



Gruppo di Ricerca Italiano Fitofarmaci e Ambiente
&
Associazione Italiana Studio delle Argille

Bari, 20-22 June 2016

Dipartimento di Scienze della Terra e GeoAmbientali,
Università degli Studi "Aldo Moro" – Bari (Italy)



NATURAL MINERALS AND SYNTHETIC SURROGATES FOR ENVIRONMENT AND HEALTH SAFEGUARD: MEDICINE, VETERINARY, AGRICULTURE AND ECOLOGICAL ISSUES

Disclaimer

Adsorption of toxins and release of pharmaceuticals are of large concern in industrial applications. In animal breeding, adsorbents are used for detoxification of feed from many toxicant substances produced by bacteria and fungi that can contaminate raw materials used for feed preparations. At the same time, slow release formulations of pharmaceuticals obtained by using mineral or synthetic sorbents have been extensively used for the animal health control.

Many recognised materials are also used for the reduction of acute toxicity mishaps that humans can incur. Moreover, special formulations are under investigation for improving the target viability of chemotherapeutic drugs and other medicines.

New organic-inorganic composites have been studied and proposed as bio-compatible materials for human diseases and remediation of water polluted with drugs.

Pests treatments are today under examination due to cases of toxicity induced to beneficial insects and of environmental contamination; so that, new formulations are needed to optimize the efficiency of pesticides minimizing at the same time the negative effects on non-target organisms.

In the last decade, many papers have been published concerning the environment protection or remediation using different raw *and* synthetic materials, with the scope of reducing the mobility of contaminants in water catchments and soil profiles, and to preserve groundwater used for drinking purposes.

First tentative steps towards creating 'life' from inorganic

chemicals have been performed, potentially defining the new area of 'inorganic biology'.

The topics listed above are not exhaustive of the vast field of applications examined up today for natural or synthetic adsorbing materials.

The exploration of sol-gel novel structures, including cell and cage expanded nano-composites, is the new challenge requiring advanced research efforts of the scientific community.

Preliminary Programme

June 20, Monday

15.00 - Summer School Opening Ceremony

15.30-18.30 Session I – Basic information

June 21, Tuesday

9.30 - 13.00 Session II – Environmental applications

13.00-14.30 Lunch

14.30-18.00 Session III – Biotech applications

19.00 Welcome buffet

June 22, Wednesday

9.30 - 13.00 Session IV – Med applications

13.00-14.30 Lunch

14.30-18.00 Session V – Innovative and future perspectives

18.00 Closure remarks

How to apply and fees

The Application form is available at the website
<http://www.grifa.org/>.

FEES : € 230 by May 15, 2016, € 260 after this date.

The fee include: Certificate of attendance, teaching materials, coffee breaks, half-board accommodation (lunch) in double / triple room in Hotel campus.

Single rooms are available with additional charge, please contact the Hotel directly (phone: +39 0805520805; e-

mail: info@campushotel.it

<http://www.campushotel.it/>)

Information about the wire transfer :

Holder: G.R.I.F.A. via Ospedale, 72 – Cagliari

Bank: Banca di Piacenza – Agenzia n.4; Bank account:
0250007349, ABI 05156 - CAB 12603 - CIN A

IBAN: IT80A0515612603CC0250007349

In the wire transfer indicate, clearly, the name of the participant and the structure to which he belongs.

Please send the registration form filled in, signed, and scanned, to laura.scrano@unibas.it and rocco.laviano@uniba.it

Venue:

Dipartimento di Scienze della Terra e
Geoambientali – Università degli Studi «Aldo Moro»,
Bari, Italy

Sponsorships:

 **Levanchimica** s.r.l.
part of the **CDL** network

Invited Speakers

- Sergio Paoletti, Department of Life Sciences, University of Trieste
- Gianluca Turco, Department of Medical, Surgical and Health Sciences, University of Trieste
- Luigia Sabbatini, Department of Chemistry, University “Aldo Moro” Bari
- Bruno Zappone, Department of Physics, University of Calabria
- Piergiulio Cappelletti, Department of Earth Sciences, Environment and Resources, University ‘Federico II’ Napoli
- Monica Carmosino, Department of Sciences, University of Basilicata
- Lee Cronin, Regius Chair of Chemistry, School of Chemistry University of Glasgow, U.K.

Organizing Comittee

- Laura Scrano, University of Basilicata
- Ilaria Braschi, University of Bologna
- Rocco Laviano, University ‘Aldo Moro’ Bari
- Mauro Pallara, University ‘Aldo Moro’ Bari

Scientific Committee

- Sabino Aurelio Bufo, Department of Sciences, University of Basilicata, GRIFA President
- Saverio Fiore, Italian National Council of Research, AIPEA President
- Aldo Mirabella, AISA President