



Proceedings of

9th World Congress on

Green Chemistry and Technology

September 17-19, 2018 | Amsterdam, Netherlands



Scientific Program

Venue

Hyatt Place Amsterdam Airport
Rijnlanderweg 800, 2132 NN Hoofddorp, Netherlands

09:00-09:45 Registrations

Hall: Meeting Place 2

Opening Ceremony 09:45-10:00

Keynote Talks

10:00- 10:40 Title: **Creating the right (green) chemistry CO₂, water and biomaterials**
Paul O'Connor, ANTECY, The Netherlands

10:40-11:20 Title: **"Greener" food processing in light of sustainability**
Anet Rezek Jambrak, University of Zagreb, Croatia

Networking & Refreshments 11:20-11:40 @Pre Function Area

Sessions: Industrial Applications of Green Chemistry | Environmental Chemistry and Pollution Control | Green Chemistry and Technology | Biomass and its Conversion | Life Cycle Assessment and Environmental Sustainability

Chair: Paul O Connor, ANTECY, The Netherlands

Co-chair: Rudina BLETA, University of Artois, France

11:40-12:10 Title: **Powering green chemistry with microspheres and microcapsules**
Thorsten Brandau, BRACE GmbH, Germany

12:10-12:40 Title: **Cyclodextrins as versatile tools for the preparation of UV-and visible-light responsive mesoporous photocatalysts**
Rudina BLETA, University of Artois, France

12:40-13:10 Title: **Systems approach to identify sustainable chemical innovations that encompass life-cycle impacts**
Elze C. van Hamelen, The Natural Step, Germany

Group Photo

Lunch Break 13:10-14:10 @The Gallery

14:10-14:40 Title: **Characteristics of chemicals and trade secrets used in the semiconductor manufacturing industry**
Chungsik Yoon, Seoul National University, South Korea

14:40-15:10 Title: **Effect of Al³⁺/clay ratio on C₃H₆-SCR over iron catalysts supported on aluminum pillared montmorillonite (FE-AL-PILC)**
Yaxin Su, Donghua University, China

15:10-15:40 Title: **Design and use of an imidazolium ion-tagged fluorescent chemosensor for sensing metal ions in water**
Bharti Khungar, Birla Institute of Technology and Science (BITS) Pilani, India

Networking & Refreshments 15:40-16:00 @Pre Function Area

16:00-16:30 Title: **Laws to enhance green chemistry and protect humanity**
Vandana Khungar, University of Rajasthan, India

16:30-17:00 Title: **High value-added cellulose products prepared from low-grade cellulose resources**
Jun ZHANG, Chinese Academy of Sciences, China

End of Day 1

Keynote Talks

10:00-10:40	<p>Title : Towards carbon fibers from single component kraft lignin systems: An application of green chemistry with forest biomaterials</p> <p>Dimitris S. Argyropoulos, North Carolina State University, USA</p>
10:40- 11:20	<p>Title: Tannins: A new approach to characterization, chemical modification and processing towards innovative products and nano materials</p> <p>Claudia Crestini, University of Rome Tor Vergata, Italy</p>

Networking & Refreshments 11:20-11:40 @Pre Function Area

Sessions: Green Chemistry and Technology | Green Chemical Engineering | Environmental Chemistry and Pollution Control | Green Analytical Chemistry

Chair: Dimitris S Argyropoulos, North Carolina State University, USA

Co-chair: Ricardo Reis Soares, Federal University of Uberlandia, Brazil

11:40-12:10	<p>Title: Fatty acids, olefins and green diesel from catalytic edible oils hydrolysis</p> <p>Ricardo Reis Soares, Federal University of Uberlandia, Brazil</p>
12:10-12:40	<p>Title : Green analytical techniques in food analysis</p> <p>ZHANG Feng, Chinese Academy of Inspection and Quarantine, China</p>
12:40-13:10	<p>Title : Green solvents selection for high voltage electrical discharge extraction of bioactive compounds form <i>S.officinalis</i></p> <p>Anet Režek Jambrak, University of Zagreb, Croatia</p>

Lunch Break 13:10-14:10 @The Gallery

14:10-14:40	<p>Title: Ionic liquid-based green process engineering for co-production of ethylene glycol and dimethyl carbonate</p> <p>Weiguo Cheng, Chinese Academy of Sciences, China</p>
14:40-15:10	<p>Title: Optimization of reverse phase liquid-liquid microextraction (RP-DLLME) method coupled with high performance liquid chromatography (HPLC) for the determination of chlorophenols (CPs) in marine sediments</p> <p>Morteza Ziyaadini Avarani, Chabahar Maritime University, Iran</p>
15:10-15:40	<p>Title: Homogeneous and heterogeneous catalytic oxidation of some AZO dyes using copper (II) ions</p> <p>Ibrahim A. Salem, Tanta University, Egypt</p>

Networking & Refreshments 15:40-16:00 @Pre Function Area

Poster Presentations 16:00- 17:00 @Pre Function Area

Poster Judges: Claudia Crestini, University of Rome Tor Vergata, Italy & Anet Režek Jambrak, University of Zagreb, Croatia

GCTPP-1	<p>Title: Mechanism of biomimetic monooxidation of cyclohexane by hydrogen peroxide</p> <p>Tofik Nagiev, Nagiev Institute of Catalysis and Inorganic Chemistry, Azerbaijan</p>
GCTPP-2	<p>Title: Production of antifungal active substance using biofilm by <i>Bacillus subtilis</i></p> <p>Yuji Fukmoto, Kindai University, Japan</p>
GCTPP-3	<p>Title: Basic analysis of volatile organic compounds from actinomycetes</p> <p>Minori Maeda, Kindai University, Japan</p>
GCTPP-4	<p>Title: Enhanced performance of soil microbial fuel cell by earthworms</p> <p>Hiroshi Yukimoto, Kindai University, Japan</p>
GCTPP-5	<p>Title: Biocompatible film based on corn starch/gelatin and red radish anthocyanin for pH sensing</p> <p>Kasitnun Chayavanich, Chulalongkorn University, Thailand</p>
GCTPP-6	<p>Title: Bio crude oil production through hydrothermal liquefaction using homogeneous alkali catalyst from Korean native kenaf</p> <p>Seong Ju Kim, Hankyong National University, South Korea</p>
GCTPP-7	<p>Title: A holistic approach to tannins chemical functionalization towards tailored surface adsorption properties</p> <p>Lili Zhen, Università degli Studi di Roma 'Tor Vergata', Italy</p>

- GCTPP-8** Title : Extraction and characterization of lignin from herbaceous biomass of Korea via organosolv and alkaline process
Ga Hee Kim, Hankyong National University, South Korea
- GCTPP-9** Title : Determination of targeted pesticides in aqueous samples using coconut shell activated carbon for preconcentration prior to high performance liquid chromatography
Ksenija Kumrić, University of Belgrade, Serbia
- GCTPP-10** Title : Use of waste sludge from Ni/Cr plating as raw material for obtaining the inorganic pigments
Radojka Vujasin, University of Belgrade, Serbia
- GCTPP-11** Title : Synergetic effect of ionizing radioation and adsorption on methylene blue degradation
Ljiljana Matović, University of Belgrade, Serbia
- GCTPP-12** Title: Development of a cellulose based biodegradable material for packaging
Marta Pineiro, University of Coimbra, Portugal
- GCTPP-13** Title: Mechanochemistry for two-step synthesis of porphyrins
Carla Gomes, University of Coimbra, Portugal
- GCTPP-14** Title: 3D water-stable magnesium metal-organic framework for sensing Fe³⁺ion
Rong-Xin Yuan, Changshu Institute of Technology, China
- GCTPP-15** Title: Synthesis of new bio-based surfactants from cashew nutshell liquid in water
Valentina Bragoni, Ruhr Universität Bochum, Germany
- GCTPP-16** Title : Fragmentation pathway of harmful chemicals in soft ionization mode and its application in novel analogue screening
Chen Fengming, Chinese Academy of Inspection and Quarantine, China
- GCTPP-17** Title : Eco-friendly features in long-chain studies for pharmaceutical tetrapyrrolic formulation targeting efficient drug delivery
Radu Socoteanu, Institute of the Romanian Academy, Romania
- GCTPP-18** Title : Study of the *in situ* formulation of active condensation agents and their use for amide formation
Andrea Morandini, University Ca' Foscari of Venice, Italy
- GCTPP-19** Title : Decarboxylative amination of benzoic acids
Dominik Lichte, Ruhr Universität Bochum, Germany
- GCTPP-20** Title : Metal-free trifluoromethylthiolation of arenediazonium salts with Me₄NSCF₃
Giulia Bertoli, Ruhr Universität Bochum, Germany
- GCTPP-21** Title : Regioselective C–H alkylation via carboxylate-directed hydroarylation in water
Guodong Zhang, Ruhr Universität Bochum, Germany
- GCTPP-22** Title : Carboxylate-directed C–H allylation with allyl alcohols or ethers
Zhiyong Hu, Ruhr Universität Bochum, Germany
- GCTPP-23** Title : Study of the removal mechanism of chromate ion from water; the potential human carcinogen
Amara Dar, University of the Punjab, Pakistan
- GCTPP-24** Title : Chemometric assessment and investigation of mechanism involved of TiO₂ photocatalytic processes of artificial sweetener sucralose in aqueous media
Vasilios Sakkas, University of Ioannina, Greece
- GCTPP-25** Title: Electricity generation from septic waste water using septic tank as microbial fuel cell
Ihesinachi Appolonia Kalagbor, Ken Saro Wiwa Polytechnic, Nigeria

End of Day 2

Keynote Talk

9:30- 10:00 Title: **Synthesis, characterization and applications of imidazolium ion-tagged metal complexes**
Bharti Khungar, Birla Institute of Technology and Science (BITS) Pilani, India

Sessions: Biomass and its Conversion | Environmental Chemistry and Pollution Control | Green Chemistry and Technology

Chair: **Bharti Khungar**, Birla Institute of Technology and Science (BITS) Pilani, India

10:00-10:30 Title : **Alumina Extraction from Pakistani Bauxite and activity testing on biofuel production from waste cooking oil**
Rabya Aslam, University of the Punjab, Pakistan

Networking & Refreshments 10:30-10:50 @Pre Function Area

Young Researchers Forum

10:50-11:20 Title : **Optimized solid state ¹³C CP-MAS NMR, FTIR and Raman spectroscopy for the accurate determination of %degree of acetylation of extracted crab shell chitin for valorization of fisheries waste streams**
Fionn Ó Fearghail, Dublin Institute of Technology, Ireland

11:20-11:50 Title: **Recycling of heterogeneous catalysts for the room-temperature decomposition of aqueous formic acid mixtures**
Axel Kosider, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

11:50-12:20 Title : **Double-dip approach: Simultaneous acquisition of the dissolution curves of two active ingredients in a binary pharmaceutical dosage form exploiting the opportunities offered by ion selective electrodes**
Dina A. Ahmed, Future university in Egypt

12:20-12:50 Title: **Preparation of activated carbon from olive waste, application as adsorbent for persistent organic pollutants in water**
Nadia El Ouahedy, University of Poitiers, France

12:50-13:20 Title: **Catalytic transformation of 2,5-Dimethylfuran to functionalized 2-methyltetrahydrofuran derivatives**
Jialu Li, Université de Poitiers, France

13:20-13:50 Title: **Towards commodity scale production of ketones using a resilient fungal heme protein**
Kevin Speina, Princeton University, USA

Award & Closing Ceremony 13:50-14:00

Lunch Break 14:00-15:00@ The Gallery