

CONFERENCE PROGRAM

1st CONFERENCE ON GREEN CHEMISTRY & SUSTAINABLE COATINGS

ecofunco FINAL EVENT

17-18 JUNE 2022

 PISA, ITALY & ONLINE

Centro Congressi "Le Benedettine"
Piazza S. Paolo a Ripa D'Arno, 16,
56125, Pisa, Italy



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DAY 1

17 JUNE 2022

Opening,
ECOFUNCO project

9:00 - 9:30 **Opening of the Conference**

ECOFUNCO

Eco sustainable multifunctional biobased coatings with enhanced performance and end of life options

Patrizia Cinelli

INSTM/University of Pisa

📍 Italy

Invited Lecture

Chair: Prof. Patrizia Cinelli

9:30 - 10:00 Enzymatic upgrading of biomass hemicelluloses for materials and nutrition

Francisco J. Vilaplana

KTH

📍 Sweden

CBE JU Funded Projects

Chair: TBC

10:00 - 10:20 CBE, BBI program INSTM and UNIPI participation

Maria Beatrice Coltelli

INSTM/University of Pisa

📍 Italy

10:20 - 10:40 **BIONTOP**
Novel packaging films and textiles with tailored end of life and performance based on bio-based copolymers and coatings

Sergio J. Quesada

ENCO Consulting

📍 Italy

10:40 - 11:00 Coffee Break - Poster exhibition

H2020 Funded Projects

Chair: Prof. Alfonso Jimenez

11:00 - 11:20 **FISH4FISH**
Biodegradable Packaging from chitinolytic fish wastes: the FISH4FISH project
PRESERVE

Daniele Spinelli

NTT

📍 Italy

- 11:20 - 11:40 PRESERVE**
 High performance sustainable bio-based packaging with tailored end of life and upcycled secondary use

Aldo Ramírez
 IRIS
 📍 Spain
- 11:40 - 12:00 RECOVER**
 Development of innovative biotic symbiosis for plastic biodegradation and synthesis to solve their end of life challenges in the agriculture and food industries

Giovanna Strangis
 University of Pisa
 📍 Italy
- 12:00 - 12:20 PROLIFIC**
 Ultimate exploitation of agro-industrial residues: a PROLIFIC contribution to the development of biocomposites

Micaela Vannini
 University of Bologna
 📍 Italy
- 12:20 - 12:40 AgriMax**
 Agri and food waste valorisation co-ops based on flexible multi-feedstocks biorefinery processing technologies for new high added value applications

Cristina Fernández
 IRIS
 📍 Spain
- 12:40 - 13:00 AgriMax Biorefinery**
 Valorization of crop and food processing by-products through an integrated cascade process

Serena Chierici
 SSICA
 📍 Italy

13:00 - 14:00 Lunch Break - Poster exhibition

Invited Lecture

Chair: Prof. Patrizia Cinelli

- 14:00 - 14:30** Development of biopolymeric materials in sustainable agricultural applications.

Vera Alvarez
 INTEMA CONICET
 📍 Argentina

ECOFUNCO results

Chair: Prof. Maurizia Seggiani

- 14:30 - 14:50** Single Use Plastic Ban and possible solutions with Bio Plastics

Andreas Michalsky
 Huhtamaki
 📍 Germany

- 14:50 - 15:10** Production and scale up of Sustainable Bio-based Polymers of bacterial origin and their use in Biomedical Applications

Ipsita Roy
University of Sheffield
📍 UK
- 15:10 - 15:30** Collagen-based inks reinforced with hydroxyapatite nanoparticles for 3D printing: a rheological study comparing bovine and fish sources

Mario Milazzo
University of Pisa
📍 Italy
- 15:30 - 15:0** Different nanocellulose absorption properties for superabsorbent in hygienic applications

Saeed Ismaeilmoghadam
University of Tehran
📍 Iran

15:50 - 16:10 Coffee Break - Poster exhibition

- 16:10 - 16:30** Distribution study of biopolymers coatings on films and cellulosic materials for packaging application

Kudirat Abidemi
IRIS
📍 Spain
- 16:30 - 16:50** Deposition of Chitin Nanofibrils on different substrates by Electro spray Technique

Bahareh Azimi
University of Pisa
📍 Italy
- 16:50 - 17:10** Thermogravimetric evaluation of the antioxidants stability of biodegradable polymer containing natural phenolic antioxidants

Stefano Bianchi
University of Bologna
📍 Italy
- 17:10 - 17:30** Thermo-mechanical properties of recycled PLA

Aleksandra Nešić
University of Novi Sad
📍 Serbia
- 17:30 - 17:50** Study of the microbial communities associated with cultures of *Acartia tonsa* (Copepoda, Calanoida) and involved in the degradation of poly(butylene succinate-co-butylene adipate)

Luca Nicolini
University of Pisa
📍 Italy

17:50 - 19:00 Posters exhibition (Conference get together)

Invited Lecture

Chair: Prof. Patrizia Cinelli

8:45 - 8:50 Second day opening

Patrizia Cinelli

INSTM/University of Pisa

📍 Italy

8:50 - 9:20 The power of synergistic interactions between organisms for plastic recycling and degradation

María José López

University of Almería

📍 Spain

Session

Chair: Prof. Maria Beatrice Coltelli

9:20 - 9:40 New exploitation strategies of the by-products deriving from the hazelnut supply chain

Domenico Licursi

University of Pisa

📍 Italy

9:40 - 10:00 Bio-based remediation: hydrocarburoclastic fungi and bacteria to improve bioavailability and degradability of petroleum hydrocarbons in a historically contaminated soil

Simona Digregorio

University of Pisa

📍 Italy

10:00 - 10:20 Poly(ethylene furandicarboxylate) (PEF): A bio-based alternative to PET Amorphous chain mobility in relation to crystallization

Maria Cristina Righetti

CNR-IPCF/INSTM

📍 Italy

10:20 - 10:40 Antifouling properties of electrospun polymer coatings induced by surface morphology

Fabio Lineu Favrin

University of Pisa

📍 Italy

10:40 - 11:00 Biodegradability and compostability performances of new coated packaging

Francesca Braca

ARCHA

📍 Italy

11:00 - 11:20 Coffee Break - Poster exhibition

Invited Lecture

Chair: Prof. Patrizia Cinelli

11:20 - 11:50 Multirole of chitin nanofibrils for a greener society **Pierfrancesco Morganti**
 TEXOL
 📍 Italy

Session

Chair: Prof. Alfonso Jimenez

11:50 - 12:10 Agro-food wastes as a source of antioxidants, lipids and cutin by microwave-assisted and ultrasound-assisted extraction **Mari Carmen Garrigós**
 University of Alicante
 📍 Spain

12:10 - 12:30 Trends in paper based food packaging and products with increased recyclability **Simone Giangrandi**
 LUCENCE
 📍 Italy

12:30 - 12:50 Chitin nanofibrils in antimicrobial coatings for cellulosic and bioplastic substrates **Maria Beatrice Coltelli**
 University of Pisa
 📍 Italy

12:50 - 13:10 Extraction of PHAs from Rhodovulum Sulfidophilum DSM 1374 bacteria by non-chlorinated solvents **Maurizia Seggiani**
 University of Pisa
 📍 Italy

13:10 Poster awards, closure of the conference, comments and candidates for hosting next conference

13:20 Good bye lunch

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