PROGRAM

WELCOME

The organizing committee wishes to thank you for attending the ***47th Meeting of the Italian Section of the Combustion Institute – Advancing Combustion for a Sustainable and Low-Carbon Future (May 12-15, 2025), Pisa.***

The annual meeting of the Italian Section of the Combustion Institute is aimed at giving the opportunity for exchange of expertise and discussion between scientists and technologists working in the field of combustion, in all its fundamental and applied aspects, with specific emphasis on low-emission and sustainable technologies. We hope you will have a productive meeting!

As for the last meetings, awards will be given to the best presentations and/or posters delivered by PhD students or young researchers during the meeting.

Oral presentations: 15 min (recommended 12 min +3 min for Q&A), to be uploaded before each session in ppt or pdf format.

Poster presentation: A0 format

VENUE

Centro Congressi le Benedettine,
Piazza S. Paolo a Ripa D'Arno, 16, 56125 Pisa
12-15 May, 2025

Italian Section of The Combustion Institute

Associazione Sezione Italiana del Combustion Institute
P.le V. Tecchio, 80 – 80125 Napoli – Italia
ASICI website: www.combustion-institute.it
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Associazione Sezione Italiana del Combustion Institute ASICI

ACKNOWLEDGEMENTS

Consiglio Nazionale delle Ricerche STEMS Istituto di Scienze e Tecnologie per l'Energia e la Mobilità Sostenibili

Università di Pisa

47th Meeting of the Italian Section of the Combustion Institute

Advancing Combustion for a Sustainable and Low-Carbon Future

Pisa | May 12-15, 2025

SUPPORTING PARTNERS

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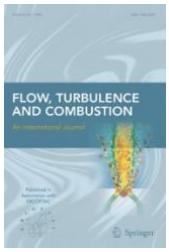


ORGANIZING AND SCIENTIFIC COMMITTEE

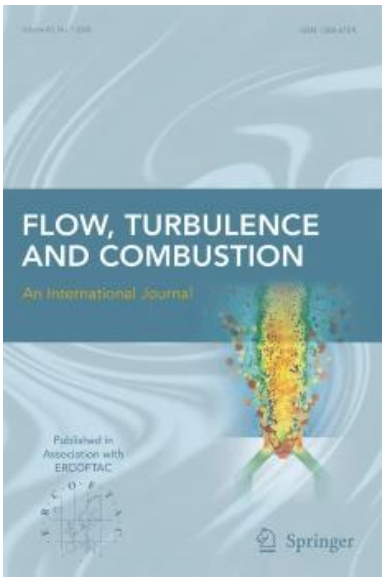
Dr. Mario Commodo (CNR-STEMS)
Dr. Rachele Lamioni (Università di Pisa)
Prof. Chiara Galletti (Università di Pisa)
Dr. Giancarlo Sorrentino (CNR-STEMS)
Dr. Gianluigi De Falco (CNR-STEMS)
Mr. Filippo Fruzza (Università di Pisa)

TOPICS:

- Combustion dynamics and flame stability
- Low-Carbon and low-emission strategies, including transport processes
- Low-Carbon Fuels: fundamentals and kinetics
- Gas turbines and safety assessment, including emission and contaminants mitigation
- Plasma-assisted combustion and fuel synthesis
- Processes for Industrial decarbonization, steam reforming and CO_2 removal
- Biomass and waste thermochemical conversion and valorization
- Innovative propulsion systems and engine combustion
- Numerical combustion and CFD modelling
- Pollutant formation mechanisms and emissions chemistry
- Sprays, droplet combustion and multiphase flows
- Materials for fuels valorization and processing

SPECIAL ISSUES PUBLICATIONS

Selected papers from the conference proceedings will be published in Special Issues of Flow, Turbulence and Combustion and Fuel Communications Journals



Direct Download

Proceedings

SOCIAL EVENTS

MONDAY MAY 12
WELCOME COCKTAIL

CENTRO CONGRESSI LE BENEDETTINE
Piazza S. Paolo a Ripa D'Arno 16 - 56125 Pisa

TUESDAY, MAY 13
EARLY CAREER RESEARCHER MIXER

CAVALIERI – SPECIALITY COFFEE
Via Corsica 14 - 56126 Pisa

WEDNESDAY, MAY 14
SOCIAL DINNER

BISTROT DELL'OPERA
Piazza del Duomo 23 - 56126 Pisa

47th Meeting of the Italian Section of the Combustion Institute

Advancing Combustion for a Sustainable and Low-Carbon Future

Pisa | May 12-15, 2025

Monday, 12 May 2025 — **47th Meeting of the Italian Section of the Combustion Institute**

17:00–18:00	Registration
18:00-20:30	WELCOME COCKTAIL – (CENTRO CONGRESSI LE BENEDETTINE)

Tuesday, 13 May 2025 — **47th Meeting of the Italian Section of the Combustion Institute**

Centro Congressi le Benedettine, Piazza S. Paolo a Ripa D'Arno 16, Pisa

8:15-8:45	Registration			
8:45-9:00	Opening			
9:00-10:00	PLENARY LECTURE – AULA A **SIMPLE MODELS IN COMPLEX PROBLEMS: ARE WE TAKING THE CORRECT STEPS IN COMBUSTION?** ***Prof. Alessandro Parente*** *Chair: Chiara Galletti*			
10:00-10:15	Break/Transfer			
10:15-11:15	ORAL PRESENTATIONS			
	AULA A **SESSION I: Combustion dynamics and flame stability** *Chair: Rachele Lamioni*		**AULA B** **SESSION II: Sprays, droplet combustion and multiphase flows** *Chair: Fabio Sasso*	
10:15	I-1	THE EFFECT OF HYDROGEN ENRICHMENT ON SATURATED OSCILLATIONS AMPLITUDE IN A SIMPLE THERMOACOUSTIC SYSTEM *A. Torregrosa, A. Broatch, J. García-Tíscar, A. Bordoni*	II-1	HIGH-FIDELITY MODELING OF AMMONIA DROPLET BURNING IN MICROGRAVITY *A. Cuoci, A. Frassoldati*
10:30	I-2	NUMERICAL STUDY OF NOISE EMISSION FROM TURBULENT H2 AND CH4 FLAMES *F. G. Schiavone, M. Torresi, S. M. Camporeale, G. Daviller, D. Laera*	II-2	ASSESSMENT OF 3D CFD MODELING OF W/O EMULSIFICATION IN MICROFLUIDIC CROSS-JUNCTIONS *D. Piazzullo, F. Reale, R. Carandente, P. Massoli*
10:45	I-3	FLASHBACK ONSET MECHANISMS AFTER HYDROGEN IGNITION: A COMPREHENSIVE LES STUDY *M. Amerighi, G. Senatori, T. Yahou, J. R. Dawson, T. Schuller, A. Andreini*	II-3	NUMERICAL ANALYSIS OF JET ATOMIZATION IN CROSSFLOW WITH A HYBRID VOF-LPT METHOD *M. Piras, G. Sorrentino, C. Cuscire, R. Ragucci*
11.00	I-4	FLAME QUENCHING MECHANISMS AND NOISE GENERATION IN PREMIXED METHANE AND HYDROGEN FLAMES *N. Misceo, F. G. Schiavone, S. M. Camporeale, M. Torresi, D. Laera*	II-4	VOLUME-OF-FLUID SIMULATIONS OF DROPLET COMBUSTION *E. Cipriano, R. Caraccio, A. Frassoldati, T. Faravelli, A. Cuoci*
11.15-11:45	Coffee Break			

11:45-13:00	ORAL PRESENTATIONS			
	Aula A **SESSION III: Low-Carbon and low-emission strategies including transport processes** *Chair: Filippo Fruzza*		**AULA B** **SESSION IV: Pollutant formation mechanisms and emissions chemistry** *Chair: Matteo Amerighi*	
11:45	III-1	REACTIVE STRUCTURES OF AMMONIA/HYDROGEN BLENDS IN MILD COMBUSTION PROCESSES *B. Cassese, G. Sorrentino, R. Ragucci, M. de Joannon*	IV-1	EMISSIONS CHARACTERISTICS AND ENVIRONMENTAL IMPACT OF COKE OVEN GAS COMBUSTION *S. Yilmaz, K. Bayramoglu*
12:00	III-2	NUMERICAL INVESTIGATION OF RICH-MILD-QUENCH-LEAN AMMONIA COMBUSTION IN A DUAL-STAGE BURNER WITH CYCLONIC AND QUAD JICF CONFIGURATION *D. Cecere, M. Cimini, G.B. Ariemma, E. Giacomazzi*	IV-2	PRESSURE EFFECTS ON NOX EMISSION IN AMMONIA/HYDROGEN SWIRL FLAMES: A COMPARISON OF KINETIC MECHANISMS USING LES-CRN APPROACH *L. Mazzotta, R. Meloni, G. Babazzi, R. Lamioni, A. Valera-Medina, D. Borello*
12:15	III-3	EXPERIMENTAL INVESTIGATION OF INSTABILITIES DURING NH3 MILD COMBUSTION IN A SEMI-INDUSTRIAL SCALE FURNACE *N. Cid, M. Cafiero, E. Rahmani, M. Lubrano Lavadera, M. M. Kamal, A. Parente*	IV-3	COAGULATION OF COMBUSTION-GENERATED CARBONACEOUS NANOPARTICLES OF ETHYLENE AND ETHYLENE/ETHANOL FLAMES IN AN ATMOSPHERIC SIMULATION CHAMBER *V. Liguoro, V. Vernocchi, G. De Falco, F. Picca, F. Sasso, A. Sannino, P. Minutolo, A. D'Anna, T. Isolabella, P. Prati, D. Massabò, M. Commodo*
12.30	III-4	NUMERICAL INVESTIGATION OF MILD COMBUSTION IN NH_3/H_2 MIXTURES USING A PERFECTLY STIRRED REACTOR *Z. Ali Shah, M. Basit Chandio, G. Mehdi, M. G. De Giorgi*	IV-4	IMPACT OF SAFS ON PARTICULATE FORMATION: A COMPARATIVE STUDY IN LAMINAR PREMIXED FLAMES *F. Picca, F. Sasso, M. Commodo, P. Minutolo, A. D'Anna*
12:45	III-5	NUMERICAL INVESTIGATION OF A NOVEL NON-PREMIXED HYDROGEN BURNER UNDER ATMOSPHERIC PRESSURE CONDITIONS *A. Ballotti, G. Senatori, S. Galeotti, A. Andreini*	IV-5	THE EFFECT OF OXYGENATED FUELS ON ETHYLENE LAMINAR PREMIXED FLAME: AN EXPERIMENTAL AND NUMERICAL STUDY *V. Esposito, A. Tregrossi, F. Stanzione, B. Apicella, M. Sirignano, C. Russo*
13.00-14:00	PROJECT POSTERS SESSION AND LUNCH BREAK			

14:00-15:00	PLENARY LECTURE – AULA A **CHEMISTRY OF PYROLYSIS OF (WASTE) HYDROCARBON STREAMS: CARBON UPCYCLING AND H_2 PRODUCTION** ***Prof. Matteo Pelucchi*** *Chair: Giancarlo Sorrentino*			
15:00-15:15	Break/Transfer			
15:15-16:00	ORAL PRESENTATIONS			
	AULA A **SESSION V: Processes for industrial decarbonization, steam reforming and CO_2 removal** *Chair: Marianna Guastaferro*		**AULA B** **SESSION VI: Gas turbines and safety assessment including emission and contaminants mitigation** *Chair: Luna Pratali Maffei*	
15:15	V-1	OXY-COMBUSTION OF COKE BREEZE FOR INTEGRATED DRY REFORMING FOR STEELMAKING DECARBONIZATION *I. Luzzo, E. Faraci, M. Gili, D. Ressegotti, C. Morelli, L. Micheletti, D. Garot*	VI-1	FLARING IN A CLOSED ENVIRONMENT: SCALABILITY AND EMISSION CONTROL *A. Scarano, D. Semeraro, S. Kretzschmar, R. Withnall*
15:30	V-2	SIMULATION OF A FLUIDIZED BED REACTOR FOR THE SORPTION-ENHANCED STEAM METHANE REFORMING PROCESS *A. Coppola, F. Massa, F. Scala*	VI-2	A COST-EFFECTIVE NUMERICAL APPROACH FOR RISK-SEVERITY ASSESSMENT OF DEFLAGRATION EVENTS IN HYDROGEN-ENRICHED GAS TURBINE EXHAUSTS *G. Lemmi, P. C. Nassini, M. Cerutti, A. Andreini*
15:45	V-3	H_2-READY BURNERS FOR STEEL INDUSTRY DECARBONIZATION: ACHIEVEMENTS AND CHALLENGES *S. Nardi, M. Bissoli, D. Astesiano, E. Malfa*	VI-3	UNDERSTANDING METHANOL COMBUSTION FOR THE DESIGN OF A DEDICATED LOW-EMISSION BURNER *L. Giuntini, M. M. Kamal, M. Lubrano Lavadera, A. Coussement, A. Parente*
16:00-16:30	Coffee Break			
16.30-17:00	D'ALESSIO AWARD 2025			
17.00-18:00	ASICI MEMBER MEETING			
18.30-20:30	EARLY CAREER RESEARCHER MIXER (Cavalieri – Specialty Coffee)			

Wednesday, 14 May 2025 **47th Meeting of the Italian Section of the Combustion Institute**
Centro Congressi le Benedettine, Piazza S. Paolo a Ripa D'Arno 16, Pisa

8:15-9:00	Registration			
9:00-10:00	PLENARY LECTURE – AULA A **LARGE-EDDY SIMULATION OF REACTING PARTICLE LADEN FLOWS** ***Prof. Andreas Kempf*** *Chair: Maria Vittoria Salvetti*			
10:00-10:15	Break/Transfer			
10:15-11:15	ORAL PRESENTATIONS			
	AULA A **SESSION VII: Innovative propulsion systems and engine combustion** *Chair: Pasquale Di Gloria*		**AULA B** **SESSION VIII: Biomass and waste thermochemical conversion and valorization** *Chair: Roberta Russo*	
10:15	VII-1	INVESTIGATIONS OF FILM COOLED ROTATING DETONATION COMBUSTOR *S. Ramanagar Sridhara, A. Andreini, M. Polanka, M. Bohon*	VIII-1	A ONE-GRID FRAMEWORK FOR ANISOTROPIC REACTING POROUS MEDIA: APPLICATION TO BIOMASS PYROLYSIS *R. Caraccio, E. Cipriano, A. Frassoldati, T. Faravelli*
10:30	VII -2	NUMERICAL INVESTIGATION OF COMBUSTOR INLET TEMPERATURE EFFECTS ON EMISSIONS AND PERFORMANCE IN NON-PREMIXED AMMONIA-FUELED MICRO-GAS TURBINES *M. Fatehi, M. Renzi*	VIII-2	EFFECT OF COAL PARTICLE SIZE, AIR VELOCITY AND TEMPERATURE ON TRANSIENT PULVERIZED COAL COMBUSTION *S. Yilmaz, K. Bayramoglu*
10:45	VII -3	LARGE-EDDY SIMULATIONS OF TRANSCRITICAL AND DOUBLY-TRANSCRITICAL LOX-METHANE FLAMES *D. Cavalieri, D. Schintu, P. P. Ciottoli, P. E. Lapenna, F. Creta*	VIII-3	THERMAL DEGRADATION OF POLY(METHYL METHACRYLATE): CONDENSED-PHASE KINETIC MODEL AND EXPERIMENTAL INVESTIGATION *A. Locaspi, S. Delfino, F. Pelizza, M. Pelucchi, M. Mehl, M. Sponchioni, D. Moscatelli, T. Faravelli*
11.00	VII -4	EVALUATING THE IMPACT OF LUBRICATING OIL FORMULATION ON GAS ENGINE PARTICLE EMISSIONS THROUGH EXPERIMENTAL AND MACHINE LEARNING METHODOLOGIES *C. Guido, A. Arpino, P. Napolitano, D. Cerbone, D. Di Domenico, C. Beatrice*	VIII -4	FROM WASTE TO FLAME-DERIVED CARBON CATALYST: A NOVEL APPROACH VIA ELECTROSPRAY DEPOSITION *A. Parisi, L.P. Di Bonito, A. Di Colandrea, M. Sirignano, F. Di Natale*
11.15-11:45	Coffee Break			

11:45-13:00	ORAL PRESENTATIONS			
	AULA A **SESSION IX: Numerical combustion and CFD modelling** *Chair: Gianluca Rossiello*		**AULA B** **SESSION X: Low-Carbon fuels: fundamentals and kinetics** *Chair: Andrea Locaspi*	
11:45	IX-1	OPTIMAL SUB-MODEL SELECTION BASED ON STOCHASTIC MODELING OF PARTIALLY STIRRED REACTOR MODEL *Y. Yalcinkaya, A. Péquin, R. Amaduzzi, A. Parente*	X-1	THE ROLE OF CARBON-NITROGEN INTERACTIONS IN THE LOW TEMPERATURE OXIDATION OF NH3/CH3OH FUEL BLENDS *F. R. Artioli, G. D'Amato, A. Stagni*
12:00	IX -2	HYBRIDISATION OF THE THICKENED FLAME MODEL AND EDDY DISSIPATION CONCEPT FOR HIGH-FIDELITY MULTI-REGIME COMBUSTION MODELLING *G. Lemmi, S. Castellani, R. Meloni, N. Ansari, S. Orsino, M. Farokhi, A. Andreini*	X -2	RAMAN SPECTROSCOPY AS A DIAGNOSTIC TOOL FOR TRADITIONAL AND AMMONIA COMBUSTION *R. Dal Moro, F. Melison, L. Cocola, L. Poletto*
12:15	IX -3	FLAMELET-BASED MODELING OF THERMO-DIFFUSIVELY UNSTABLE HYDROGEN-AIR FLAMES *C. Matteucci, S. Bottari, D. Cavalieri, F. d'Alessio, D. Schintu, P. E. Lapenna, F. Creta*	X -3	NITROGEN OXIDES CHEMICAL PATHWAY IDENTIFICATION IN A PARTIALLY PREMIXED NH3-H2 SWIRLED FLAME *H. J. Vargas Ruiz, L. Gicquel, D. Laera*
12.30	IX -4	LatentBatchSMOKE++, A LATENT VARIABLE TRANSPORT SOLVER FOR BATCH REACTORS WITH DETAILED CHEMISTRY COMPUTATION *E. Muñoz, M.R. Malik, A. Cuoci, H.G. Im and A. Parente*	X -4	THE IMPACT OF NH2 RADICAL ON SOOT FORMATION IN LAMINAR FLAMES *P. Crepaldi, A. Nobili, T. Dinelli, L. Pratali Maffei, A. Cuoci, T. Faravelli*
12:45	IX -5	DNS STUDY OF THE IMPACT OF THERMODIFFUSIVE EFFECTS ON THE TURBULENT FLAME SPEED IN PARTIALLY CRACKED AMMONIA FLAMES *R. Intranuovo, F. G. Schiavone, D. Laera*	X-5	BEYOND CONVENTIONAL MODELS: IMPLEMENTATION OF LMR-R FRAMEWORK FOR MULTI-COLLIDER SYSTEMS IN HYDROGEN COMBUSTION *T. Dinelli, M. Primi, L. Pratali Maffei, A. Cuoci, C. Cavallotti, M. Pelucchi*
13.00-14:00	LUNCH BREAK – WOMEN IN COMBUSTION (WiC)			

14:00-15:00	PLENARY LECTURE AULA A **MULTIFUEL COMBUSTION: FUELING THE TRANSITION TO ZERO-EMISSION AVIATION** ***Prof. Francesca De Domenico*** *Chair: Davide Laera*			
15:00-15:15	Break/Transfer			
15:15-16:00	ORAL PRESENTATIONS			
	AULA A **SESSION XI: Plasma-assisted combustion and fuel synthesis** *Chair: Gianluigi De Falco*		**AULA B** **SESSION XII: Materials for fuels valorization and processing** *Chair: Davide Amato*	
15:15	XI-1	ENHANCING COMBUSTION EFFICIENCY AND EMISSION REDUCTION THROUGH MILD COMBUSTION COUPLED WITH NON-THERMAL PLASMA *M. G. De Giorgi, S. Bonuso, P. Di Gloria, G. Battista Ariemma, P. Sabia, R. Ragucci*	XII-1	UTILIZING γ-AL_2O_3-SUPPORTED PEROVSKITES IN METHANE CHEMICAL LOOPING CYCLES *R. Russo, S. Padula, C. Tregambi, M. Troiano, R. Solimene, G. Landi*
15:30	XI -2	PLASMA CATALYTIC NH3 SYNTHESIS: THE ROLE OF THE SUPPORT IN SILVER ENHANCED PLASMA NH3 SYNTHESIS *F. Spadoni, S. Perina, G. Castellani, P. Tosi, P. Fornasiero, V. M. Sglavo, L. M. Martini*	XII -2	CARBON PRODUCTS BY METHANE DECOMPOSITION WITH ORGANOMETALLIC PRECURSORS *E. A. Scelzo, F. Picca, N. Molaro, L. Basta, M. Commodo, P. Minutolo, A. D'Anna*
15:45	XI -3	THE INFLUENCE OF PLASMA ON DETONATION FOR HYDROGEN/OXYGEN MIXTURES *G. Cinieri, A. S. Zubair, M. G. De Giorgi*	XII -3	METHANE CRACKING IN MOLTEN TIN FOR CLEAN HYDROGEN AND CARBON PRODUCTION: AN EXPERIMENTAL STUDY *B. de Caprariis, E. Busillo, M.P. Bracciale, M. Pelucchi, P. De Filippis*
16.00-16:30	Coffee Break			
16.30-18:00	TOUR: EXPLORE PISA			
19.30-22:00	SOCIAL DINNER (RISTORANTE BISTROT DELL'OPERA)			

Thursday, 15 May 2025 **47th Meeting of the Italian Section of the Combustion Institute**
Centro Congressi le Benedettine, Piazza S. Paolo a Ripa D'Arno 16, Pisa

9:00-9:30	Registration
9:30-9:45	Break/Transfer
9:45-11:15	ROUND TABLE **"INDUSTRIAL STRATEGIES FOR A LOW-CARBON FUTURE"** *Moderators: Chiara Galletti, Rachele Lamioni* - *Luca Linari* (Andritz) - *Christian Romano* (Baker Hughes) - *Salvatore Nardi* (Tenova) - *Gianluca Magnanini (Enapter)* - *Massimiliano Fantuzzi (Danieli Group)* - *Leonardo Tognotti (Università di Pisa)*
11:15-12:30	POSTER SESSION AND COFFEE BREAK
12:30-13:00	Closing remarks and awards for young researchers
13:00-14:30	Farewell Lunch
14.30-18:30	**THIRD ITALIAN WORKSHOP ON AMMONIA ENERGY** AULA A Centro Congressi le Benedettine

POSTER SESSION FOR FUNDED PROJECTS	
FPP1	Project: ENHANCING SYNGAS PRODUCTION FROM WASTE THROUGH MICROWAVE-ASSISTED CO-PYROLYSIS OF BIOMASS AND PLASTICS *M. Guastaferro, C. Nicolella, L. Tognotti*
FPP2	Project: ACHIEVE ADVANCING THE COMBUSTION OF HYDROGEN-AMMONIA BLENDS FOR IMPROVED EMISSIONS AND STABILITY *F. Creta, P. E. Lapenna, A. Orchini, C. O. Paschereit, A. Andreini, F. De Domenico, F. Guethe, B.Fiorina, R. Viquelin, C. Sala, J.J. Candel, T.F. Guiberti*
FPP3	Project: FLEXI-FUEL HIGH-EFFICIENCY LINEAR PISTON ENGINE FOR FUTURE POWER GENERATORS *C. Beatrice, T. Lucchini, M. Baratta, C. Capasso, D. Misul, R. Saviano, F. Capuano, N. Morandi, A. Scopelliti, F. Santonocito, R. Sola*
FPP4	Project: MINICOR - MILD COMBUSTION WITH NITROGEN AND CARBON DIOXIDE REFORMING *C. Brackmann, F. Ossler, S. Möller, H. Fatehi, N. Garcia Gonzales, M. de Joannon, R. Ragucci, P. Sabia, C. M. Grottola, P. Giudicianni, G. Sorrentino, P. Glarborg, H. Hashemi, K. Davidsson, W. Butt*
FPP5	Project: NOX EMISSIONS FROM NH3/H2/N2 FUEL BLENDS IN GAS TURBINES: A CHEMICAL REACTOR NETWORK-BASED ASSESSMENT *R. Lamioni, L. Mazzotta, C. Romano, C. Galletti*
FPP6	Project: HYDROGEN AND CARBON BLACK PRODUCTION FROM CRACKING IN MOLTEN MEDIA (HAMMER) *B. de Caprariis, M. Pelucchi, M. Bracconi*
FPP7	Project: NEST – Network 4 Energy Sustainable Transition Spoke 3- Bioenergy & New biofuels for sustainable future *Antonio Coppola et al.*
FPP8	Project: Slags inerTization and valoRizatiON of the off-Gas from STEEL Industry through gas-fermentATION for bio-butanol production *Antonio Coppola et al.*
FPP9	Project: POR H2-PIANO OPERATIVO DI RICERCA SULL'IDROGENO *Antonio Coppola et al.*
FPP10	Project: HYDROGEN IRON TRANSPORT *Antonio Coppola et al.*
FPP11	Project: iENTRANCE@ENL - Infrastructure for ENergy TRAnsition aNd Circular Economy @ EuroNanoLab *Andrea Capuozzo & Luigi Stanzione*
FPP12	Project: POTTERS "POrtable Thermal Treatment for Effective and Regenerative Sludge management" *Antonio Capasso et al.*
FPP13	Project: GAPFORCE_GAs Production FOr Circular Economy *Antonio Capasso et al.*
FPP14	Project: FENICS_Fanghi, Energia e scarti industriali per economia circolare e Sostenibilità *Antonio Capasso et al.*
FPP15	Project: Rechargeable Thermochemical Energy Battery for Energy Storage from Renewable Sources (ReThebes) *S. Padula, F. Di Lauro, G. Marotta, L. E. Nozzolillo, R. Arena, C. Tregambi, M. Troiano, M. Alfé, V. Gargiulo, L. Cimino, P. Giudicianni, A. Coppola, M. Urciuolo, T. Bencivenga, A. Cante, E. Marinò, F. Montagnaro, P. Salatino, R. Solimene*

WORK-IN-PROGRESS POSTER SESSION	
P1	CHAR:ME: BIOCHAR AND BIOMASS-DERIVED WASTE PRODUCTS AS SUSTAINABLE AND SAFE DOMESTIC FUEL *R. Caraccio, M. M. Afessa, A. Scialabba, L. Signori, L. Capel, D. Caregnato, D. Della Toffola, C. Ferrato, T. Faravelli, M. Bracconi, A. Turolla, M. Pelucchi*
P2	EULER-EULER SIMULATION OF WASTE PLASTIC GASIFICATION IN A FLUIDIZED BED WITH KINETIC MODEL *X. Guan, A. Cuoci*
P3	RATE RULE MODELING OF PAHs GROWTH *N. Fanari, L. Pratali Maffei, T. Faravelli*
P4	RESPONSE OF ACOUSTICALLY EXCITED LEAN LAMINAR HYDROGEN FLAMES *L. Iaria, S. Al Kassar, F. Fruzza, R. Lamioni, C. Galletti, A. Attili*
P5	PARAMETRIC ANALYSIS OF LEAN TURBULENT PREMIXED HYDROGEN FLAMES *S. Cantagalli, S. Al Kassar, F. Fruzza, R. Lamioni, A. Attili, C. Galletti*
P6	INTEGRATION OF FILM COOLING IN A MICROROTATING DETONATION COMBUSTOR *M. Tagliaferri, A. Picchi, M. Polanka, A. Andreini, B. Facchini*
P7	PYROLYSIS OF IRON-IMPREGNATED PLASTIC SOLID WASTE *L. Marchetti, C. Nicolella, R. Volpe*
P8	CALCIUM LOOPING TESTS WITH SiC/LIMESTONE MIXTURES TO IMPROVE SOLAR ADSORPTION IN A DIRECTLY IRRADIATED FLUIDIZED BED FOR THERMOCHEMICAL ENERGY STORAGE *F. Di Lauro, C. Tregambi, G. Marotta, R. Arena, F. Montagnaro, P. Salatino, R. Solimene*
P9	RE-THINKING SPENT LiFePO4 CATHODES RECYCLING *B. Visone, A. Maaoui, B. Apicella*
P10	EFFECTS OF WET OXIDATION ON FLAME-FORMED CARBON NANOMETERIALS *A. Caputo, B. Apicella, A. Maaoui, M.M. Oliano, C. Russo, M. Sirignano*
P11	COMBUSTION AND PERFORMANCE ANALYSIS OF A SPARK IGNITION ENGINE FUELED WITH AMMONIA/HYDROGEN BLENDS *L. Teodosio, F. Berni, G. Langella*
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