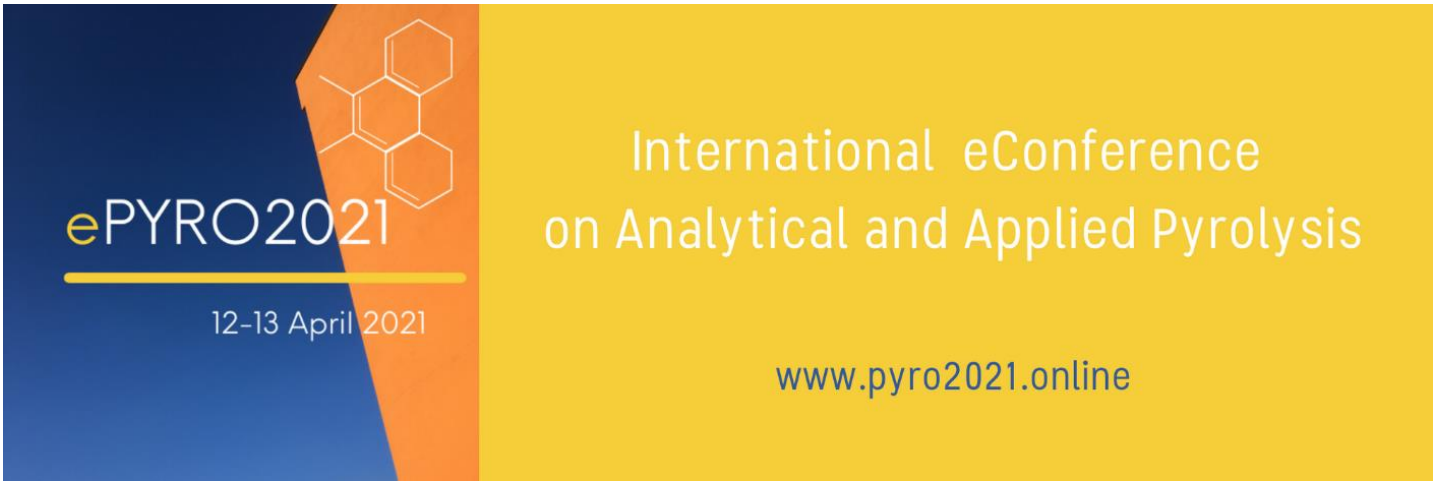

Attention: all times in the program are CEST (UTC+1) – check your time zone to tune in on time

LEGEND	Keynote speakers
	Short oral presentations
	Scientific sponsor presentations

Monday 12 April 2021

SESSION Ia Progress in analytical pyrolysis research and instrumentation

Moderator: Frederik Ronsse (Belgium)

10.00	**The relevance of secondary reactions in the analysis of microplastics by Py-GC-MS** Daniele Fabbri (Italy)
10.20	**Lignin depolymerization: Analysis of monomers and oligomers by UV fluorescence, MALDI-TOFMS and GPC** Erika Bartolomei (France)
10.30	**Progress of pyrolysis study using photoionization mass spectrometry** Fei Qi (China)
10.50	**Onl-line mass spectrometry for heterogeneous catalytic conversion of biomass in batch reactors** Cunhao Cui (China)
11.00	**Application of in situ atmospheric pressure photoionization mass spectrometry in the study of biomass pyrolysis mechanism** Xiamin Chen (China)
11.10	Q&A
11.15	End of session 1a

SESSION Ib Progress in analytical pyrolysis research and instrumentation

Moderator: Kevin Van Geem (Belgium)

11.25	**Determination of microplastics ingested in plankton individuals by pyrolysis-GC-MS** Hajime Ohtani (Japan)
11.45	**Thermo-analytical techniques to study the effects of milling and irradiation on the pyrolytic behavior of softwoods and hardwoods** Marco Mattonai (Italy)
11.55	**Qualitative and quantitative assessment of lignocellulosic biomass pyrolysis using chloride molten salts in a tandem micro reactor** Adriana Estrada Leon (Belgium)
12.05	**Analytical pyrolysis approach for effective valorisation of lignin** Thallada Bashkar (India)
12.25	**From sample prep to data interpretation: recent advances in the optimization of a Py-GC/MS system for microplastics** Michael Soll (Germany)
12.40	Q&A
12.45	End of session 1b

SESSION 2 Reaction mechanisms and kinetics, modelling and experimentation

Moderator: Robert Carleer (Belgium)

13.00	**Progress and challenges of lignin pyrolysis** Manuel Garcia Perez (USA)
13.20	**Kinetic parameter determination for wheat straw pyrolysis** Frederico Fonseca (Germany)
13.30	**Py-GC-MS characterisation and TGA kinetics of lignocellulosic feedstock** Regina Siu (UK)
13.40	**Understanding the activation of cellulose and polymers at high temperature** Paul Dauenhauer (USA)
14.00	**Multi-scale modelling of biomass conversion in a fluidized bed reactor** Lukas von Berg (Austria)
14.10	**CFD-DEM modelling of biomass pyrolysis using multi-component kinetics mechanism** Boyao Wang (Norway)
14.20	**Assessment of simple and detailed reaction schemes for biomass pyrolysis** Andres Anca-Couce (Austria)
14.40	**Determining microplastic content in environmental samples using a database software approach for identification and comparison of two different pyrolysis-GC/MS techniques** Eike Kleine-Benne (Germany)
14.55	Q&A
15.05	End of session 2

SESSION 3 Pyrolysis of biomass and coal

Moderator: Patrice Perreault (Belgium)

15.30	**An overview on an industrial pyrolysis biorefinery** Anthony Dufour (France)
15.50	**Pyrolysis and pressure: new insights based on fixed bed experiments** Guillain Mauviel (France)
16.00	**Fast pyrolysis of hydrolysis lignin in fluidized bed** Elmeri Pienhäkkinen (Finland)
16.10	**Micro-spectroscopy of binder effects in catalytic fast pyrolysis of biomass** Bert Weckhuysen (The Netherlands)
16.30	**Deoxygenation of biomass fast pyrolysis vapors over Na-Al2O3 catalyst for production of bio-oil with low acidity** Andreas Eschenbacher (Belgium)
16.40	**Shale gas reserve estimation for the UK Bowland shale using high pressure water pyrolysis** Colin Snape (Ireland)
17.00	**In-depth analysis of biomass and pyrolysis oils using high-resolution mass spectrometry** Evan Terrel (USA)
17.10	**Selective production of glycolaldehyde via hydrothermal pyrolysis of glucose: experiments and microkinetic modeling** Pavlo Kostetsky (USA)
17.30	**Fast pyrolysis process development & applications** Bert van de Beld (The Netherlands)
17.45	Q&A
17.55	End of session 3

Tuesday 13 April 2021

SESSION 4a Pyrolysis of polymers and plastics

Moderator: Kevin Van Geem (Belgium)

09.40	**Production of hydrocarbons by the graded upgrading of bio-oil** Shurong Wang (China)
10.00	**Challenges and future directions in pyrolysis research at VTT** Anja Oasmaa (Finland)
10.20	**Mechanistic roles of naturally present alkaline earth metal ions in thermal activation of cellulose** Vineet Maliekkal (USA)
10.30	**Co-production of hydrogen and carbon nanotubes from waste plastics catalytic pyrolysis** Haiping Yang (China)
10.50	**Copyrolysis of wood and plastic: evaluation of kinetic data and synergistic effects through analytical pyrolysis** Federica Nardella (Italy)
11.00	**New insights into global and mechanistic modeling of polyethylene and polypropylene pyrolysis** Sribala Gorugantu (USA)
11.10	Q&A
11.15	End of session 4a

SESSION 4b Catalyc pyrolysis

Moderator: Robert Carleer (Belgium)

11.25	**Catalytic upgrading of pyrolysis vapors using mixed metal oxides** William Locatel (France)
11.45	**Superior activity and selectivity of mildly desilicated ZSM-5 catalysts in the catalytic pyrolysis of beech wood** Stelios Stefanidis (Greece)
11.55	**Deactivation and regeneration modes of technical catalysts employed in ex-situ catalytic fast pyrolysis** Ana Hernandez (Spain)
12.05	**Coproducts from catalytic fast pyrolysis enable cost-effective biofuels** Mark Nimlos (USA)
12.25	**Simultaneous analysis of residual blowing agents and flame retardants in recycled polyurethane** Joeri Vercammen (Belgium)
12.40	Q&A
12.45	End of session 4b

SESSION 5 Pyrolysis chars characterization, upgrading and utilization

Moderator: Patrice Perreault (Belgium)

13.00	**Applied machine learning to predict CO_2 adsorption on biomass waste-derived porous carbons** Yong Sik Ok (South-Korea)
13.20	**Investigation of effect of CO_2 on pyrolysis of spruce wood and bark** Liang Wang (Norway)
13.30	**The use of boron-doped additives for the prevention of char agglomeration and the preparation of boron-doped carbon microspheres during lignin pyrolysis** Dong Zhiguo (China)
13.40	**The potential use of pyrolysis char from dairy and sewage sludge as components of fertilizers** James Leahy (Ireland)
14.00	**Release of N-containing compounds during pyrolysis of dairy sludge – experimental results** Marzena Kwapinska (Ireland)
14.10	**Iron salts catalytic graphitization of bamboo: influence of species of iron salts impregnation** Xia Sunwen (China)
14.20	**Turning the pyrolysis process in the direction of satisfying quality demands of metallurgical industries** Øyvind Skreiberg (Norway)
14.40	**Evolved gas analysis and multi-step pyrolysis GC-MS of cosmetics** Karen Sam
14.55	Q&A
15.05	End of session 5

SESSION 6 Catalyc pyrolysis. Bio-oil characterization, upgrading and utilization

Moderator: Wolter Prins (Belgium)

15.30	**Enhancing bio-oil quality and energy recovery by atmospheric hydrodeoxygenation of wheat straw pyrolysis vapors using Pt and Mo-based catalysts** Anker Degn Jensen (Denmark)
15.50	**Characterisation of algal feedstock incl. catalytic pyrolysis** Chris Thomas (UK)
16.00	**Solids removal by hot vapour filtration** Christian Lindfors (Finland)
16.10	**Pyrolysis oil esterification: from 250-ml-scale to 20-L-scale** Tim Schulzke (Germany)
16.30	**Feasibility of fast pyrolysis bio-oil distillation** Anke Krutof (Germany)
16.40	**Effect of catalyst deactivation on catalytic fast pyrolysis and on catalytic upgrading of pyrolysis vapors** Angelos Lappas (Greece)
17.00	**Electrooxidation of the pyrolysis aqueous phase on boron-doped diamond electrodes** Christopher Kick (Germany)
17.10	**Recent advancements in catalytic fast pyrolysis for the production of fuels and chemicals from biomass** Joshua Schaidle (USA)
17.30	**Pyrolysis of residual biomass via thermo-catalyc reforming – experimental investigation of sewage sludge** Andreas Apfelbacher (Germany)
17.50	**Applications of biochar in gas/water purification** Franco Berruti (Canada)
18.10	Q&A
18.20	End of session 6 – Closing words