6th National Conference of the MikroBioKosmos Society
MikroBioKosmos: New Horizons in the Micro World

SCIENTIFIC PROGRAMME

FRIDAY, April 3, 2015

Registration and Poster Preparation 15:00 -17:00
Chairpersons M. A. Typas, Th. Sotiroudis
Opening Ceremony, Welcome
17:00 – 17:15 Welcome by the President of the National Hellenic Research Foundation Dr. V. Grigoriou
17:15 – 17:30 Welcome by the General Secretary of Research and Technology
17:30 – 17:40 Welcome by the President of the Organizing Committee, Th. Sotiroudis
17:40 – 17:50 MikroBioKosmos – Background and Goals, M.A. Typas

KEYNOTE LECTURES
Chairpersons K. Pappas, N. Kyrpidis
17:50 - 18:30 R. Landick Engineering microbes for conversion of lignocellulosic hydrolysates to biofuels
18:30 – 19:10 D. Kekos 2nd Generation Bioethanol: from Science to Technology
19:10 - 19:50 R. Poole Gas microbiology in bioenergy and the environment

20:00 WELCOME RECEPTION

SATURDAY, APRIL 4, 2015

Agriculture - Environment
Session 1 9:00-11:05
Chairpersons G. Zervakis, D. Karpouzas
09:00 – 09:30 P. Baldrian Involvement of soil microorganisms in the biodegradation of lignocellulosics: from ecology to biotechnology
09:30 – 10:00 D. Daffonchio The microbial resource management for plant growth promotion under drought in arid ecosystems
10:00 – 10:15 M. Iliadi Evaluation of maize germplasm for resistance to the mycotoxigenic fungi Fusarium proliferatum -Fusarium verticillioides and the producing fumonisins
10:15 – 10:30 G. Karaoglanidis Population structure and fungicide resistance profile of
**Session 1**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 – 10:45</td>
<td>A. Katsiani</td>
<td>Botrytis spp. causing damping off disease in stone- and pome-fruit rootstock seedlings</td>
</tr>
<tr>
<td>10:45 – 11:00</td>
<td>V. Fryssouli</td>
<td>Genetic diversity and evolutionary mechanisms of Closteroviruses with emphasis on LChV-1</td>
</tr>
<tr>
<td>11:00 – 11:15</td>
<td>V. Doudoumis</td>
<td>Multigene phylogenetic analysis of the genus Ganoderma (Basidiomycota) with emphasis on species occurring in Europe</td>
</tr>
</tbody>
</table>

**11:15 – 11:45**

**COFFEE BREAK – POSTER VIEWING**

**Session 2**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:45 – 12:15</td>
<td>C. Morris</td>
<td>The plant pathogenic and ice nucleation active bacterium Pseudomonas syringae: a link between agriculture and Earth system processes</td>
</tr>
<tr>
<td>12:15 – 12:45</td>
<td>V. Edgcomb</td>
<td>Microbial “dining” and social “networking” at deep-ocean smorgasboards: activities and interactions in deep Mediterranean haloclines</td>
</tr>
<tr>
<td>12:45 – 13:00</td>
<td>K. Nikolouli</td>
<td>Prokaryotic diversity in biodeteriorated wood coming from the fossil forest Bükkábrány (Hungary)</td>
</tr>
<tr>
<td>13:00 – 13:15</td>
<td>M. Tourna</td>
<td>Ecology of sulphur-oxidizing bacteria in New Zealand pasture soils</td>
</tr>
<tr>
<td>13:15 – 13:30</td>
<td>F. Bekris</td>
<td>Soil bacteria diversity and vegetation in Mediterranean ecosystems of Crete</td>
</tr>
<tr>
<td>13:30 – 13:45</td>
<td>C. Perruchon</td>
<td>A proteogenomic analysis of a Sphingomonas haloaromaticamans strain able to degrade the fungicide ortho-phenylphenol used in fruit-packaging industry</td>
</tr>
<tr>
<td>13:45 – 14:00</td>
<td>N. Remmas</td>
<td>Denitrifying community dynamics in an intermittently aerated and fed membrane reactor treating landfill leachate via the implementation of pyrosequencing techniques</td>
</tr>
</tbody>
</table>

**14.00 – 15:00**

**LUNCH – POSTER VIEWING**

**Session 3**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00 – 15:30</td>
<td>C. Scazzocchio</td>
<td>Genes in microorganisms: from the cistron to the pan-genome</td>
</tr>
<tr>
<td>15:30 – 16:00</td>
<td>G. Diallinas</td>
<td>Model fungi as unique systems for understanding the function of eukaryotic transporters</td>
</tr>
<tr>
<td>16:00 – 16:30</td>
<td>T. Suarez</td>
<td>Dictyostelium discoideum: a versatile eukaryotic model organism for development and cellular functions</td>
</tr>
</tbody>
</table>

**16:30 – 17:00**

**COFFEE BREAK – POSTER VIEWING**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:00 – 17:15</td>
<td>S. Boukouvala</td>
<td>Microbial xenobiotic metabolism: Comparative functional investigation of arylamine N-acetyltransferases (NATs) in bacteria and fungi</td>
</tr>
<tr>
<td>17:15 – 17:30</td>
<td>S. Tjamos</td>
<td>A bacterial triggered signaling cascade leading to plant protection against Verticillium dahliae</td>
</tr>
</tbody>
</table>
**17:30 – 17:45**  
S. Bellou  
Comparative studies of lipid biosynthesis process in heterotrophic (*Yarrowia lipolytica*) and autotrophic (*Chlorella* sp. and *Nannochloropsis salina*) microorganisms

**17:45 – 18:00**  
A. Oulas  
Metagenomic investigation of the geologically unique Hellenic Volcanic Arc reveals a distinctive ecosystem with unexpected physiology

**18:00 – 18:15**  
I.S. Sougleri  
*CagA* protein is involved in epithelial to mesenchymal transition of gastric epithelial cells in experimental *H. pylori* infection

**18.30 - 20.00**  
General Assembly–Elections for the Board of Directors of the Mikrobiokosmos Society

**20.30**  
Social Dinner

---

**SUNDAY, APRIL 5, 2015**

**Session 4**  
**09:00 – 11:15**

**Microbes and Food**

*Chairpersons*  
G. Aggelis, I. Boziaris

**09:00 – 09:30**  
R. Briandet  
Biocide action in multispecies biofilms

**09:30 – 10:00**  
G.J. Nychas  
Microbiological spoilage of foods; quantitative determination

**10:00 – 10:15**  
D. Ghikas  
Revealing association of "flat sour" spoilage in canned condensed milk and presence of thermophilic bacteria in milk powder using rep-PCR fingerprinting

**10:15 – 10:30**  
A.I. Doulgeraki  
Resistance of biofilm cells of *Salmonella typhimurium* and *Staphylococcus aureus* under mono- and dual-species conditions to sub-lethal concentrations of benzalkonium chloride, paracetic acid and sodium hypochlorite

**10:30 – 10:45**  
N. Chorianopoulos  
Production of Greek yoghurt using a *Lactobacillus plantarum* strain with probiotic potential as starter adjunct

**10:45 – 11:00**  
E. Nikouli  
Post-prandial response of gut microorganisms communities after a single meal in trout *Oncorhynchus mykiss*

**11:00 – 11:15**  
C.V. Bikouli  
Qualifying gilthead seabream freshness using microbial indicators

**11:15 – 11:45**  
COFFEEBREAK – POSTER VIEWING

**Session 5**  
**11:30 – 14:30**

**New Technologies – Biotechnological Applications**

*Chairpersons*  
G. Tsiamis, S. Ntougias

**11:45 – 12:15**  
N. Kyrpidis  
Identifying the micro from the peta: a tale of a big data in the micro world

**12:15 – 12:45**  
K. Vorgias  
Life at extremes. The molecular basis of protein thermostability. “Looking a needle in the haystack”

**12:45 – 13:00**  
N. Kalogerakis  
Combating Marine Oil Spills Employing Biotechnological Methods
13:00 – 13:15  D. Sakoula  Cr(VI) resistance and reduction mechanisms in S3/K bacterial strain-Bench bioreactors creation for the detoxification of Cr(VI) contaminated wastewaters

13:15 – 13:30  E. Nikolaivits  Structural and functional studies of a *Fusarium oxysporum* cutinase with synthetic activity in water-oil reaction system and thermodynamic studies of the reaction system

13:30 – 13:45  G. Skretas  Directed evolution of small-molecule therapeutics against neurodegenerative diseases

13:45 – 14:00  A. Chaliotis  A novel computational tool for large-scale evolutionary analysis of aminoacyl-tRNA synthetases and detection of paralog fragments with putative biological role

14:00 – 14:15  E. Kapsanaki-Gotsi  Microbial Resources - a biological treasure to foster innovation

14:15 – 15:15  LUNCH – POSTER VIEWING

*Virtual Talk and Sponsors Talks*

15:15– 15:45  ASM Presentation by R. Cano  Paleomicrobiology: a study of microbial forensics of ancient habitats and cultures

*Parallel Thematic Sessions – Group Discussions 16.00 – 17.00*

Session 1:  BioEnergy [Coordinator: to be announced]
Session 2:  Food [Coordinator: to be announced]
Session 3:  Agriculture [Coordinator: to be announced]
Session 4:  Extreme Environments [Coordinator: to be announced]
Session 5:  Environmental Cleanup - Biodegradation – Bioremediation [Coordinator: to be announced]
Session 6:  Molecular mechanisms – model microorganisms [Coordinator: to be announced]
Session 7:  Society (Culture, Tourism, Education) [Coordinator: to be announced]

*ROUND TABLE*  17:00 – 18.00  The K. Drainas scholarship award; Awards for the 3 best posters; The ASM award for the best poster by a PhD student

*END OF CONFERENCE*