

6th Greek Scientific Conference
«RECENT TRENDS IN LIPIDS»

Athens 11 and 12 June 2015

National Hellenic Research Foundation

Program

THURSDAY, 11 June 2015

- 13:00-13:30 Welcome and Registration
- 13:30-13:40 Welcome Address Dr V. Grigoriou President of
National Hellenic Research
Foundation
- 13:40-14:10 Keynote presentation:
Nutritional policy in Greece: The importance
of the Greek national health and nutrition
survey "HYDRIA" A. Trichopoulou President of
Hellenic Health Foundation
- 14:10-16:30 Round Table:
Coorganization of Greek Lipid Forum and
Olive Products of Certified Quality Coordinator: V. Zampounis
- Phenolic compounds, analytical methods,
health claims and biological value of olive oil Speakers: D. Boskou, M.
Tsimidou, L. Skaltsounis, K.
Barberis, P. Magiatis
- 16:30-17:00 Coffee Break - Posters

Topic:

• **Olive oil**

Chair: P. Lagiou

L. Skaltsounis

- 17:00-17:20 O-1 Meeting of the expert group of
chemists in European Commission –
sub-group olive oil and in
International Olive Council - 2015
[information – updates –
conclusions] S. Iosifidou, O. Rompou, G.
Karigiannis, T. Klada
- 17:20-17:40 O-2 Factors affecting the content of
polyphenols in olive oil N. Mavroeidis
- 17:40-18:00 O-3 Olive oil fingerprinting by high-
throughput SNP-genotyping based
on fluorescent microspheres D.P. Kalogianni, C. Bazakos, L.
M. Boutsika, M. Ben Targem,
T.K. Christopoulos, P.
Kalaitzis, P. C. Ioannou
- 18:00-18:20 O-4 Sesame oil admixtures enchases
olive oil stability during deep frying E. Ioannou, C. Georgiou

FRIDAY, 12 June 2015

09:30-10:20 Honorary Ceremony in the memory of Sofia M. Komaitis, P. Kalaitzis, V. Mastronikoli, Panos Kefalas, Christos Zampounis Petrakis

- Topic:**
- **Lipid oxidation-Antioxidants**
 - **Lipids, oils and nutrition**
 - **Biotechnological applications**

Chair: K. Grigorakis

D. Gerasopoulos

10:20-10:40 O-5 Recovery of antioxidants from the aromatic plant *Satureja thymbra* and study of their activity in food systems E. Choulitoudi, K. Bravou, A. Bimpilas, D. Tsimogiannis, V. Oreopoulou

10:40-11:00 O-6 Chemical characterisation of squalene oxidation products and evaluation of their pro-oxidant activity in purified olive oil triacylglycerols E. Naziri, M.Z. Tsimidou

11:00-11:20 O-7 Type of added lipid used for cooking – results from the greek national health and nutrition survey “HYDRIA” P. Orfanos, E. Peppas, E. Valanou, E. Klinaki, A. Naska, A. Trichopoulou

11:20-11:40 O-8 Biotechnological perspectives of single cell oils from microalgae S. Bellou, M.N. Baeshen, A.M. Elazzazy, D. Aggeli, F. Sayegh, G. Aggelis

11:40-12:00 O-9 Wine lees and cheese whey as co-substrates for microbial lipid production by *Cryptococcus curvatus* E. Xenopoulos, A. Papadaki, N. Kopsachelis, A. Koutinas, S. Papanikolaou

12:00-12:30 Coffee Break - Posters

- Topic:**
- **Metabolism and biological activity of lipids**
 - **Functional components**

Chair: L. Leontiadis

S. Antonopoulou

12:30-12:50 O-10 Monounsaturated Fatty Acid Ether Oligomers Formed during Heating of Virgin Olive Oil Show Agglutination Activity against Human Red Blood Cells I. Patrikios, T. Mavromoustakos

12:50-13:10 O-11 Characterization of the vitamin E biosynthetic pathway in olive fruit P. Kalaitzis, E. C. Georgiadou, T. Ntourou, V. Goulas, G. A. Manganaris, V. Fotopoulos

13:10-13:30	O-12	W/O edible nanodispersions as hydroxytyrosol carriers. Formulation, characterization and digestion	<u>M. D. Chatzidaki</u> , D. Amadei, V. Papadimitriou, J. Monteil, F. Leal-Calderon, F. Carrière, A. Xenakis
13:20-13:40	O-13	Anti-inflammatory activity of tyrosol, resveratrol and their derivatives in U-937 cells	<u>I. C. Vlachogianni</u> , E. Fragopoulou, G. M. Stamatakis, I. K. Kostakis, S. Antonopoulou
13:40-14:00	O-14	An insight in lipid metabolism in <i>Yarrowia lipolytica</i>	<u>I.E. Triantaphyllidou</u> , S. Bellou, P. Mizerakis, G. Aggelis
14:00-14:20	O-15	The effect of coffee brew preparation methods on their fatty acids, caffeine and phytosterols content	<u>C. Grigoriou</u> , S. Karavoltsos, A. Kaliora, A. Sakellari, N. Kalogeropoulos
14:20-14:40	O-16	Aroma compounds in wild and cultured meagre (<i>Argyrosomus regius</i>)	<u>I. Giogios</u> , K. Grigorakis, C. Nathanailides, N. Kalogeropoulos

14:40-15:30 Lunch Break - Posters

Topic:

- **Trends in lipid technology**
- **Safety and quality**

Chair: V. Kiosseoglou
A. Koutinas

15:30-15:50	O-17	Biological safety and physicochemical stability of “milk-like” plant oil body preparations after heat treatment	E. Naziri, S. Donsouzi, T. Koupantsis, F. Mantzouridou, A. Paraskevopoulou, M.Z. Tsimidou, <u>V. Kiosseoglou</u>
15:50-16:10	O-18	Food grade nanodispersions as replacements of oil and aqueous phase in macroemulsions.	<u>E. Mitsou</u> , G. Tavantzis, A. Xenakis, V. Papadimitriou
16:10-16:30	O-19	Incorporation of endogenous olive oil compounds in olive oil w/o food nanoemulsions without co-surfactant and study of their properties and stability	M. Katsouli, <u>V. Polychniatou</u> , C. Tzia
16:30-16:50	O-20	Lipids – packaging interactions and consecutive product preservation predictive indicators	<u>A. Kanavouras</u>
16:50-17:10	O-21	Determination and migration of additives and oligomeric substances of elastomeric hoses used in olive oil mills	<u>T. Togkalidou</u> , E. Poulima
17:10-17:30	O-22	Study of the effect of globe artichoke, wild artichoke, oregano, pomegranate and goji berry methanolic extracts on the growth of aflatoxinogenic fungus <i>Aspergillus parasiticus</i>	<u>E. Kollia</u> , A. Gourdomichali, E. Prilli, P. Markaki, C. Proestos, P. Zoumpoulakis

17:30-17:50 O-23 Aflatoxins (B1,B2, G1, G2) in Greek vegetable oils G. Seiragakis, P. Tsiantas, F. Spithouraki

17:50-19:00 Posters

Posters

- P-1 Bioconversion of industrial glycerol into polyols and citric acid from the yeasts *Yarrowia Lipolytica* and *Debariomyces Hansenii* D. Antoniou, R. Filippousi, P. Trifinopoulou, A. Koutinas, G.I. Nychas, S. Papanikolaou
- P-2 Production and study of the lipids of the fungus *Mortierella isabellina* during growth on substrates based on industrial glycerol M. Athenaki, Ch. Gardeli, A. Mallouchos, O. Kalantzi, A.A. Koutinas, S. Papanikolaou
- P-3 Selective uptake of saturated and unsaturated fatty acids by *Yarrowia lipolytica* S. Bellou, C. Chatzikotoula, B. Koboti, G. Aggelis
- P-4 Lipid synthesis and composition of some mushroom fungi grown on glucose-based submerged cultures P. Diamantopoulou, S. Papanikolaou, M. Komaitis, G. Aggelis, A. Philippoussis
- P-5 A novel portable device for on-site, real time assessment of olive oil quality parameters A. Gimisis, V. Lagouri, V. Manti, E. Smyrli, V. Tsoulougian, A. Velkou, S. Vraimakis, S. Dimou, T. Domvoglou, S. Koutsoukos, D. Lenis, M. Maniatis, G. Stavropoulos, K. Grigoriou, D.Kostopoulou, L.Leondiadis, I.Vasiliadou
- P-6 Encapsulation of nisin in microemulsions with essential oils. Antimicrobial activity assessment of the microemulsions E. N. Gad, M. D. Chatzidaki, S. Alexandraki, V. Papadimitriou, A. Xenakis, K. Papadimitriou, E. Tsakalidou
- P-7 The fatty acid composition of yoghurt and yoghurt-type products: presentation of some recent literature data A. Georgala
- P-8 Phenols separation from olive mill wastewater by cloud point extraction with food grade surfactants I. Giovanoudis, V. Athanasiadis, G. Nanos, O. Gortzi, S. Lalas
- P-9 Production of ω -3 and ω -6 fatty acids from microalga *Chlamydomonas reinhardtii* D. Spiliotakopoulou, H. Papaemmanouil, P. Katapodis, A. Tzacos, A. Polydera, I. Gerothanasis, H. Stamatis
- P-10 Improving the thermal stability of a concentrated cream recovered from sesame seed oil bodies' aqueous extracts M. Kyrimlidou, A. Matsakidou, V. Kioseoglou
- P-11 Microbial oil production from various carbon sources by newly isolated oleaginous yeasts S. Maina, C. Pateraki, S. Paramythiotis, E. Drosinos, S. Papanikolaou, A. Koutinas
- P-12 Synchronous fluorescence spectroscopy for the determination of argan oil adulteration with corn oil G. Mousdis, F. Mellou, C. Georgiou
- P-13 Biorefining of wine lees and whey lactose for the microbial oil production by *Mortierella rammaniana* A. Papadaki, E. Xenopoulos, N. Kopsahelis, S. Papanikolaou, A. Koutinas

- P-14 High molecular weight protein-polyphenol complexes isolated from oil mill waste water: emulsifying properties M. Khemakhem, V. Papadimitriou, G. T. Sotiroudis, T. G Sotiroudis, N. Bouzouita
- P-15 Green biocatalytic processes for the valorization of olive-mill wastewater phenolic antioxidants E. Lappa, A. A. Papadopoulou, M. Patila, A. Polydera, P. Katapodis, H. Stamatis
- P-16 In vitro study of nutritional value indicators for extra virgin olive oils from Lemnos' local market N. Papapostolou, H.C. Karantonis
- P-17 Design of nano-enzyme assemblies for the development of robust nanobiocatalysts with lipolytic activity M. Patila, G, Orfanakis, Z. Chakim, A. Papadopoulou, P. Katapodis, D. Gournis, H. Stamatis
- P-18 Valorization of low-cost, sugar-rich substrates by edible ascomycetes for the production of mycelial mass and unsaturated fatty acids D. Sarris, P. Diamantopoulou, S. Papanikolaou, A. Philippousis
- P-19 Selection of yeast strains capable to assimilate xylose for production of microbial lipids D. Sarris, M. Georgousis, D. Psarianos, Ch. Gardeli, A.A. Koutinas, G. Aggelis, S. Papanikolaou
- P-20 Production of biomass and cellular lipids during growth of yeasts on substrates based on blends of xylose and raw glycerol D. Sarris, A. A. Koutinas, A. Mallouchos, G. Aggelis, S. Papanikolaou
- P-21 Cell surface heat stable lipolytic enzyme activity of the marine alga *Nannochloropsis oceanica* M. G. Savvidou, T. G. Sotiroudis, F. N. Kollis
- P-22 HPLC profiles of phenolic compounds present in olive oil by-products extracts P. Siamandoura, S. Chanioti, C. Tzia
- P-23 On the methodology for the extraction of plant oils from aromatic plants P. Zoumpoulakis, D. Lantzouraki, K. Makris, T. Tsiaka, G. Heropoulos, A. Tourtoupoulou, C. Hatzibatzakis, V. J. Sinanoglou
- P-24 Transformation of industrial glycerol into microbial lipids with the aid of the yeasts *Rhodospiridium toruloides* and *Lipomyces starkeyi* S. Sadjeu Tchakouteu, O. Kalantzi, Ch. Gardeli, A. Koutinas, G. Aggelis, S. Papanikolaou
- P-25 Oil- in-water microemulsions, as carriers for olive oil antioxidants: encapsulation of squalene and structural study I. Theohari, A. Xenakis, V. Papadimitriou
- P-26 Rosemary (*Rosmarinus officinalis*) as a source of natural antioxidants M. Strilgka, E. Gogou, D. Tsimogiannis, V. Oreopoulou
- P-27 Organoleptic assessment of virgin olive oil from Lianolia variety, as affected by maturity stage and extraction process, and correlation to volatile and phenolic compounds composition E. Andreou, K. Kotsiou, M. Tasioula-Margari
- P-28 In vitro study of nutritional value indicators for vegetable oils from Lemnos' local market B. Nani, H. C. Karantonis
- P-29 Fatty acids, ergosterol and functional properties of *Pleurotus ostreatus* mushrooms P. Stathopoulos, M. E. Kougioumtzi, E. Koutsotheodorou, G. Koutrotsios, A. C. Kaliora, A.

P-30 Inflammatory markers in hearts of cholesterol-fed rats supplemented with extra virgin olive oil or sunflower oil, in either commercial or modified forms

Mastrogiannis, L. Lahouvaris, G. I.
Zervakis, N. Kalogeropoulos
A. Katsarou, A. Kaliora, A. Papalois,
N. Kalogeropoulos, N. K.
Andrikopoulos, A. Chiou