10th World Congress on Polyphenols Applications

June 29-30 & July 1, 2016
ISEP Porto, Portugal

Final Program

www.polyphenols-site.com
Dear Colleagues,

On behalf of the International Society of Antioxidants in Nutrition and Health (ISANH) and the Scientific Committee, we are pleased to announce the 10th World Congress on Polyphenols Applications: Porto Polyphenols 2016 to be held in Porto, Portugal from June 29 to July 1, 2016.

The 10th Polyphenols World Congress will bring together experts from academia and industries to discuss the latest scientific advances in the field of polyphenols and their uses to improve human health.

Porto Polyphenols 2016 three-day conference will highlight the following strategic subjects:

- Polyphenols in Health & Diseases: Mechanistic aspects
- Polyphenols Valorization from Foods & Bio-Products
- Polyphenols and Microbiota: the subtle modulation
- Innovations in Polyphenols Methods
- Polyphenols & Preventive / Therapeutic Medicine
- Polyphenols & Natural Preservatives
- Polyphenols & Industrial Innovations
- Polyphenols, Functional Drinks & Functional Ingredients
- Polyphenols & Waste Valorisation from Fruits & Vegetable Processing

We look forward to welcoming you in Porto for this special event.

Fernanda Borges - Jorge Garrido
Local Organizing Committee

Andreas Schieber
President of Porto Polyphenols 2016
## Agenda of Porto Polyphenols 2016

### 10th World Congress on Polyphenols Applications

**June 29-30 & July 1, 2016 – ISEP Porto, Portugal**

### Day 1 - June 29, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>8h00</td>
<td>Welcoming of Attendees - Registration</td>
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<tr>
<td>8h55</td>
<td>Opening ceremony &amp; introduction by the local and scientific committee</td>
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<td>9h00</td>
<td><strong>Session 1: Polyphenols 2016: recent advances &amp; perspectives</strong></td>
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<td>One step forward. Can epigenetic reprogram polyphenols applications?</td>
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<td><strong>Fernanda Borges</strong>, Universidade do Porto, Portugal</td>
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<tr>
<td>9h30</td>
<td>Dietary polyphenols are inversely associated with metabolic syndrome in Polish adults of the HAPIEE study</td>
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<td><strong>Giuseppe Grosso</strong>, Jagiellonian University Medical College, Poland</td>
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<tr>
<td>9h55</td>
<td>Systemic absorption, metabolism and bioavailability of dietary procyanidins in pigs</td>
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<td><strong>Hans-Ulrich Humpf</strong>, University of Münster, Germany</td>
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<td>10h20</td>
<td><strong>Coffee break &amp; poster session</strong></td>
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<tr>
<td>10h50</td>
<td>Polyphenol toxicity and mitochondrial function: an emergent link</td>
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<td><strong>Paulo Oliveira</strong>, University of Coimbra, Portugal</td>
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<td>11h15</td>
<td>Influence of coffee consumption on DNA integrity in humans</td>
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<td><strong>Elke Richling</strong>, University of Kaiserslautern, Germany</td>
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<td>11h40</td>
<td>Anthocyanins and cellular redox signaling: Nrf2 and NF-kB as targets</td>
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<td><strong>Francesco Cimino</strong>, University of Messina, Italy</td>
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<td>12h05</td>
<td>Effect of flavonoids on cytochrome P450 activity in the gut – an in vitro food-drug interaction study</td>
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<td><strong>Orsolya Farkas</strong>, Szent István University, Hungary</td>
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<tr>
<td>12h15</td>
<td>Total and specific dietary polyphenol intakes and 6-year anthropometric changes, cardiovascular and all-causes mortality in the middle-aged general population cohort SU.VI.MAX, France, 1994-2007</td>
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<td><strong>Solia Adriouch</strong>, University Paris 13, France</td>
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<tr>
<td>12h25</td>
<td><strong>Coffee break &amp; poster session</strong></td>
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### Session 2: Extraction, valorization and analysis of polyphenols from foods and by-products

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>14h00</td>
<td>A fast and innovative microextraction technique, μSPEed, followed by ultrahigh performance liquid chromatography for the analysis of phenolic compounds in teas</td>
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<td><strong>José S. Câmara</strong>, Universidade da Madeira, Portugal</td>
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<tr>
<td>14h25</td>
<td>Extracting polyphenols: trying to get the best</td>
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<td><strong>Patrícia Valentão</strong>, Universidade do Porto, Portugal</td>
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<td>14h50</td>
<td>Monitoring and characterizing phenolics in malting and brewing: from barley to beer</td>
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<td><strong>Luis F. Guido</strong>, Universidade do Porto, Portugal</td>
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<tr>
<td>15h15</td>
<td>Non-extractable polyphenols or macromolecular antioxidants in plant foods: content, isolation and potential applications</td>
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<td><strong>Fulgencio D. Saura-Calixto</strong>, Instituto de Ciencia y Tecnología de Alimentos y Nutrición, Spain</td>
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<tr>
<td>15h40</td>
<td><strong>Coffee break &amp; one-hour poster session</strong></td>
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16h40  Isolation of coriander phenolic antioxidants by emerging and green extraction techniques
  Branimir Pavlić, University of Novi Sad, Serbia

17h05  Optimization of extraction and energy consumption during ultrasound-assisted extraction of polyphenols from pomegranate peels
  Krasimir Dimitrov, Charles Violette Institute, ProBioGEM Team, France

17h20  Short oral presentations (7 minutes + 3 minutes for questions)
  From specialized cell cultures to high quality fine chemicals: ANTHOcyanin production PLatform Using Suspension cultures (ANTHOPLUS)
  Andrea Matros, IPK-Gatersleben, Germany
  How polyphenols can help on the authentication of berry-based natural and pharmaceutical extracts by liquid chromatography-mass spectrometry techniques?
  Oscar Nuñez, University of Barcelona, Spain
  Contribution of tyrosol and ethanol to the in vivo endogenous formation of hydroxytyrosol in humans
  José Rodriguez-Morató, IMIM - Hospital del Mar Research Institute, Spain
  Synergistic effect of the main simple phenols present in olive oil and olive tables
  Guillermo Rodriguez Gutierrez, Spanish National Research Council, Spain
  Development and roll-out a modular system for recovery of polyphenol extracts from low value co-product streams in the beverage industry
  Michael Clancy, FDT Consulting Engineers, Ireland
  Remarkable antioxidant and anti-inflammatory properties of wastes from fermented pomegranate and ellagic acid release profile under simulated digestion conditions
  Luisella Verotta, Universita degli Studi di Milano, Italy
  Extraction of anthocyanins from blackcurrant (Ribes nigrum L.) by-products
  Ezzat Mohamad Azman, University of Reading, United Kingdom
  Peroxisome proliferator-activated receptor gamma (PPARgamma) is involved in resveratrol induced apoptosis and chemosensitization
  Virginie Aires, Université de Bourgogne, France

18h40  End of first day

Day 2 - June 30, 2016

8h25  Opening of the second day

8h30  The use of flax phenolics in therapy of human disorders
  Anna Kulma, University of Wroclaw, Poland

8h55  Resveratrol modulates cell membranes: what's the story?
  Ana Rute Neves, Universidade do Porto, Portugal

9h20  The hormetic role of redox-active polyphenols in human health and disease
  José Teixeira, Universidade do Porto, Portugal

9h55  Effect of polyphenols on nutrient uptake by breast cancer cells: a new potential therapeutic approach?
  Fátima Martel, Faculty of Medicine of Porto, Portugal

10h20  Coffee break & poster session

11h00  Short oral presentations (7 minutes + 3 minutes for questions)
  Seasonal variation in the effects of Mediterranean polyphenols extracts on the exsheathment kinetics of goat gastro-intestinal nematode larvae
  Hassan Ahmad Azaizeh, Tel Hai College, Israel
  Unexplored flavonolignans from milk thistle: silychristin and its analogs
  Kateřina Valentová, Czech Academy of Sciences, Czech Republic
Importance of immune system modulation in anti-inflammatory and antitumoral properties of resveratrol, a polyphenol of wine
Dominique Delmas, Université de Bourgogne, France

Soy isoflavones are positively associated with tissue levels of 17β-estradiol in human mammoplasty specimen but do not affect fluxes of estrogen-DNA adducts determined by computational-based metabolic network modelling
Daniela Pemp, University of Würzburg, Germany

Induction of human thyroid cancer cells growth inhibition and apoptosis by xanthohumol, a prenylated chalcone from hops (Humulus lupulus L.)
Daniel Carvalho, Universidade do Porto, Portugal

Antagonistic influence of anthocyanidins on genotoxic effects of alternaria mycotoxins
Georg Aichinger, University of Vienna, Austria

Effect of synergism between leucine and quercetin: a new strategy against metabolic disorders
Mayara Franzoi Moreno, Universidade Federal de São Paulo (UNIFESP), Brazil

Phenolic composition and in vitro inhibitory activities of plant-producing berries on the generation of advanced glycation end-products: in vitro inhibition studies
Vítor Spínola, Universidade da Madeira, Portugal

12h20 – Lunch break & poster session

Session 4: Polyphenols applications in food & beverages: recent technologies & innovations

14h00 Natural and bioinspired polyphenols with antioxidant properties for health and food applications
Alessandra Napolitano, University of Naples “Federico II”, Italy

14h25 Influence of copigmentation on the stability of spray dried anthocyanins
Fabian Weber, University of Bonn, Germany

14h50 Neuroprotective role of natural polyphenols: a look to the potentiality of elderberry extracts
Carmela Spagnuolo, Institute of Food Sciences, National Research Council, Italy

15h15 Rosemary extract: Recent advances and perspectives - Carnosic acid stimulates skeletal muscle cell glucose uptake via AMPK activation
Evangelia Litsa Tsiani, Brock University, Canada

15h40 - Coffee break & one-hour poster session

16h40 Polyphenols as protective agents against neurotoxicity and neurodegeneration: the case of tea polyphenols
Branca Maria Silva, University of Beira Interior, Portugal

17h05 Short oral presentations (7 minutes + 3 minutes for questions)

Fortification of orange juice with antioxidant from orange by-products and evaluation of stability during in vitro digestion
Jorge G. Figueroa, University of Granada, Spain

Polyphenol enriched diets for aquaculture applications
Marina Paolucci, University of Sannio, Italy

A superior antioxidant biomaterial from spent coffee grounds: cell protection, food lipid preservation and in vitro digestion
Lucia Panzella, University of Naples “Federico II”, Italy

Chlorogenic acids content and melanoidins in dark roasted instant coffees
Susana Alejandra Palma Duran, University of Glasgow, United Kingdom

Impact of storage on the physicochemical properties of acidified milk gels fortified with polyphenols
Mukaddes Kilic Bayraktar, University of Reading, United Kingdom

17h55 End of second day

20h00 Porto Polyphenols Dinner at Intercontinental Hotel Porto – Palacio das Cardosas
Praça da Liberdade, 25 - 4000-322 Porto
To attend the dinner, please register online.
Day 3 – July 1, 2016

Session 5: Polyphenols innovations in 2016

8h30  Fermentation of bioactive solid lipid nanoparticles by human gut microbiota
Raquel Madureira, Universidade Católica Portuguesa, Portugal

8h55  Exploring the interactions between cranberry polyphenols and gut microbiota in the prevention of urinary tract infections
Begoña Bartolomé, Instituto de Investigación en Ciencias de la Alimentación, Spain

9h20  The current state on the development of nanoparticles for use against bacterial gastrointestinal pathogens
Manuela Pintado, Universidade Católica Portuguesa, Portugal

9h55  Industrial dosage forms to improve the oral bioavailability of resveratrol
Teofilo Vasconcelos, Universidade do Porto, Portugal

10h20  Rosmarinic acid as quorum-quenching compound to attenuate Pseudomonas aeruginosa virulence
Anabela Borges, Universidade do Porto, Portugal

10h30 – Coffee break & one-hour poster session

11h30  Recent investigations on phytochemicals and quorum sensing/biofilms
Manuel Simoes, Universidade do Porto, Portugal

11h55  Mediterranean diet, dietary polyphenols and low-grade inflammation: results from the Moli-sani study
George Pounis, IRCCS Istituto Neurologico Mediterraneo Neuromed, Italy

12h20  Short oral presentations (7 minutes + 3 minutes for questions)

Smart chocolate as a platform for new generation of functional food
Ivan Petyaev, Lycotec Ltd., United Kingdom

Enrichment of enzymatically mineralized gellan gum hydrogels with phlorotannin-rich Ecklonia cava extract Seanol™ to endow antibacterial properties and promote mineralization
Timothy Douglas, Ghent University, Belgium

Anticancer activity of flavonoids isolated from spent hops and their derivatives obtained by microbial transformations
Tomasz Tronina, Wroclaw University of Environmental Life Sciences, Poland

Hydroxytyrosol induces epigenetic changes in chondrocyte response to oxidative stress
Stefania d'Adamo University of Bologna, Italy

13h00 – Lunch break & poster session

14h00  General Discussion & Conclusion

15h00  End of Porto Polyphenols 2016