



UNIVERSITY OF MALTA  
Department of Chemistry

## **Fourth National Chemistry Symposium**

Erin Serracino Inglott Hall  
University of Malta  
Msida

15th November 2008

**Editorial Board and Scientific Committee:**

Prof. Giovanna Bosica  
Dr. Claude Farrugia  
Prof. Joseph N. Grima (coordinator)  
Dr. Emmanuel Sinagra (Head of Department)

## PROGRAMME

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- 09:15 – 09:30      **REGISTRATION**
- 09:30 – 10:00      **OPENING**
- 10:00 – 10:15      **O1: PARTICLE-BOUND POLYCYCLIC AROMATIC  
HYDROCARBONS IN Malta: LEVELS AND SOURCES**  
*Omar Sebastian Saliba and Alfred J. Vella\**  
*Department of Chemistry, University of Malta, Msida MSD 2080, Malta*  
*e-mail: [alfred.j.vella@um.edu.mt](mailto:alfred.j.vella@um.edu.mt)*
- 10:15 – 10:30      **O2: ORGANOTIN COMPOUNDS IN THE MARINE  
ENVIRONMENT WITH SPECIAL REFERENCE TO THE  
SURFACE MICROLAYER**  
*Colette Grima and Alfred J. Vella\**  
*Department of Chemistry, University of Malta, Msida MSD 2080, Malta*  
*e-mail: [alfred.j.vella@um.edu.mt](mailto:alfred.j.vella@um.edu.mt)*
- 10:30 – 10:45      **O3: ETHANOLIC DESOLVATION OF DILUTE FISH-SKIN  
GELATIN SOLUTIONS**  
*Mark G. Schembri, Emmanuel Sinagra\* and Claude A. Farrugia*  
*Department of Chemistry, University of Malta, Msida MSD 2080, Malta*  
*e-mail: [emmanuel.sinagra@um.edu.mt](mailto:emmanuel.sinagra@um.edu.mt)*
- 10:45 – 11:00      **O4: THE INTERACTION BETWEEN COLD WATER FISH  
GELATIN AND SODIUM DODECYL SULFATE**  
*Mario N. Camilleri and Emmanuel Sinagra\**  
*Department of Chemistry, University of Malta, Msida MSD 2080, Malta*  
*e-mail: [emmanuel.sinagra@um.edu.mt](mailto:emmanuel.sinagra@um.edu.mt)*
- 11:00 – 11:45      **POSTER SESSION / COFFEE BREAK**
- 11:45 – 12:30      **INVITED KEYNOTE LECTURE**  

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**AIR POLLUTION IN MALTA**  
*Professor Alfred J. Vella\**  
*Department of Chemistry, University of Malta, Msida MSD 2080, Malta*  
*e-mail: [alfred.j.vella@um.edu.mt](mailto:alfred.j.vella@um.edu.mt)*
- 12:30 – 12:45      **O5: IS SOLID BENZENE AUXETIC?**  
*Daphne Attard and Joseph N. Grima\**  
*Department of Chemistry, University of Malta, Msida MSD 2080, Malta*  
*e-mail: [joseph.grima@um.edu.mt](mailto:joseph.grima@um.edu.mt)*

- 12:45 – 13:00      **O6: ANOMALOUS MECHANICAL AND THERMAL PROPERTIES IN NATROLITE SINGLE CRYSTALS**  
Victor Zammit, Ruben Gatt and Joseph N. Grima\*  
Department of Chemistry, University of Malta, Msida MSD 2080, Malta  
e-mail: [joseph.grima@um.edu.mt](mailto:joseph.grima@um.edu.mt)
- 13:00 – 13:15      **O7: ON THE EXTENT OF AUXETICITY IN NAT-TYPE SYSTEMS VARIOUS HYDRSTATIC PRESSURES**  
Joseph N. Grima\*, Richard N. Cassar and Ruben Gatt  
Department of Chemistry, University of Malta, Msida MSD 2080, Malta  
e-mail: [joseph.grima@um.edu.mt](mailto:joseph.grima@um.edu.mt)
- 13:15 – 14:30      **LUNCH (UNIVERSITY HOUSE)**
- 14:30 – 15:00      **INVITED KEYNOTE PAPER**  
**KN2: BIS- $\beta$ -DIKETONATE AND FUNCTIONALISED BIS- $\beta$ -DIKETONATE BASED METAL ORGANIC FRAMEWORKS.**  
Dr. Kevin Cassar\*  
Johnson Matthey Technology Centre, Sonning Common, United Kingdom  
E-Mail: [cassak@matthey.com](mailto:cassak@matthey.com)
- 15:00 – 15:15      **O8: POTENTIAL FOR USING LOCAL CLAY AND LIMESTONE FOR REMOVAL OF METAL IONS FROM INDUSTRIAL DISCHARGES**  
Robert Cortis and George Peplow\*  
Department of Chemistry, University of Malta, Msida MSD 2080, Malta  
e-mail: [peplowg@maltanet.net](mailto:peplowg@maltanet.net)
- 15:15 – 15:30      **O9: LEACHABILITY OF SELECTED CONSTRUCTION AND DEMOLITION WASTE**  
Gustaf K Cauchi and George Peplow\*  
Department of Chemistry, University of Malta, Msida MSD 2080, Malta  
e-mail: [peplowg@maltanet.net](mailto:peplowg@maltanet.net)
- 15:30 – 15:45      **CLOSING**  
Dr. Emmanuel Sinagra, Head, Department of Chemistry

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The name of the presenting author is underlined.

## POSTER CONTRIBUTIONS

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### **P1: A PRELIMINARY INVESTIGATION OF GHOST PEAKS IN A REVERSED-PHASE GRADIENT HPLC SYSTEM**

*Maria Micallef, Hans Frey and Claude A. Farrugia\**

*Department of Chemistry, University of Malta, Msida MSD 2080, Malta*

*E-mail: [claudio.farrugia@um.edu.mt](mailto:claudio.farrugia@um.edu.mt)*

### **P2: STABILITY STUDIES ON ANALYTICAL SOLUTIONS IN A PHARMACEUTICAL LABORATORY**

*Rosalie Camilleri, Oliver Schembri and Claude A. Farrugia\**

*Department of Chemistry, University of Malta, Msida MSD 2080, Malta*

*E-mail: [claudio.farrugia@um.edu.mt](mailto:claudio.farrugia@um.edu.mt)*

### **P3: ON THE MECHANICAL PROPERTIES OF BETA-CRISTOBALITE**

*Joseph N. Grima\* and Ruben Gatt*

*Department of Chemistry, University of Malta, Msida MSD 2080, Malta*

*e-mail: [joseph.grima@um.edu.mt](mailto:joseph.grima@um.edu.mt)*

### **P4: A NOVEL AND REVERSIBLE METHOD FOR THE MANUFACTURE OF AUXETIC POLYURETHANE FOAMS**

*Joseph N. Grima\*, Daphne Attard, Ruben Gatt, Richard Cassar and Brian Ellul*

*Department of Chemistry, University of Malta, Msida MSD 2080, Malta*

*e-mail: [joseph.grima@um.edu.mt](mailto:joseph.grima@um.edu.mt)*

### **P5: ON THE MECHANICAL PROPERTIES OF THE MOLECULAR LEVEL 'VFI' HONEYCOMB**

*Joseph N. Grima\*, Elaine Manicaro, Brian Spiteri, Richard N. Cassar and Ruben Gatt*

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### **P6: A COMPARATIVE STUDY OF ORGANIC NETWORKED SYSTEMS WITH NEGATIVE POISSON'S RATIOS**

*Joseph N. Grima\*, Luke Farrugia, Richard Cassar, Lara Trapani and Daphne Attard*

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