

TUESDAY, 16 SEPTEMBER | Room A

9:00	Welcome to AMPERE 2025
9:10	Plenary Lecture - Chair: (TBD) CHRISTOPHER BRACE BRING THE HEAT: ADVANCES AND CHALLENGES IN MICROWAVE ABLATION <i>Christopher Brace</i>
9:50	Plenary Lecture - Chair: (TBD) SANDRA COSTANZO MICROWAVE TECHNOLOGIES FOR SENSING AND DIAGNOSTICS <i>Sandra Costanzo</i>
10:30	BREAK
	Session TS05a – Chaired by Marco Fiore & Punit Prakash MEDICAL AND BIOLOGICAL APPLICATIONS - NEVIO TOSORATTI MEDICAL SESSION
10:50	Simone Cassarino FROM RESEARCH TO PATIENTS CARE: THE IMPACT OF NEVIO TOSORATTI ON INTERVENTIONAL ONCOLOGY Simone Cassarino
11:00	Punit Prakash MODEL-DRIVEN DEVELOPMENT AND ASSESSMENT OF A LOCAL THERMAL THERAPY SYSTEM FOR PRE-CLINICAL EXPERIMENTAL INVESTIGATIONS IN SMALL ANIMALS <i>Anna Bottiglieri, Punit Prakash</i>
11:20	Luis Cuenca-Dacal COLD SALINE IRRIGATION DURING EPICARDIAL RADIOFREQUENCY ABLATION: PROTECTING ADJACENT STRUCTURES WITHOUT COMPROMISING LESION EFFICACY <i>Luis Cuenca-Dacal, Marcela Mercado-Montoya, Tatiana Gómez-Bustamante, Enrique Berjano, José M. Lozano, María Teresa Izquierdo, Juan J. Pérez, Ana González-Suárez</i>
11:35	Giuseppe Ruvio SECOND-GENERATION TRANSBRONCHIAL MICROWAVE ABLATION TECHNOLOGY FOR SAFE AND CONTROLLED TREATMENT OF LUNG TUMOURS <i>Giuseppe Ruvio, Laura Farina</i>
12:50	Giorgia Paglialunga TECHNOLOGICAL ADVANCEMENTS OF THE ALBA 4D: A 70 MHZ LOCO-REGIONAL RADIATIVE HYPERTHERMIA SYSTEM <i>Artemis Kontogoula, Giorgia Paglialunga, Francesca Romana Cappelli, Eugenio Pagliaroli, Pierfrancesco Pavoni</i>
12:05	Marco Di Cristofano CHARACTERIZATION AND OPTIMIZATION OF AN E-FIELD SENSOR FOR RADIATIVE HYPERTHERMIA APPLICATION <i>Marco Di Cristofano, Giorgia Paglialunga, Luca Lalli, Marta Cavagnaro</i>
12:20	QUICK LUNCH

	Session TS05b – Chaired by Marta Cavagnaro & Li Wu MEDICAL AND BIOLOGICAL APPLICATIONS - NEVIO TOSORATTI MEDICAL SESSION
14.00	Li Wu MICROWAVE-INDUCED ATMOSPHERIC PRESSURE ROOM-TEMPERATURE PLASMA JET AT ATMOSPHERIC PRESSURE AND ITS APPLICATION IN ORAL SQUAMOUS CELL CARCINOMA TREATMENT <i>Li Wu, Wenting Qi, Xian Liu, Junwu Tao, Yutian Yu</i>
14.20	Mary McGovern MICROWAVE COLD PLASMA MEDICAL DEVICE - FROM PROTOTYPE TO COMMERCIALISATION <i>Mary McGovern</i>
14.35	Heinrich Rotering CLINICAL APPLICATION OF COLD ATMOSPHERIC PLASMA - ONE-YEAR FOLLOW UP OF A PLASMA BASED TREATMENT CONCEPT FOR STERNAL INFECTION <i>Heinrich Rotering</i>
14.50	Marta Cavagnaro EXPERIMENTAL DIELECTRIC SPECTROSCOPY RESULTS WITH TWO DIFFERENT SMART MICROWAVE THERMAL ABLATION APPLICATORS <i>Klementina Vidjak, Andrea Colombo, Cavagnaro Marta</i>
15.05	Amir Ghassabi A BROADBAND VERSATILE EXPOSURE SYSTEM FOR DIELECTRIC SPECTROSCOPY APPLICATIONS <i>Amir Ghassabi, Alessandra Paffi, Francesca Apollonio, Micaela Liberti</i>
15.20	BREAK
	Session TS05c – Chaired by Marta Cavagnaro & Li Wu MEDICAL AND BIOLOGICAL APPLICATIONS - NEVIO TOSORATTI MEDICAL SESSION
16.00	Marta Cavagnaro A MULTISENSOR APPROACH FOR REAL-TIME MONITORING OF MICROWAVE THERMAL ABLATION PROCEDURES <i>Klementina Vidjak Fabio Cappelli, Fabiana Capitanio, Lucia Pullo, Domenico Caputo, Nicola Lovecchio, Lorenzo Crocco, Rosa Scapatucci, Marta Cavagnaro</i>
16.20	Francesco Anelli INKJET-PRINTED ANTENNAS: FROM SIMPLE STRUCTURES TO COMPLEX RESONATORS <i>Francesco Anelli, Antonella Maria Loconsole, Vito Vincenzo Francione, Md. Imran Khan, Francesco Prudeniano</i>
16.35	Marco Fiore SOLID-STATE MICROWAVE GENERATORS FOR ADVANCED TISSUES ABLATION <i>Marco Fiore, Fabio Lobascio, Nicola Di Modugno, Tommaso De Nicola, Cristian Bruno, Rocco Di Modugno, Amandine Guissart</i>
16.50	Antonella Maria Loconsole MICROWAVE NEEDLE APPLICATORS FOR CANCER THERAPY: A LOW-COST AND MINI-INVASIVE SOLUTION <i>Antonella Maria Loconsole, Francesco Anelli, Vito Vincenzo Francione, Md. Imran Khan, Francesco Prudeniano</i>
17.05	Shuntaro Tsubaki ENHANCING THE FREEZE-DRYING OF BIOLOGICAL MATERIALS BY AN ICE-RESONANT MICROWAVE HEATING <i>Shuntaro Tsubaki, Yo Kamikawa, Mai Nakata, Yuki Takayama, Ibrahim Maamoun, Noriyuki Igura, Etsuo Yonemochi</i>
17.05 18.00	POSTER SESSION
19.30 Late	<i>An Evening of Good Food and Friendship</i>

TUESDAY, 16 SEPTEMBER | Room B

	Session TS01 – Chaired by CHEMISTRY/BIOCHEMISTRY AND PROCESSING
11.00	Witold Łojkowski MICROWAVE, HIGH PRESSURE, AND ULTRASONIC TECHNOLOGY FOR NANOMATERIALS SYNTHESIS <i>Witold Łojkowski Urszula Szafaj Jacek Wojnarowicz, Julia Higuchi, Tadeusz Chudoba, Anna Swiderska-Sroda, Olena Sych, Wojciech Majewski, Andrzej Majcher</i>
11.20	Maurizio Vignolo MICROWAVE-ASSISTED TECHNIQUES FOR ADVANCED AND INNOVATIVE MATERIALS <i>Maurizio Vignolo, Riccardo Manfredi, Fortunato Marco, Luciano Giorgio, Utzeri Roberto, Buscaglia Maria Teresa, Stagnaro Paola</i>
11.35	Gregory Facas MICROWAVE PLASMA PYROLYSIS OF METHANE: THE EFFECT OF ACETYLENE AND HYDROGEN COFEEDING <i>Gregory Facas, Ilva Lazdina, Panayotis Dimopoulos Eggenschwiler</i>
12.50	Dezhi Gou INFLUENCE OF ELECTROSTATIC FIELD ON OPTICAL ROTATION OF D-GLUCOSE SOLUTION: EXPERIMENTAL RESEARCH FOR MICROWAVE NON-THERMAL EFFECT <i>Dezhi Gou</i>
12.05	Ryo Ishibashi ATOMIC-LEVEL SELECTIVE HEATING OF METAL CATIONS IN ZEOLITE FRAMEWORKS FOR EFFICIENT MICROWAVE-DRIVEN CATALYSIS <i>Ryo Ishibashi, Fuminao Kishimoto, Kazuhiro Takanabe</i>
12.20	QUICK LUNCH
	Session TS01b – Chaired by (TBD) CHEMISTRY/BIOCHEMISTRY AND PROCESSING
14.00	Cecilia Mortalò MICROWAVE-ASSISTED HYDROTHERMAL PROCEDURE FOR THE PREPARATION OF EU3+:YPO4 LUMINESCENT NANOPOWDERS <i>Cecilia Mortalò, Enrico Paradisi, Valentina Zin, Silvia Maria Deambrosis, Enrico Miorin, Cristina Leonelli</i>
14.20	Frederic Meunier FIXATION OF N2 TO NOX OVER (LA,SR)MNO3 PEROVSKITE ASSISTED BY MICROWAVES <i>Frederic Meunier, Marilena Radoiu, Yves Schuurman, Amelie D'Ascia, Marta Marinelli</i>
14.35	Ángel M. López-Buendía INNOVATIVE MICROWAVE-BASED APPROACH FOR ENERGY-EFFICIENT DRYING OF CERAMIC TILES <i>Beatriz García-Baños, Ángel M. López-Buendía, Mar Urquiola, Eduardo Brau, Jose M. Catalá-Civera</i>
14.50	Annapoorani Ketharam MICROWAVE AND ELECTRIC FIELD ASSISTED PROCESSING OF ZIRCONOLITE CERAMICS FOR NUCLEAR APPLICATIONS <i>Annapoorani Ketharam, Pletser Dimitri Evans Nigel, Sina Saremi-Yarahmadi, Bala Vaidhyanathan</i>
15.05	Katarzyna Matras-Postolek MICROWAVE-ASSISTED SYNTHESIS OF GRAPHITIC CARBON NITRIDE-BASED PHOTOCATALYSTS FOR ENVIRONMENTAL PURIFICATION <i>Katarzyna Matras-Postolek, Alicja Szymaska-Szymanik, Xiao Zhang</i>
15.20	BREAK
	Session TS01c – Chaired by (TBD) CHEMISTRY/BIOCHEMISTRY AND PROCESSING
16.00	Celia Duce ADVANCEMENTS IN BIOMASS PROCESSING: EXPLORING MW COAXIAL ANTENNA TECHNOLOGY FROM LABORATORY TO PILOT PLANT <i>Celia Duce</i>
16.20	Sota Kuramoto HETEROGENEOUS CATALYST DESIGN FOR ENERGY-EFFICIENT MICROWAVE-DRIVEN AMMONIA DECOMPOSITION <i>Sota Kuramoto, Fuminao Kishimoto, Tatsuya Shinagawa, Masayuki Kawagoe, Chihiro Hiraiwa, Kazuhiro Takanabe</i>
16.35	Miki Takizawa MICROWAVE-ASSISTED GREEN CHEMISTRY FOR EFFICIENT N-METHYLATION IN PHARMACEUTICALS <i>Miki Takizawa, Akinobu Matsumoto, Takashi Miyazawa, Satoshi Horikoshi</i>
16.50	Łukasz Janus MICROWAVE-ASSISTED SYNTHESIS OF BIOMASS-DERIVED CARBON QUANTUM DOTS FOR UV-BASED DETECTION OF SOIL ELEMENTS IN PRECISION AGRICULTURE <i>Łukasz Janus, Julia Radwan-Pragłowska, Aleksandra Sierakowska-Byczek, Klaudia Kuźmiak, Karol Łysiak</i>

17.05	Takeomi Morishima POTENTIAL OF MICROWAVE VULCANIZATION TECHNOLOGY FOR SUSTAINABLE TIRE RUBBER PRODUCTS IN A CIRCULAR ECONOMY <i>Takeomi Morishima, Toshiki Takizawa, Satoshi Horikoshi</i>
19.30 Late	<i>An Evening of Good Food and Friendship</i>

TUESDAY, 16 SEPTEMBER | Room C

Session TS02a – Chaired by Juan Monzò-Cabrera DIELECTRIC AND MAGNETIC MATERIALS PROPERTIES

11.00	Junwu Tao NUMERICAL INVESTIGATION OF THE DEPOLARIZATION FACTOR TO IMPROVE THE MEASUREMENT OF THE ELECTRICAL PARAMETERS OF MATERIALS <i>Khawla Ghorab, Junwu Tao, Rawdha Thabet, Mohamed Lahdi Riabi, Tan Hoa Vuong</i>
11.20	Felipe Penaranda-Foix PERMITTIVITY MEASUREMENTS OF MATERIALS FOR CO ₂ CAPTURE <i>Felipe Penaranda-Foix, Reyes Mallada-Viana, José D. Gutierrez-Cano, Beatriz García-Baños, Pedro J. Plaza-Gonzalez, Lucia Bacete Barchin, Laura Florentino</i>
11.35	Yedai Hu STUDY OF A MICROWAVE PLASMA TORCH WITH FOCUSING DIELECTRIC <i>Yedai Hu, Huacheng Zhu, Yang Yang</i>
12.50	Sofia N. Gonçalves MORPHOLOGY-DEPENDENT DIELECTRIC RESPONSE OF 6H-SIC UNDER MICROWAVE HEATING <i>Sofia N. Gonçalves, Felipe L. Peñaranda-Foix, Reyes Mallada-Viana, José D. Gutiérrez-Cano, Beatriz García-Baños, Pedro Plaza-González, José M. Cátala-Civera</i>
12.05	Anne Tretau MEASUREMENT SETUP FOR DETERMINING THE PERMITTIVITY UP TO 1000 °C <i>Anne Tretau, Ralf Wagner, Albrecht Schmidt, Christian Dannert, Moritz Fritzsche</i>

12.20 QUICK LUNCH

Session TS02b – Chaired by Kama Huang DIELECTRIC AND MAGNETIC MATERIALS PROPERTIES

14.00	Malgorzata Celuch ADVANCES IN MATERIAL MEASUREMENTS WITH MICROWAVE AND MMWAVE MULTIMODE RESONATORS <i>Malgorzata Celuch, Marzena Olszewska-Placha, Lukasz Nowicki</i>
14.20	José D. Gutiérrez-Cano IMPROVED APPROACH FOR DIELECTRIC MEASUREMENTS OF MATERIALS UNDER MICROWAVE HEATING <i>José D. Gutiérrez-Cano, Beatriz García-Baños, José M. Catalá-Civera, Felipe L. Peñaranda-Foix</i>
14.35	Lucía Bacete-Barchín EXPLORING MICROWAVE ENHANCEMENT OF CONDUCTIVITY IN MATERIALS <i>Lucía Bacete-Barchín, José D. Gutiérrez-Cano, Aitor Dominguez-Saldaña, Pedro J. Plaza-González José M. Serra, José M. Catalá-Civera</i>
14.50	Alba Cao ENHANCING SUSTAINABLE AGRICULTURE THROUGH INNOVATIVE ORGANIC FERTILIZERS DERIVED FROM ANIMAL BY-PRODUCTS <i>Alba Cao, Tiziana Pivetta, Paola Casti, Mirco Fara, Marco Dettori, Antonio Diaferia, Costantino Palmas</i>

15.20 BREAK

Session TS11 – Chaired by Claudia Fernández Martín BIOMASS AND WASTE PROCESSING

16.00	Claudia Fernandez Martin PRODUCTION OF HOUSEHOLD MIXED PLASTIC-DERIVED CO ₂ ADSORBENTS THROUGH MICROWAVE CHEMICAL ACTIVATION <i>Emanuel Dan, Claudia Fernandez Martin, Alan McCue, Davide Dionisi</i>
16.20	Muhammad Usman Azam EFFECT OF MORPHOLOGICAL MODIFICATIONS AND SURFACE FUNCTIONALIZATION OF METAL CARBIDES ON THE MICROWAVE-ASSISTED UPCYCLING OF PLASTIC WASTE TO MONOMERS <i>Muhammad Usman Azam, Michael X. Jie, Peter P. Edwards, Daniel R. Slocombe</i>
16.35	Mohamed Adam DIELECTRIC BEHAVIOUR OF POLYMERS AND ITS IMPLICATIONS FOR MICROWAVE-ASSISTED PLASTIC RECYCLING <i>Mohamed Adam, Nicklas Hjalmarsen, Chai Lee, John Robinson, Derek Irvine, Eleanor Binner</i>

16.50	Mayu Takechi CHEMICAL UPCYCLING OF PLASTICS AND CREATION OF NOVEL MATERIALS USING THE PHYSIOLOGICAL FUNCTION MODULATION EFFECTS OF INSECTS BY MICROWAVES <i>Mayu Takechi, Ryu Murata, Satoshi Horikoshi</i>
17.05	Chai Siah Lee HIGHLY EFFICIENT AND RAPID DECHLORINATION OF POLYVINYL CHLORIDE VIA MICROWAVE PYROLYSIS <i>Chai Siah Lee, Mohamed Adam, Eleanor Binner, John Robinson</i>
19.30 Late	<i>An evening of Good Food and Friendship</i>

TUESDAY, 16 SEPTEMBER | Room D

Session TS10 – Chaired by Guido Link MATERIAL INTERACTION

11.00	Bala Vaidhyanathan MICROWAVE ASSISTED PROCESSING OF 3D PRINTED CERAMICS <i>Bala Vaidhyanathan, Annapoorani Ketharam Parvathi Vasudevan, Thanos Goulas, Baschar Ozkan, Cameron Wallace-Carville, Aravind K Janardhanan, Sina Saremi Yarahmadi</i>
11.20	Parvathi Vasudevan FIELD-ASSISTED PROCESSING OF NEXT-GENERATION “GREEN” CERAMIC FILTERS <i>Parvathi Vasudevan, Annapoorani Ketharam, Thanos Goulas, Sina Saremi-Yarahmadi, Bala Vaidhyanathan</i>
11.35	Muralimohan Juttu Vidyasagar MICROWAVE ENHANCED RECYCLING OF PEM FUEL CELL/ ELECTROLYSER COMPONENTS: MATERIAL CHARACTERISTICS <i>Muralimohan Juttu Vidyasagar, Ralph Behrend, Hartmut Krause</i>
12.50	Mamdouh Omran EFFICIENT RECYCLING OF SPENT LITHIUM ION BATTERIES (LIBS) BY APPLYING MICROWAVE PRETREATMENT <i>Mamdouh Omran</i>
12.05	Cristina Leonelli GEOPOLYMER-BASED REFRACTORIES AND SUSCEPTORS FOR MICROWAVE HEATING APPLICATIONS <i>Veronesi Paolo, Elena Colombini, Magdalena Gualtieri, Isabella Lancellotti, Elie Kamseu, Cristina Leonelli, Ainhoa Bilbao, Jose Ignacio Tolosa, Irina Rivero, Santiago Torres, Panagiotis Davris, Efthymios Balomenos</i>

12.20 QUICK LUNCH

Session TS07a – Chaired by Eli Jerbi PLASMA PHENOMENA AND PROCESSING

14.00	Marilena Radoiu MICROWAVE-ASSISTED FIXATION OF N ₂ TO NO _x OVER PEROVSKITES <i>Marilena Radoiu, Yves Schuurman, Frederic Meunier</i>
14.20	Soldatov Sergey ENHANCING EFFICIENCY OF CO ₂ REDUCTION IN ATMOSPHERIC MICROWAVE PLASMA BY MEANS OF QUENCHING IN A WATER-COOLED NOZZLE <i>Soldatov Sergey, Lucas Silberer, Guido Link, Alexander Navarrete, Roland Dittmeyer, John Jelonnek</i>
14.35	Yutian Yu QUANTITATIVE RESEARCH OF DEEP DISINFECTION EFFICACY OF MICROWAVE-INDUCED ROOM-TEMPERATURE PLASMA JETS UNDER ATMOSPHERIC PRESSURE <i>Yutian Yu, Kama Huang, Li Wu, Shinohara Naoki</i>
14.50	Fujii Satoshi REDUCTION OF DYSPROSIUM OXIDE BY MICROWAVE PLASMA <i>Fujii Satoshi</i>
15.05	Jens Hofmann FROM RENEWABLE ENERGY TO VALUABLE CHEMICALS: PLASMA INNOVATIONS IN POWER-TO-X APPLICATIONS <i>Jens Hofmann, Amandine Guissart, Markus Dingeldein, Klaus-Martin Baumgaertner</i>

15.20 BREAK

Session TS07b – Chaired by Koen Van Reusel PLASMA PHENOMENA AND PROCESSING

16.00	Amandine Guissart PERFORMANCE STUDY OF A SOLID-STATE MICROWAVE REMOTE PLASMA SOURCE <i>Amandine Guissart, Timo Richter, Daniel Baars, Marco Fiore, Markus Dingeldein, Klaus-Martin Baumgaertner</i>
16.20	Nora Schüller OPTICAL EMISSION SPECTROSCOPY CHARACTERIZATION OF MICROWAVE PLASMA <i>Nora Schüller, Panayotis Dimopoulos Eggenschwiler, Gregory Facas</i>
16.35	Jerome Cuenca MICROWAVE PLASMA MODELLING FOR DIAMOND ON III-NITRIDES <i>Jerome Cuenca, Soumen Mandal, Oliver Williams</i>

WEDNESDAY, 17 SEPTEMBER Room A	
8.30	Plenary Lecture - Chair: Marilena Radolu GEORGIOS STEFANIDIS OPPORTUNITIES FOR PROCESS INTENSIFICATION VIA DYNAMIC OPERATION OF MICROWAVE-DRIVEN REACTORS <i>Georgios Stefanidis</i>
	Session ID01 – Chaired by Marilena Radolu INDUSTRIAL MICROWAVE HEATING
09.10	John Bows MICROWAVE & RF PROCESS SOLUTIONS TO DELIVER POSITIVE FOOD CHOICES FOR CONSUMERS <i>John Bows</i>
09.25	Rudy Tops TOPS FOODS MICROWAVE PASTEURIZATION & STERILIZATION <i>Rudy Tops</i>
09.40	Luca Perregrini MICROWAVE-ASSISTED DOWNDRAFT REACTOR FOR SYNGAS AND BIOCHAR PRODUCTION <i>Luca Perregrini, Gianluigi Bruni, Alessandro Leona, Piero Rosina</i>
10.05	Davide Di Nunno GEA PUREWAVE: MICROWAVE PASTEURIZATION FOR FRESH PASTA <i>Davide Di Nunno, Simone Bertoncello</i>
10.20	BREAK
	Session ID02 – Chaired by Philippe Bergonzo INDUSTRIAL MICROWAVE PLASMA
10.45	Philippe Bergonzo CAN WE CONSIDER CVD DIAMOND ALMOST READY TO REACH ELECTRONIC APPLICATION MARKETS? <i>Philippe Bergonzo</i>
11.25	Mathé van Stralen USING MICROWAVE PLASMA TO MANUFACTURE OPTICAL GLASS FIBRES AT PRYSMIAN <i>Mathé van Stralen</i>
11.40	John Ciraldo DEVELOPMENT OF LARGE-SCALE DEVICE GRADE DIAMOND FOR EMERGING TECHNOLOGIES <i>John Ciraldo</i>
11.55	Alexander Feigl MICROWAVE OVEN UNIT FOR USE IN PET BOTTLE MANUFACTURING <i>Alexander Feigl, José Manuel Catalá Civera, Beatriz García Baños, Pedro Jose Plaza González</i>
12.10	Alberto Lazzaretti CHEMICAL RECYCLING OF PET WASTE: MICROWAVE-DRIVEN PROCESS INTENSIFICATION AND REACTOR DESIGN FOR MULTIPLE FEEDSTOCKS <i>Alberto Lazzaretti, Franco Antonio Cavadini</i>
12.25	Jayam Sonani INDUSTRIAL AND SCIENTIFIC APPLICATIONS OF LAB-GROWN DIAMONDS GROWN BY MICROWAVE PLASMA <i>Jayam Sonani</i>
12.40	QUICK LUNCH

14.00	Plenary Lecture - Chair: CHRIS DODDS MICROWAVE PROCESSING AT MEGA SCALE FOR ZERO CARBON APPLICATIONS <i>Chris Dodds</i>
	<i>Session ID01 – Chaired by Chris Dodds</i> <i>INDUSTRIAL MICROWAVE HEATING</i>
14.40	Michele Pagotto POLYMER DRYING/CRYSTALLIZATION PROJECT USING MICROWAVE TECHNOLOGY <i>Michele Pagotto</i>
14.55	Christian Bianchi BRIDGING INNOVATION AND INDUSTRY: THE UNOX FRAMEWORK FOR ADVANCED MICROWAVE PRODUCT DEVELOPMENT <i>Christian Bianchi</i>
15.10	Hildegard Sung-Spitzl SUCCESS DRIVERS FOR INDUSTRIAL MICROWAVE PLASMA FROM CVD-DIAMOND TO ADVANCED PLASMA CHEMISTRY <i>Hildegard Sung-Spitzl</i>
15.25 16.10	PANEL DISCUSSION <i>Moderated by Georgios Dimitrakis & Paolo Veronesi</i>
16.10	Alberto Pascual MICROWAVE HEATING SYSTEM FOR INDUSTRIAL ASPHALT PRODUCTION AND RECYCLING: TOWARDS ELECTRIFIED AND SUSTAINABLE PROCESSING <i>Alberto Pascual, Ivan Echeverría, Fernando Arteche, Ismael Viejo, Javier Sagües, Begoña García, María Herrando</i>
16.20	Renaat Van Geel HOW TO IMPROVE OPEX-COSTS BY MICROWAVE HEATING ON INDUSTRIAL SCALE <i>Renaat Van Geel</i>
16.30	Paolo Veronesi MICROWAVE AND INDUCTION BAKING OF ANODES FOR ALUMINUM SMELTING <i>Paolo Veronesi, Elena Colombini, Magdalena Gualtieri, F Baccalà, J Chollet2, P Davris</i>
16.40	Yoav Shoshani HIGH-POWER 2.45 GHZ PULSED MICROWAVE SYSTEM FOR PLASMA PRE-IONIZATION AND HEATING IN NT-TAO LTD. PULSED STELLARATOR <i>Yoav Shoshani</i>
16.50	Marilena Radoiu ELECTRIFICATION, RENEWABLE POWER AND INDUSTRIAL MICROWAVE TECHNOLOGY <i>Marilena Radoiu, Markus Dingeldein, Marco Fiore</i>
17.05 18.00	EuMA PRESENTATION AMPERE ORDINARY GENERAL ASSEMBLY
18.00 19.00	Poster Session
18.00 19.00	<i>Take-A-Drink (free)</i>
19.30 Late	<i>An Evening of Good Food and Friendship</i>

THURSDAY, 18 SEPTEMBER | Room A

9:00	Plenary Lecture - Chair: SATOSHI HORIKOSHI SOLID-STATE GENERATORS AS ENABLERS OF THE NEXT-GENERATION MICROWAVE APPLICATIONS <i>Satoshi Horikoshi</i>
9:40	Plenary Lecture - Chair: GUIDO LINK EMPOWERING SYSTEM DESIGN WITH ACCURATE PERMITTIVITY DATA <i>Guido Link</i>
10:20	BREAK
	Session TS11a – Chaired by Birgitta Raaholt BIOMASS AND WASTE PROCESSING
11.00	David McLean MICROWAVE TREATMENT OF PFAS IMPACTED SOIL <i>David McLean, Joel McLean</i>
11.20	Nasser Hamdami MICROWAVE-ASSISTED HYDROLYSIS FOR THE VALORIZATION OF RESTAURANT FOOD WASTE: PROCESS OPTIMIZATION AND BIOCHEMICAL CHARACTERIZATION <i>Payam Torabi, Omidvar Farhadian, Nafiseh Soltanizadeh, Alain Le-Bail, Nasser Hamdami</i>
11.35	Ryotaro Kikuchi SUSTAINABLE PRODUCTION OF SYNTHETIC FRAGRANCES AND PHARMACEUTICALS USING MICROWAVE CHEMISTRY <i>Ryotaro Kikuchi, Takashi Miyazawa, Akinobu Matsumoto, Satoshi Horikoshi</i>
11.50	Lutz Hartmann LARGE SCALE MICROWAVE-ASSISTED SPLIT-PHASE GLYCOLYSIS TO RECOVER POLYOLS FROM POLYURETHANE WASTE <i>Lutz Hartmann, Dirk Dietrich, Jens Kuersten, Andreas Bernaschek, Christian Dreyer</i>
12.05	Julia Radwan-Pragłowska MICROWAVE-ASSISTED FABRICATION OF NANOCOMPOSITE POLYMERIC MATRICES FOR IMMOBILIZATION OF PLANT GROWTH-PROMOTING BACTERIA TO ENHANCE SOIL FERTILITY <i>Julia Radwan-Pragłowska, Łukasz Janus, Aleksandra Sierakowska-Byczek, Karol Łysiak, Klaudia Kuźmiak, Dariusz Bogdał</i>
12.20	QUICK LUNCH
	Session TS11b – Chaired by Antonino Rizzuti BIOMASS AND WASTE PROCESSING
14.00	Isabelle Polaert MICROWAVE PYROLYSIS OF SARGASSUM: HOW TO SCALE-UP? <i>Randal De La Cruz Iturbides, Ulises Jauregui Haza, Isabelle Polaert</i>
14.20	Angel M López-Buendía PYROLYSIS ENHANCEMENT OF BIOMASS WITH MICROWAVE-ASSISTED PROCESS FOR BIOCHAR AND BIO-OILS PRODUCTION <i>Angel M López-Buendía, Néstor Estebanez, Jaime Arbona, Eduardo Brau, Luis Saúl Esteban, Raquel Ramos Casado</i>
14.35	Rie Honda MICROWAVE SPATIAL POWER COMBINING REACTOR FOR FAST PYROLYSIS OF FOOD WASTES <i>Rie Honda, Shuntaro Tsubaki, Noriyuki Igura, Maamoun Ibrahim, Satoshi Fujii</i>
14.50	Kama Huang NEW INSIGHTS INTO THE INFLUENCE OF MICROWAVE ELECTRIC FIELD ORIENTATION ON SOLUTION EVAPORATION <i>Kama Huang, Song Jia, Song Wang</i>
15.05	Lucas Briest MEASUREMENT OF ELECTROMAGNETIC FIELD DISTRIBUTION IN PILOT PLANT SCALE MICROWAVE DRYER <i>Lucas Briest, Akshay Ujjani Narasimhaiah, Vincent Szameitat, Mathias Magdowski, Ralf Wagner, Anne Tretau, Evangelos Tsotsas, Nicole Vorhauer-Huget</i>
15.20	BREAK

	Session TS04 – Chaired by Francesco Anelli DESIGN OF APPLICATORS AND COMPONENTS
16.00	Juan Monzó-Cabrera APPLICATION OF MICROWAVE CAVITIES AND LOW-LOSS DIELECTRIC MOLDS FOR THE RECOVERY OF WASTEWATER <i>Juan Monzó-Cabrera, Alejandro Díaz-Morcillo, Francisco Sabater-Martínez, Juan Aparicio-Carrión</i>
16.20	Changkun Sun MW-LEGO: MANUFACTURING COMPLEX MICROWAVE WAVEGUIDES AS ASSEMBLING LEGO <i>Changkun Sun, Qiang Cheng, Nanya Li</i>
16.35	Evgeni Sheingaouz THE ACTIVE APPLICATOR – AN INTEGRATED MICROWAVE-HEATING DEVICE <i>Evgeni Sheingaouz, Eli Jerby</i>
16.50	Raphael Speck A NOVEL PHASED ARRAY APPLICATOR FOR EFFICIENT MICROWAVE PRE-CONDITIONING OF HARD ROCKS <i>Raphael Speck, Ralph Behrend, Hartmut Krause</i>
17.05	Siyuan Liu A NOVAL MICROWAVE HEATING TECHNOLOGY FOR SOLDERING ELECTRONIC COMPONENTS <i>Siyuan Liu, Huacheng Zhu, Yang Yang</i>
19.30 23.00	Gala Dinner at Masseria Cariello Nuovo

THURSDAY, 18 SEPTEMBER | Room B

Session TS12a – Chaired by Georgios D. Stefanidis PROCESS INTENSIFICATION & FOOD PROCESSING

11.00	Mahir Cin COMPARISON OF MICROWAVE-VACUUM AND RADIO FREQUENCY VACUUM DRYING METHODS <i>Mahir Cin, Welat Miran, T. Koray Palazoglu</i>
11.20	Ioanna Tzortzi MICROWAVE-ASSISTED THERMAL CYCLING FOR INTENSIFIED HMPE SYNTHESIS: OPTIMIZING PEG DEPROTONATION AND SEQUENTIAL POLYMERIZATION EFFICIENCY <i>Katerina Zerva, Ioanna Tzortzi, Tom Van Gerven, Georgios Stefanidis</i>
11.35	Nobuki Banda EFFICIENT OXIDATION OF CARBOHYDRATES AND FOOD WASTE USING POLYOXOMETALATE CATALYSTS AND MICROWAVE IRRADIATION <i>Nobuki Banda, Tadaharu Ueda, Noriyuki Igura, Ibrahim Maamoun, Shuntaro Tsubaki</i>
12.50	Ioannis Papaioannou INTENSIFICATION OF ETHYLENE CARBONATE SYNTHESIS VIA MICROWAVE-INDUCED PHASE CHANGE CYCLES (PCCS) <i>Ioannis Papaioannou, Athanasios Arampatzis, Ioanna Tzortzi, Tom Van Gerven, Georgios Stefanidis</i>
12.05	Marilena Radoiu EU PROJECT CARBOWAVE - CARBON FIBRE PRODUCTION VIA LOW ENERGY MICROWAVE ABSORPTION <i>Marilena Radoiu, Maurice N. Collins, Ariel Mello, Anne Beaucamp, Mario Culebras Rubio, Clara Gomez, Rafael Muñoz-Espí, Joerg Ihde, Christoph Regula, Laura Schilinsky, Amadine Guissart, Markus Spira</i>

12.20 **BREAK**

Session TS12b – Chaired by Daniel Slocombe PROCESS INTENSIFICATION & FOOD PROCESSING

14.00	Beatriz Garcia-Baños TRANSFORMATION OF IRON-BEARING OILY WASTES DURING MICROWAVE HEATING <i>Beatriz Garcia-Baños, Beatriz López-Buendía, Eduardo Brau, Susanne Bethlehem-Seidel, Kersten Marx, José M Catalá-Civera</i>
14.20	Felix Faber DETERMINATION OF EFFECTIVE DIELECTRIC PROPERTIES OF FROZEN AQUEOUS SOLUTIONS BY PORE-LEVEL MODELING OF THE IRREGULAR PORE STRUCTURE <i>Felix Faber, Isabel Kalinke, Sebastian Gruber, Petra Först, Nicole Vorhauer-Huget</i>
14.35	Athanasios Arampatzis MICROWAVE-ASSISTED HYBRID CRYSTALLIZATION: BALANCING REACTIVE AND COOLING MECHANISMS TO TUNE PARTICLE PROPERTIES <i>Athanasios Arampatzis, Athanasios Katsakioris, Tom Van Gerven, Georgios Stefanidis</i>
14.50	Ibrahim Maamoun GERMINATION INDUCTION OF BACILLUS SUBTILIS BY ROSEMARY EXTRACT AND THE SYNERGISTIC EFFECT OF MICROWAVES <i>Ibrahim Maamoun, Seita Murakami, Shuntaro Tsubaki, Yoshimitsu Masuda, Noriyuki Igura</i>

15.05

15.20 **BREAK**

Session TS13 – Chaired by Antonella Loconsole INDUSTRIAL EQUIPMENT AND SCALE UP

16.00	Frantisek Kukurugya MICROWAVE-ASSISTED EXTRACTION OF PRECIOUS METALS FROM END-OF-LIFE PRODUCTS – OPTIMIZATION AND UPSCALING IN H2020 PEACOC PROJECT <i>Frantisek Kukurugya, Jeroen Spooren, Eduardo Brau Cedrá, Angel Lopez Buendia</i>
16.20	McLean David MICROWAVE STUNNING OF BOVINES FOR HALAL AND KOSHER MARKETS: A 15-YEAR JOURNEY FROM CONCEPT TO COMMERCIALIZATION <i>McLean David, McLean Joel, Small Alison, Ralph James</i>
16.35	Markus Kraus PRACTICABILITY ENHANCEMENT OF RADIO-FREQUENCY HEATING FOR THERMAL PEST CONTROL IN WOODEN BEAMS <i>Markus Kraus, Ulf Trommler, Christian Hoyer, Frank Holzer, Ulf Roland</i>

16.50	Jun Fukushima SCALING UP CARBON-RECYCLED SILICON CARBIDE SYNTHESIS: EFFECTIVE USE OF INDUSTRIAL WASTE AND CARBON DIOXIDE <i>Jun Fukushima, Keiichiro Kashimura, Hirotsugu Takizawa</i>
17.05	Fadi Zoubian ENHANCING MICROWAVE PLASMA TECHNOLOGY WITH SOLID-STATE GENERATORS: OVERCOMING SURFACE LIMITATIONS FOR SUPERIOR PERFORMANCE <i>Fadi Zoubian, Louis Latrasse</i>
19.30 23.00	<i>Gala Dinner at Masseria Cariello Nuovo</i>

THURSDAY, 18 SEPTEMBER | Room C

Session TS08 – Chaired by Felipe Laureano Peñaranda Foix **EM MODELLING AND NUMERICAL TECHNIQUES**

11.00	Giuseppe Mazzearella AN EXPERIMENTAL STUDY OF MICROWAVE DISINFECTION OF SOILS <i>Giuseppe Mazzearella, Matteo Bruno Lodi, Andrea Melis, Alessandro Fanti</i>
11.20	Tomasz Nalecz ELECTROMAGNETIC AND THERMAL ANALYSIS OF MICROWAVE ABLATION USING FDTD SIMULATIONS <i>Tomasz Nalecz, Lukasz Nowicki, Malgorzata Celuch</i>
11.35	Antonio Romero MODELING OVERLAPPING IN HEPATIC RADIOFREQUENCY ABLATION (RFA): DEVELOPMENT OF A CLINICALLY-ORIENTED COMPUTATIONAL MODEL <i>Antonio Romero, Jose Bon, Macarena Trujillo</i>
12.50	Welat Miran COMPUTATIONAL INVESTIGATION OF EFFECTS OF SURROUNDING ENVIRONMENT THICKNESS ON THE RADIO FREQUENCY TEMPERING UNIFORMITY <i>Welat Miran, Mahir Cin, Tunç Koray Palazoğlu</i>
12.05	Albrecht Schmidt MULTI-PHYSICAL MODELING OF MICROWAVE-BASED DRYING OF MOIST POROUS MEDIA <i>Albrecht Schmidt, Ralf Wagner, Anne Tretau, Akshay Ujjani Narasimhaiah, Lucas Briest, Nicole Vorhauer-Huget</i>

12.20 **BREAK**

Session TS09 – Chaired by Bala Vaidhyanathan **MEASUREMENTS AND METROLOGY**

14.00	Koen Van Reusel SAFETY ASSESSMENT ACCORDING TO THE EUROPEAN LEGISLATION AND IEC STANDARDS REGARDING THE INDUSTRIAL USE OF MICROWAVE TECHNOLOGY <i>Koen Van Reusel</i>
14.20	Ralf Wagner INDIRECT MEASUREMENT OF THE ELECTRIC FIELD DISTRIBUTION WITHIN THE SAMPLE DURING A MICROWAVE DRYING PROCESS <i>Ralf Wagner, Martin Ganss, Anne Tretau, Albrecht Schmidt</i>
14.35	Zexin Zhu METASURFACE ENABLED MICROWAVE SENSING TECHNOLOGY DURING POLYMER COMPOSITES CURING PROCESSES <i>Zexin Zhu, Jing Zhou, Yingguang Li</i>
14.50	Georgios Dimitrakis NON-DESTRUCTIVE MICROWAVE NEAR-FIELD APPROACH TO CHIRALITY DISCRIMINATION OF ENANTIOMERIC SAMPLES. <i>Gleb Anufriev, Ricky Wildman, Georgios Dimitrakis</i>
15.05	Kai Silver DESIGN CONSIDERATIONS FOR AN ELECTRON PARAMAGNETIC RESONANCE SPECTROMETER FOR SIMULTANEOUS EPR AND NEUTRON DIFFRACTION <i>Kai Silver, Heungjae Choi, Steve C. Cripps, Ron Smith, Martin O. Jones, Emma Richards, Damien Murphy, Adrian Porch</i>

15.20 **BREAK**

19.30
23.00 **Gala Dinner at Masseria Cariello Nuovo**

THURSDAY, 18 SEPTEMBER | Room D

Session TS10 – Chaired by Isabelle Polaert MATERIAL INTERACTION

11.00	Georgios Dimitrakis RAPID MICROWAVE SINTERING AND MICROSTRUCTURE EVOLUTION OF NON-MAGNETIC (316L) AND MAGNETIC (410L) STAINLESS STEELS: DIFFERENTIATING THE ELECTRIC AND MAGNETIC FIELD EFFECTS. <i>Forhad Hossain, Jeffrey V. Turner, Robert Wilson, Ling Chen, Geoffrey de Looze, Juliano Juliano, Chris Dodds, Georgios Dimitrakis</i>
11.20	Yi Zhang MICROWAVE INTERACTION AND EFFECTIVE ELECTROMAGNETIC PARAMETERS EXTRACTION OF CONDUCTIVE-CONTAINING COMPOSITES IN MICRO-SCALE <i>Yi Zhang, Gou Damin, Luo Tingfang, Zhang Chuang, Zhao Chaoxia, Huang Kama</i>
11.35	Jing Zhou MICROWAVE HEATING OF CONDUCTIVE MATERIALS VIA ELECTROMAGNETIC RESONANCE <i>Jing Zhou, Yingguang Li</i>
12.50	Aleksandra Sierakowska-Byczek MICROWAVE-ASSISTED FABRICATION OF CHITOSAN-BASED CARRIERS FOR BACILLUS AZOTOFIXANS AND THEIR EFFECT ON ENHANCING BIOAVAILABLE NITROGEN FORMS IN MINERAL SOILS OF VARYING PHYSICOCHEMICAL PROPERTIES <i>Aleksandra Sierakowska-Byczek, Łukasz Janus, Julia Radwan-Pragłowska, Karol Łysiak, Klaudia Kuźmiak</i>
12.05	Apurbba Kumar Sharma INVESTIGATION ON MICROWAVE MACHINING OF DIFFICULT-TO-MACHINE ALLOYS <i>Apurbba Kumar Sharma, Pranjal Gupta, Inderdeep Singh</i>

BREAK

Session TS10 / TS14 – Chaired by Junwu Tao MEASUREMENTS AND METROLOGY / THZ AND MILLIMETRE WAVE APPLICATIONS

14.00	Birgitta Waepling Raaholt MODELLING OF MEASUREMENT SCENARIOS TO DETERMINE THE DIELECTRIC PROPERTIES OF SPHERICALLY SHAPED SEMI-CONDUCTING MICROWAVE ABSORPTION CERAMIC OBJECTS <i>Birgitta Waepling Raaholt, Peter Ankarson, Henrik Toss</i>
14.20	Apurbba Kumar Sharma STRUCTURE-PROPERTY CORRELATION IN AA 2024 CYLINDRICAL CAST PRODUCED USING ALUMINA AND GRAPHITE MOULD THROUGH MICROWAVE IRRADIATION <i>Apurbba Kumar Sharma, Parvej Parvej</i>
14.35	Anatolii Eremeev ELECTROMAGNETIC FIELD EFFECTS DURING MICROWAVE SINTERING OF ALUMINA-CONTAINING CERAMIC COMPOSITES <i>Sergey Egorov, Anatolii Eremeev, Vladislav Kholoptsev, Kirill Rybakov, Andrey Sorokin</i>
14.50	Davide Guarnera A PHYSICS-BASED APPROACH FOR THE DESIGN OF THZ DIELECTRIC WAVEGUIDE ACCELERATORS <i>Davide Guarnera, Roberta Palmeri, Giorgio Mauro, Alberto Bacci, Nunzio Salerno, Santi C. Pavone, Giuseppe Torrisi, Luca Vincetti, Gino Sorbello</i>
15.05	Marco Simone TWO STACKED PLANAR ANTENNAS FOR SATELLITE APPLICATIONS <i>Marco Simone, Davide Guarnera, Antonella Maria Loconsole, Imran Khan, Santi Concetto Pavone, Francesco Prudenzeno, Gino Sorbello</i>

BREAK

Session TS06 / TS04 – Chaired by Ricky Metaxas ENERGY PRODUCTION / DESIGN OF APPLICATORS AND COMPONENTS

16.00	Mehdi Salakhi MULTIPHYSICS MODELLING OF CLEAN HYDROGEN PRODUCTION USING MICROWAVE ENERGY AND FLUIDIZED BEDS <i>Mehdi Salakhi, Murray Thomson</i>
16.20	María Dolores Seva MICROWAVE ASSISTED CATALYTIC DECOMPOSITION OF AMMONIA <i>María Dolores Seva, Elena Barrio, José Daniel Gutiérrez Cano, Beatriz García Baños, José Manuel Catalá Civera, María Balaguer, Sonia Escolástico, José Manuel Serra</i>

16.35	Aitor Dominguez-Saldaña MICROWAVE-DRIVEN REDOX PROCESSES: ADVANCED STRATEGIES FOR HYDROGEN PRODUCTION, OXYGEN SEPARATION, AND NANOPARTICLE EXSOLUTION. <i>Aitor Dominguez-Saldaña, Laura Navarrete, María Balaguer, Beatriz García-Baños, Joaquín Santos, David Catalán-Martinez, Pedro J. Plaza-Gonzalez, José D. Gutierrez-Cano, Felipe Peñaranda, José Manuel Catalá-Civera, José Manuel Serra</i>
16.50	Jianguo Wen DETECTING AND DISPLAYING THE DISTRIBUTION OF MICROWAVE INTENSITY IN AN INDUSTRIAL MICROWAVE APPLICATOR <i>Jianguo Wen, Zhixiang Tang</i>
17.05	Ryunosuke Baba CIRCULARLY POLARIZED MICROWAVE IRRADIATOR FOR PERFORMING CHEMICAL EXPERIMENTS <i>Ryunosuke Baba, Jun-ichi Sugiyama, Ohuchi Shokichi, Tsubaki Shuntaro</i>
19.30 23.00	<i>Gala Dinner at Masseria Cariello Nuovo</i>