



2nd Meeting on POROUS MOLECULAR SOLIDS

POMOS2018 Organizing Committee
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To: Prof. Carl Henrik Görbitz
Grants Officer
European Crystallographic Association
University of Oslo, Norway

On behalf of the Organizing Committee of the 2nd Meeting on Porous Molecular Solids we wish to acknowledge and thank the European Crystallographic Association for the economical support. In the following a summary report of the meeting activities and details on the usage of the ECA contribution of 750 eur.

General information

The meeting was held in Vietri sul Mare (Italy) from June 6th to June 8th 2018. As for the successful 1st meeting on April 2015 in Stellenbosch, the meeting focused on the recent advances in the field of porous molecular materials with the aim to provide interesting and stimulating ideas for future research.

18 invited lectures, 9 selected oral contributions and 11 poster contributions allowed to discuss the state of the art in the design and synthesis of new materials, their structural characterization, the chemical and physical analysis of their properties, the possible applications in materials science and nanomedicine. The social programme allowed further discussions and contacts among the participants. For details, the meeting programme is attached and also some photos. Other photos (posted by the participants) are available on the dedicated facebook page (PoMoS 2018).

A possible third meeting is planned in the next two years and it would be held in South Africa.

Participants statistics: by gender balance, age and country

In total there were 57 participants.

As for the gender balance 30 were male participants and 27 female participants.

5 out of 18 keynote lectures were delivered by female scientists, 7 out of 9 selected oral contributions were delivered by female scientists. One of the IUCr Young Scientist award was reserved to a female young scientist.

We achieved a rather good participation of young scientists: of 57 participants, 28 participants were aged less than 35 years old

As for the institution country 34 participants were from Italy, 7 from South Africa, 4 from USA, 2 from Croatia, 2 from Ireland, 1 from each of the following countries France, Germany, Netherlands, Norway, Portugal, Saudi Arabia, Spain, UK.

Of 34 Italian participants 31 were from the organizing institution, the University of Salerno.

ECA Prize

The European Crystallographic Association (ECA) assigned two bursaries to cover the stay and subsistence expenses for two young scientists (i.e. graduate students, PhD students and/or post-docs with a maximum age of 35).

Candidates were asked to provide their CV and a presentation letter from their supervisor.

The Organizing Committee selected two candidates

Isabella Claassens, PhD student at Stellenbosch University, South Africa, email: iec@sun.ac.za

Shi-Qiang Wang, PhD student at the University of Limerick, Ireland, email: shiqiang.wang@ul.ie

They were asked to deliver a short presentation (10 minutes talk) of their contributions during the first day of the meeting in a special session.

The contribution of 750 eur was used to cover the living and stay expenses of the selected candidates from June 5th to 9th June 2018.

A prize certificate was issued to each selected candidate.



The winners of ECA Young Scientist Award to attend the 2nd PoMoS Meeting (6-8 June 2018 Vietri sul Mare) and the Chair of the Prize session. From left: Consiglia Tedesco (University of Salerno), Isabella Claassens (Stellenbosch University), Shi-Qiang Wang (University of Limerick).

Meeting programme

Wednesday June 6th 2018

14:00-15:15

Registration

Opening ceremony

chair **C. Tedesco & L. J. Barbour**

15:15-15:30

Prof. P. Neri
University of Salerno

Head of the Dept of Chemistry and Biology „A. Zambelli“

Session I

chair **G. Guerra**

15:30-16:00

L. J. Barbour
Stellenbosch University

Structural flexibility in the solid state

16:00-16:30

K. T. Holman
Georgetown University

Closed to open pore behaviour in 0D porous molecular solids

16:30-17:00

Coffee-break

Session II

chair **L. J. Barbour**

17:00-17:30

M. Mastalerz
University of Heidelberg

Intrinsically porous molecules for selective gas sorption

17:30-18:00

A. I. Cooper
University of Liverpool

Porous molecular crystals: designing properties ‘from scratch’ using energy–structure–function maps

IUCr & ECA Prizes Session

chair **C. Tedesco**

18:00-18:15

C. X. Bezuidehout
University of Milano-Bicocca

CO₂ stabilisation and phase transitions in open-channel MOFs

18:15-18:30

I. Brekalo
Georgetown University

Are bisguanidinium organodisulfonates formally microporous?

18:30-18:35

I. Claassens
Stellenbosch University

Stepped sorption behaviour in a highly porous MOF

18:35-18:40

S.-Q. Wang
Stellenbosch University

High performance separation of C8 aromatics

19:00-20:30

Welcome party

Thursday June 7th 2018

Session III

chair **I. Izzo**

09:00-09:30

N. B. Mckeown
University of Milano-Bicocca

Structural diversity within a reliable nanoporous molecular crystal

09:30-10:00

C. Tedesco
University of Salerno

Dynamic architecture of macrocycles

10:00-10:15

R. Schettini
University of Salerno

Structural investigation of cyclic octapeptoids

10:15-10:30

S. Quaresma
University of Lisbon

BioMOFs based on azelaic and dipyridamole as potential systems for biomedical applications

10:30-11:00

Coffee-break

Session IV

chair **F. De Riccardis**

11:00-11:30

M. W. Hosseini
University of Strasbourg

Chirality in molecular tectonics

11:30-12:00	C. H. Görbitz University of Oslo	DNA-inspired porous materials
12:00-12:30	C. Esterhuysen Stellenbosch University	Mechanisms of guest uptake in copper-based MOFs
12:30-13:00	L. R. Nassimbeni University of Cape Town	Characterisation of porous inclusion compounds
13:00-15:00	<i>Buffet Lunch</i>	
	<i>Session V</i>	chair S. A. Bourne
15:00-15:30	A. Comotti University of Milano-Bicocca	Porous supramolecular architectures: ultra-fast molecular rotors and dynamics control by chemical stimuli
15:30-15:45	N. Burtch Sandia National Laboratories	Negative thermal expansion design strategies in MOFs
15:45-16:00	J. Gertenbach Malvern-Panalytical	Probing porous materials using a powder diffractometer <i>Sponsored contribution</i>
16:00-16:30	<i>Poster session</i>	
16:30-17:00	<i>Coffee-break</i>	
17:00-17:30	<i>Poster session</i>	
	<i>Session VI</i>	chair P. Neri
17:30-17:45	V. Colombo University of Milan	<i>In situ</i> crystallography over a interpenetrated MOF for CO ₂ adsorption in humid conditions
17:45-18:00	S. M. F. Vilela IMDEA Energy	A novel bismuth-tetracarboxylate MOF as a proton conductor
18:00-18:30	J. L. Atwood University of Missouri-Columbia	Porosity of seemingly non-porous organic solids
18:30-18:40	<i>IUCr Journals Best Poster Prize</i>	
19:30-22:00	<i>Banquet Dinner</i>	

Friday June 8th 2018

	<i>Session VII</i>	chair N. B. McKeown
09:00-09:30	G. Guerra University of Salerno	Nanoporous-crystalline polymers and industrial innovations
09:30-10:00	P. Sozzani University of Milano- Bicocca	Porous materials: the interplay with linear polymers
10:00-10:15	P. Rizzo University of Salerno	Nanoporous-crystalline polymer films with unexpected high optical activity and circularly polarized luminescence
10:15-10:30	L. Baldino University of Salerno	From microporous to nanoporous: the role of supercritical CO ₂ in the formation process
10:30-11:00	<i>Coffee-break</i>	
	<i>Session VIII</i>	chair L. R. Nassimbeni
11:00-11:30	M. Eddaoudi KAUST	MOF design to applications: impact of pore system control on gas separations and storage

11:30-12:00	S. A. Bourne University of Cape Town	Guest exchange in dynamic frameworks
12:00-12:30	D. A. Haynes Stellenbosch University	Framework materials from ionic organic components
12:30-13:00	M. Zaworotko University of Limerick	Taxonomy of porous solids: a crystal engineering perspective
13:00-13:05	<i>Conclusive remarks</i>	chair C. Tedesco & L. J. Barbour
13:05-15:00		<i>Lunch</i>
15:00-23:00		<i>Excursion</i>

Fisciano, 18 Febbraio 2019

For the Organizing Committee

