal (1), Kulkarni Aniket (2), Williams Maxwell (3), Carrotte Jon (3), Ozanyan Krikor (2), Wright Paul (2), Burns Iain (1)	440581	Single-shot laser-induced incandescence imaging of soot volume fraction in a pressurised gas-turbine combustion test rig	Diagnostics
Gachot Brendan (1) (2), Irimiea Cornelia (3), Dufitumukiza Jean-Pierre (1) (2), Elias Jessy (2), Faccinnetto Alessandros (4), Vincent-Randonnier Axel (5), Fournier Fabrice (6), Mounier Yvan (7), Flichet Nicolas (8)	441040	Systematic development of laser induced incandescence for monitoring of soot on aeronautic test rig combustors	Diagnostics
Xuan Guangtao (1), Ebert Mirko (2), Rodrigues Simson J. (2), Nammuni Arachchilage Chaturah J. (2), Vorhauer Huget Nicole (2), Lessig Christian (2), Fournier Fabrice (3)	440993	Temperature distribution in packed beds using an hybrid phosphor thermometry, ray tracing and data assimilation approach	Diagnostics

# Friday morning, room 9

## Numerical Combustion

Authors	Poster number	Title	Topics
Navid Ali (1), Nadiri Solmaz (2) (3), Fernandez Ravi (2) (3), Eckart Sven (1), Krause Hartmut (1)	438435	Performance assessment of a Methane-Hydrogen engine in AVL Fire	Numerical Combustion
Donato Laura (1) (2), Parente Alessandro (1), Mariotti Alessandro (2), Salvetti Maria Vittoria (2), Galletti Chiara (2)	439703	Quantification of the uncertainty due to combustion model for the digital twin of a semi-industrial furnace	Numerical Combustion
Siddareddy Reddy Babu (1), Franken Tim, Pasternak Michal, Mauss Fabian	440952	Real-time engine-out emission prediction of WLTP driving cycle using a stochastic reactor model	Numerical Combustion
Di Matteo Andrea (1), Somers Bart (1)	438225	Relationship between ECN Spray D nozzle and a Marine-Size nozzle within OpenFOAM using FGM combustion model	Numerical Combustion
El Harrab Hayat (1), Franken Tim (2), Mauß Fabian (3)	440983	Stochastic reactor-based turbulent combustion modelling of gasoline, anisole and cyclopentanone fuel blends in spark ignition engine	Numerical Combustion
Bompas Jeremy (1), Pappa Alessio (1), De Paepe Ward (1)	436717	Study on high water vapor content syngas combustion in a micro gas turbine combustor: Impact of pilot/main fuel line distribution on flame	Numerical Combustion
Alamian Rezvan (1), Sawaf Maher (1), Stockinger Claudius (1), Hadjadj Abdellah (1), Latt Jonas (2), Safdari Shadloo Mostafa (1)	440937	Surface-Reactive Flow in Porous Media using Iterative Lattice Boltzmann Method for Modelling the Regeneration Process in Soot	Numerical Combustion
Chi Cheng (1), Thévenin Dominique (1)	438001	Turbulent flame dynamics and pollutant emission characteristics of stratified NH <sub>3</sub> /H <sub>2</sub> /air flames in a prechamber/main chamber system:	Numerical Combustion