



# 16<sup>th</sup> International Zeolite Conference *joint with the* 7<sup>th</sup> International Mesostructured Materials Symposium

Sorrento, Italy, July 4<sup>th</sup> -9<sup>th</sup>, 2010

## IZC-IMMS 2010

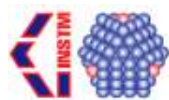
<http://www.izc-imms2010.org/>

*Engineering of new micro- and  
meso-structured materials*

# PRELIMINARY SCIENTIFIC PROGRAMME



Italian Zeolite  
Association  
(AIZ)



Interdivisional Group of Catalysis and  
Division of Industrial Chemistry of the  
Italian Chemical Society  
(GIC-SCI)

## WELCOME

*The International Zeolite Association (IZA) and the International Mesostructured Material Association (IMMA), together with the Italian Zeolite Association (AIZ) and the Interdivisional Group of Catalysis of the Italian Chemical Society (GIC-SCI), extends a cordial invitation to the colleagues in the field of micro- and meso-porous materials and related sciences and technology to participate in the 16th International Zeolite Conference (16th IZC) joint with the 7th International Mesostructured Materials Symposium (7th IMMS), which will be held from July 4<sup>th</sup> to July 9<sup>th</sup>, 2010 in Sorrento, Italy. The Conference will be preceded by an intensive Summer School (July 2<sup>nd</sup> -3<sup>rd</sup>, 2010; Salerno, Italy) on new applications of micro- and meso-porous materials.*

*A field trip in a beautiful area of Sardinia very rich of natural zeolite crystals and deposits will be also organised.*

*Enjoy IZC-IMMS2010 !*

*Prof. Gabriele Centi  
Chairman Scientific Committee*

*Prof. Girolamo Giordano  
Chairman Scientific Committee*

*Prof. Paolo Ciambelli  
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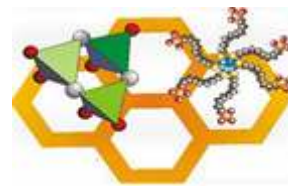



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*The International Zeolite Association (IZA) and the International Mesostructured Material Association (IMMA), together with the Italian Zeolite Association (AIZ), the Interdivisional Group of Catalysis and the Division of Industrial Chemistry of the Italian Chemical Society (SCI), extend a cordial invitation to the colleagues in the field of micro- and meso-porous materials and related S&T to participate to the 16<sup>th</sup> International Zeolite Conference (16<sup>th</sup> IZC) joint with the 7<sup>th</sup> International Mesostructured Materials Symposium (7<sup>th</sup> IMMS), which will be held from July 4 to July 9, 2010 in Sorrento, Italy.*

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International Mesostructured  
Materials Association  
(IMMA)



Italian Zeolite Association  
(AIZ)



Interdivisional Group of Catalysis and  
Division of Industrial Chemistry of  
the Italian Chemical Society  
(GIC-SCI)



EU Network of Excellence IDECAT




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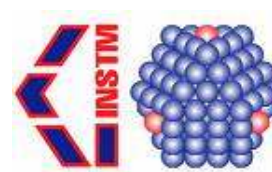
**The Conference will be  
preceded by an intensive  
Summer School  
(July 2<sup>nd</sup>-3<sup>rd</sup>, 2010)**

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European Research Institute of  
Catalysis



Consorzio Inter Universitario per la  
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#### **Communications**

#### **Students grants**

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| <i>Pre-Conference School</i>                  | A. Alberti (Univ. Ferrara), R. Aiello (Univ. Calabria),                                                                 |

## CONTACTS

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## TIME SCHEDULE

|       | Sunday | Monday July 5, 2010 |                                                                        |             |             | Tuesday July 6, 2010  |           |           |           | Wednesday July 7, 2010 |           |           |           | Thursday July 8, 2010 |           |           |           | Friday July 9, 2010                                                      |           |           |           |  |  |  |  |  |  |  |  |
|-------|--------|---------------------|------------------------------------------------------------------------|-------------|-------------|-----------------------|-----------|-----------|-----------|------------------------|-----------|-----------|-----------|-----------------------|-----------|-----------|-----------|--------------------------------------------------------------------------|-----------|-----------|-----------|--|--|--|--|--|--|--|--|
|       |        | Session 1           | Session 2                                                              | Session 3   | Session 4   | Session 1             | Session 2 | Session 3 | Session 4 | Session 1              | Session 2 | Session 3 | Session 4 | Session 1             | Session 2 | Session 3 | Session 4 | Session 1                                                                | Session 2 | Session 3 | Session 4 |  |  |  |  |  |  |  |  |
| 8.00  |        | IZA/IMMA Business   |                                                                        |             |             | IZA/IMMA Business     |           |           |           | IZA/IMMA Business      |           |           |           | IZA/IMMA Business     |           |           |           | IZA/IMMA Business                                                        |           |           |           |  |  |  |  |  |  |  |  |
| 8.30  |        | Opening Ceremony    |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 9.00  |        | Plenary 1 (Zones)   |                                                                        |             |             | Plenary 2 (Zhao)      |           |           |           | Plenary 3 (Rakoczy)    |           |           |           | Plenary 4 (De Cola)   |           |           |           | Plenary 5 (Zou)                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 10.00 |        | Coffee break        |                                                                        |             |             | Coffee break          |           |           |           | Coffee break           |           |           |           | R.M. Barrer symposium |           |           |           | Coffee break                                                             |           |           |           |  |  |  |  |  |  |  |  |
| 10.20 |        | KN1                 | O7                                                                     | O15         | O21         | KN5                   | O51       | O59       | O65       | KN9                    | O107      | O115      | O121      |                       |           |           |           | KN12                                                                     | O173      | O181      | O187      |  |  |  |  |  |  |  |  |
| 10.40 |        |                     | O8                                                                     | O16         | O22         |                       | O52       | O60       | O66       |                        | O108      | O116      | O122      |                       |           |           |           |                                                                          | O174      | O182      | O188      |  |  |  |  |  |  |  |  |
| 11.00 |        | O1                  | O9                                                                     | O17         | O23         | O45                   | O53       | O61       | O67       | O101                   | O109      | O117      | O123      |                       |           |           |           | O167                                                                     | O175      | KN13      | O189      |  |  |  |  |  |  |  |  |
| 11.20 |        | O2                  | O10                                                                    | O18         | O24         | O46                   | O54       | O62       | O68       | O102                   | O110      | O118      | O124      | IZA General Assembly  |           |           |           | O168                                                                     | O176      |           | O190      |  |  |  |  |  |  |  |  |
| 11.40 |        | O3                  | O11                                                                    | KN2         | O25         | O47                   | O55       | KN6       | O69       | O103                   | O111      | KN10      | O125      |                       |           |           |           | O169                                                                     | O177      | O183      | O191      |  |  |  |  |  |  |  |  |
| 12.00 |        | O4                  | O12                                                                    |             | O26         | O48                   | O56       |           | O70       | O104                   | O112      |           | O170      |                       |           |           |           | O178                                                                     | O184      | O192      |           |  |  |  |  |  |  |  |  |
| 12.20 |        | O5                  | O13                                                                    | O19         | O27         | O49                   | O57       | O63       | O71       | O105                   | O113      | O119      | O127      |                       |           |           |           | O171                                                                     | O179      | O185      | O193      |  |  |  |  |  |  |  |  |
| 12.40 |        | O6                  | O14                                                                    | O20         | O28         | O50                   | O58       | O64       | O72       | O106                   | O114      | O120      | O128      |                       |           |           |           | O172                                                                     | O180      | O186      | O194      |  |  |  |  |  |  |  |  |
| 13.00 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
|       |        | Lunch break         |                                                                        |             |             | Lunch break           |           |           |           | Lunch break            |           |           |           | Lunch break           |           |           |           | Lunch break                                                              |           |           |           |  |  |  |  |  |  |  |  |
|       |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
|       |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
|       |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 15.00 |        | O29                 | KN3                                                                    | O37         | O42         | IMMA General Assembly |           |           |           | Excursion (Positano)   |           |           |           | O129                  | KN11      | O147      | O157      | Poster session 2<br>(from P-335 to P-665)<br>+ Recent Research Reports 2 |           |           |           |  |  |  |  |  |  |  |  |
| 15.20 |        | O30                 |                                                                        | O38         | O43         |                       |           |           |           |                        |           |           |           | O130                  |           | O148      | O158      |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 15.40 |        | O31                 | O34                                                                    | O39         | KN4         |                       |           |           |           |                        |           |           |           | O131                  | O139      | O149      | O159      |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 16.00 |        | O32                 | O35                                                                    | O40         |             |                       |           |           |           |                        |           |           |           | O132                  | O140      | O150      | O160      |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 16.20 |        | O33                 | O36                                                                    | O41         | O44         | O73                   | O81       | O87       | O95       |                        |           |           |           | O133                  | O141      | O151      | O161      |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 16.40 |        | SO<br>1-15          | SO<br>16-30                                                            | SO<br>31-45 | SO<br>46-58 | O74                   | O82       | O88       | O96       |                        |           |           |           | Coffee break          |           |           |           | O195                                                                     | O198      | O201      | O204      |  |  |  |  |  |  |  |  |
| 17.00 |        |                     |                                                                        |             |             | O75                   | KN7       | O89       | O97       |                        |           |           |           | O134                  | O142      | O152      | O162      | O196                                                                     | O199      | O202      | O205      |  |  |  |  |  |  |  |  |
| 17.20 |        |                     |                                                                        |             |             | O76                   |           | O90       | O98       |                        |           |           |           | O135                  | O143      | O153      | O163      | O197                                                                     | O200      | O203      | O206      |  |  |  |  |  |  |  |  |
| 17.40 |        |                     |                                                                        |             |             | O77                   | O83       | O91       | O99       |                        |           |           |           | O136                  | O144      | O154      | O164      | Closing Remarks                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 18.00 |        | Cocktail            | Poster session 1<br>(from P-1 to P-334)<br>+ Recent Research Reports 1 |             |             |                       |           | O78       | O84       | O92                    | O100      | KN8       |           | O137                  | O145      | O155      | O165      |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 18.20 |        |                     |                                                                        |             |             |                       |           | O79       | O85       | O93                    | O138      |           |           | O146                  | O156      | O166      |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 18.40 |        |                     |                                                                        |             |             |                       |           | O80       | O86       | O94                    |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 19.00 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 19.20 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 19.40 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 20.00 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 20.20 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 20.40 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 21.00 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           | Social Dinner         |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 21.30 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 22.00 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |
| 22.30 |        |                     |                                                                        |             |             |                       |           |           |           |                        |           |           |           |                       |           |           |           |                                                                          |           |           |           |  |  |  |  |  |  |  |  |



## TOPICS

### 1. Synthesis and Characterization

*1.1 - Advanced synthesis, crystal-growth and post-treatment*

*1.2 - Insights on natural and synthetic MMM, and genesis conditions*

### 2. Structure and theory

*2.1 - Advances on structural aspects*

*2.2 - Theory and computational design*

### 3. Applications

*3.1 - Catalysis and membranes*

*3.2 - Adsorption/diffusion and ion exchange*

### 4. New frontiers in Micro and Mesostructured materials

*4.1 - Hybrid and composite materials (CTF, ECS, MOF, PMO, ZIF, etc.)*

*4.2 - New applications: bio-materials, nano-medicine, opto- and nano -electronics*

*4.3 - From minerals to materials*

### Abbreviation used in the IZC-IMMS2010 Programme:

PL = Plenary Lecture

KN = Keynote Lecture

O-1 = Oral Presentation + order number

P-1 = Poster Presentation + order number



## PLENARY LECTURES

|      |                                                                        |                                                                                            |
|------|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| PL-1 | <i>Synthesis of zeolites and industrial applications</i>               | <i>Dr. Stacey ZONES</i><br>Chevron (Richmond, CA - USA)                                    |
| PL-2 | <i>Mesoporous materials and new synthesis methods</i>                  | <i>Prof. Dongyuan ZHAO</i><br>(Fudan University Shanghai China)                            |
| PL-3 | <i>Challenge in the industrial zeolite catalysis</i>                   | <i>Dr. Rainer Albert RAKOCZY</i><br>(Sud-Chemie AG, Catalytic technol.<br>Munich, Germany) |
| PL-4 | <i>Zeolites as key-components of new multifunctional nanomaterials</i> | <i>Prof. Luisa DE COLA</i><br>(Univ. Muenster, Germany)                                    |
| PL-5 | <i>Advanced characterization of micro- and meso-porous materials</i>   | <i>Prof. Xiaodong ZOU</i><br>(Stockholm University, Sweden)                                |

## KEYNOTE LECTURES

|       |                                                                                                                                          |                                                                                                                             |
|-------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| KN-1  | <i>Hierarchical organized zeolite</i>                                                                                                    | <i>Dr. Valentin VALTCHEV</i><br>ENSICAEN-CNRS, Caen France                                                                  |
| KN-2  | <i>Deciphering the structural information in a powder diffraction pattern</i>                                                            | <i>Dr. Lynne B. McCusker</i>                                                                                                |
| KN-3  | <i>Hybrid materials</i>                                                                                                                  | <i>Prof. Shinji INAGAKI</i><br>Toyota Central R&D Labs., Japan                                                              |
| KN-4  | <i>CO<sub>2</sub>/CH<sub>4</sub> Separation with AlPO-14 Mixed Matrix Dense Films</i>                                                    | <i>Dr. Stephen Wilson</i>                                                                                                   |
| KN-5  | <i>A New Synthesis Strategy for Nanostructured Zeolite Architectures Using Zeolite-Structure-Directing Functional Organic Surfactant</i> | <i>Dr. Ryong Ryoo</i>                                                                                                       |
| KN-6  | <i>Application of natural zeolites in environmental remediation</i>                                                                      | <i>Prof. Panagiotis MISAEILIDES</i><br>Aristotle University of Thessaloniki,<br>Greece                                      |
| KN-7  | <i>Mesoporous Materials Synthesized by Co-structure Directing Route</i>                                                                  | <i>Dr. Shunai Che</i>                                                                                                       |
| KN-8  | <i>Micro- and meso-porous materials for sustainable energy</i>                                                                           | <i>Dr. Carlo PEREGO</i><br>Centro Ricerche per le Energie Non<br>Convenzionali - Eni Istituto<br>Donegani Novara (NO) Italy |
| KN-9  | <i>Application of Carbon Based Nanoporous Materials</i>                                                                                  | <i>Dr. Ajayan Vinu</i>                                                                                                      |
| KN-10 | <i>Membranes and films based on zeolites</i>                                                                                             | <i>Prof. Jesus SANTAMARIA</i><br>University of Zaragoza, 50009<br>Zaragoza. Spain                                           |
| KN-11 | <i>Mesopores in Zeolite Catalysts: An Industrial View on a Variety of Synthesis Routes</i>                                               | <i>Dr. Sander Van Donk</i>                                                                                                  |
| KN-12 | <i>Advanced zeolitic materials for synthesis of fine chemicals</i>                                                                       | <i>Prof. Takashi TATSUMI</i><br>Tokyo Institute of Technology Japan                                                         |
| KN-13 | <i>Adsorption-storage properties of MOF</i>                                                                                              | <i>Dr. Philip LLEWELLYN</i><br>CNRS UMR 6264, Marseille (France)                                                            |

## List of Accepted Abstracts

### ORAL PRESENTATIONS

| Code | Topic | Title                                                                                                                                                             | Authors                                                                                                                                         | Order Number |
|------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 612  | 1.1   | <i>Synthesis of Zeolites X, Y and A Hollow Spheres with Hierarchical Pore Distribution by Using Soft Template Method</i>                                          | Fatin Hasan, Ranjeet K. Singh, Xinyi Zhang and Paul Webley                                                                                      | O-001        |
| 727  | 1.1   | <i>Hierarchically Micro-Meso-Macro Porous Aluminosilicates with Strong Acidity and Highly Catalytic activity Constructed from Zeolites Nanocrystals</i>           | Xiao-Yu Yang, Yu Li, Arnaud Lemaire, Ying-Xu Wei, Zhong-Min Liu, Guस्ताaf Van Tendeloo, and Bao-Lian Su                                         | O-002        |
| 1073 | 1.1   | <i>Hierarchical ZSM-5 zeolites in shape-selective xylene isomerization: Role of mesoporosity and acid site speciation</i>                                         | Christian Fernandez, Irina Stan, Jean-Pierre Gilson, Karine Thomas, Aurélie Vicente, Adriana Bonilla and Javier Pérez-Ramírez                   | O-003        |
| 1200 | 1.1   | <i>Improvement of the hierarchical ZSM-5 properties by coupling silanization and alkoxylation treatments of protozeolitic units</i>                               | D. P. Serrano, J. Aguado, A. Peral, E. Abella                                                                                                   | O-004        |
| 814  | 1.1   | <i>Silica monoliths with uniform macropores and structured mesoporous (MCM-41) or microporous (silicalite) skeletons</i>                                          | Anne Galarneau, Alexander Sachse, François Fajula, Francesco Di Renzo, Bernard Coq                                                              | O-005        |
| 851  | 1.1   | <i>Hollow zeolitic spere</i>                                                                                                                                      | ZONGTAO ZAHG; RUNWEI WANG; SHILUN QIU                                                                                                           | O-006        |
| 753  | 3.1   | <i>Importance of Pore Intersections in the Catalytic Performance of SSZ-75</i>                                                                                    | T.M. Davis, S.I. Zones, C.Y. Chen                                                                                                               | O-007        |
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| 1354 | 3.1   | <i>New zeolite for selective bottom-cracking conversion in FCC catalysts.</i>                                                                                     | G. Bellussi, R. Millini, C. Rizzo, A. Carati, D. Colombo, M. Cozzolino; P. Pollesel, S. Zanardi, E. Montanari                                   | O-009        |
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| 809  | 3.1   | <i>The role of zeolites in the deactivation of multifunctional Fischer-Tropsch synthesis catalysts: The interaction between HZSM-5 and Fe-based FT- catalyst.</i> | Priscila C. Zonetti, Alexandre B. Gaspar, Otávio F. M. Gomes, Fabiana M. T. Mendes, Eduardo Falabella S. Aguiar, Lucia G. Appel                 | O-011        |
| 1044 | 3.1   | <i>Carbanionic species formed during hydrocarbon transformations over Zn-containing zeolites: insights from in situ FTIR, NMR and TG-GC-MS</i>                    | I.I. Ivanova, A.V. Kubarev, V.V. Ordonsky, Yu.G. Kolyagin, E.V. Asachenko, I. Kas'yanov                                                         | O-012        |
| 1359 | 3.1   | <i>Cracking of vacuum gasoil with ITQ-27, a bidimensional zeolite with 12-ring pores interconnected by 14-ring windows</i>                                        | Djamal Dari, Joaquin Martínez-Triguero, Cristina Martínez, Martínez T. Navarro, Noemí Velamazán, Avelino Corma and Fernando Rey                 | O-013        |
| 919  | 3.1   | <i>Improving activity and selectivity in petroleum cracking by the use of zeolite catalysts with small intracrystal mesopores</i>                                 | K.S. Triantafyllidis, A.A. Lappas, D.H. Park, S.S. Kim, H. Wang, T.J. Pinnavaia                                                                 | O-014        |
| 476  | 3.2   | <i>Adsorption of CFC-115 and HFC-125 on silicalite-1</i>                                                                                                          | PENG Yong, ZHANG Fumin, ZHENG Xiao, ZHONG Yijun, ZHU Weidong                                                                                    | O-015        |
| 1225 | 3.2   | <i>Sr<sup>2+</sup> Adsorption Capacity and Xenon Diffusion Behavior onto Original Mesoporous LTA Zeolite Generated by Using Organosilane Surfactant</i>           | B. Prélôt, W. Kimb, E. Gérardina, K. Chob, L.C. de Ménorvala, J.-M. Douillarda, R. Ryoo, J. Zajac,                                              | O-016        |
| 941  | 3.2   | <i>Zeosils: Hydrophobic porous solids for application in energetics</i>                                                                                           | M. Trzpit, M.A. Saada , S. Rigolet , J.-L. Paillaud, M. Soulard , J. Patarin, F. Cailliez, A. Boutin, A.H. Fuchs                                | O-017        |
| 742  | 3.2   | <i>Nanoconfined Water in Zeolites and Clays</i>                                                                                                                   | Tina M. Nenoff, Randall T. Cygan, Nathan W. Ockwig, Luke L. Daemen                                                                              | O-018        |
| 694  | 3.2   | <i>Revolution in Diffusion Measurements by IR Micro-Imaging and Interference Microscopy</i>                                                                       | Christian Chmelik, Jörg Kärger                                                                                                                  | O-019        |
| 664  | 3.2   | <i>Diffusion in circularly ordered mesoporous silica fibers</i>                                                                                                   | Hatem Alsyouri, Oliver C. Gobin, Andreas Jentys, Johannes A. Lercher                                                                            | O-020        |
| 755  | 4.1   | <i>Control of In-plane Porous Structure of Mesoporous Silica Films On a Carbon Coating With Structural Anisotropy</i>                                             | Hirokatsu Miyata, Wataru Kubo, Takashi Noma, Avi Bendavid, Philip J. Martin                                                                     | O-021        |
| 804  | 4.1   | <i>Growth of Porous Coordination Polymer Thin Films on Various Substrates</i>                                                                                     | Angelique Betard, Denise Zacher, Osama Shekhah, Christof Wöll and Roland A. Fischer                                                             | O-022        |
| 798  | 4.1   | <i>Crystal-like Pyridine-bridged Periodic Mesoporous Organosilica</i>                                                                                             | Minoru Waki, Norihiro Mizoshita, Takao Tani, Shinji Inagaki                                                                                     | O-023        |
| 877  | 4.1   | <i>Influence of the oxidation state of the metal centre on the flexibility and adsorption of the porous MOF MIL-47 (V)</i>                                        | H. Leclerc, G. Clet, P. Bazin, L. Olivier, J.-C. Lavalley, T. Devic, C. Serre, N. Audebrand, S. Devautour-Vinot, G. Férey, A. Vimont, M. Daturi | O-024        |
| 926  | 4.1   | <i>Mesoporous hybrid polymer/silica micro-objects as a key point for the silica-to-polymer shape replica</i>                                                      | Patrizia Valsesia, Mario Beretta, Silvia Bracco, Angiolina Comotti, Piero Sozzani                                                               | O-025        |

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| 905  | 4.1 | <i><sup>129</sup>Xe NMR study of the framework flexibility of MOF-type MIL-53 material</i>                                                                 | M.A. Springuel-Huet, A. Nossov, F. Guenneau, C. Volkringer, T. Loiseau, G. Férey and A. Gédéon,                                         | O-027 |
| 1266 | 4.1 | <i>Metal-Organic Materials:Strategies toward Functional Porous Materials</i>                                                                               | Mohamed Eddaoudi                                                                                                                        | O-028 |
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| 1035 | 3.1 | <i>ESR study of displacement of Fe<sup>3+</sup> active sites by Cu<sup>2+</sup> cations in the Cu-Fe-Beta catalyst for NH<sub>3</sub>-deNO<sub>x</sub></i> | Dmitriy E. Doronkin, Alexey V. Kuchero, Alexandr Yu. Stakheev, Arkady L. Kustov, Marie Grill                                            | O-030 |
| 1101 | 3.1 | <i>Variation of redox site structure in zeotypes and its influence on hydrocarbon oxidation with N<sub>2</sub>O</i>                                        | A.Crowfoot , C.A. Evans, E.M. Kennedy, B.Z. Dlugogorski, R.W. Joyner, J. Li, E. Starokon, O. Sonntag and M. Stockenhuber                | O-031 |
| 1042 | 3.2 | <i>Characterization of FeII sites in Fe-FER by Mössbauer and FTIR spectroscopy using CO and NO as complementary probe molecules.</i>                       | Elena Ivanova , Mihail Mihaylov , Konstantin Hadjiivanov ,Vanessa Blasin-Aube , Olivier Marie, Anna Plesniar, Marco Daturi              | O-032 |
| 540  | 4.2 | <i>Superparamagnetic iron-based particles in porous SBA 15 silica</i>                                                                                      | Cécile Cornu, Jean-Luc Bonardet, Edouard Alphandery, Vincent Dupuis, Anne Davidson                                                      | O-033 |
| 478  | 4.3 | <i>Zeolite L as Matrix for Zeolitic Maya Blue</i>                                                                                                          | Anna Zywert, Giuseppe Cruciani, Stanislaw Kowalak                                                                                       | O-034 |
| 703  | 1.1 | <i>Comparative Study of Zeolite L Crystal Size Formation</i>                                                                                               | Lama Itani, Krassimir N. Bozhilov, Guillaume Clet, Luc Delmotte, Valentin Valtchev                                                      | O-035 |
| 869  | 3.2 | <i>Low Cost Highly Efficient ZZ Water Purification Systems using Purified and Modified Natural Zeolite</i>                                                 | Gerardo Rodríguez-Fuentes                                                                                                               | O-036 |
| 1385 | 2.2 | <i>Stability of carbenium ions in zeolites - accurate predictions by quantum chemistry</i>                                                                 | Joachim Sauer, Christian Tuma, Torsten Kerber                                                                                           | O-037 |
| 602  | 2.2 | <i>Kinetic Inflation of Ideal Zeolite Frameworks</i>                                                                                                       | M. M. J. Treacy, V. Kapko and C. Dawson                                                                                                 | O-038 |
| 573  | 2.2 | <i>Ab initio Study of the Growth of Fused Bicyclic Species within a Zeolite-type Catalyst: the Influence of Confinement and Material Composition</i>       | Karen Hemelsoet, Arno Nollet, Veronique Van Speybroeck, Michel Waroquier                                                                | O-039 |
| 1010 | 2.2 | <i>Carbocations vs Alkoxides: Formation and Stabilization of the Bicyclobutonium Cation (C<sub>4</sub>H<sub>7</sub><sup>+</sup>) on Zeolites</i>           | Henrique C. Chagas, Hugo Arca, Nilton Rosenbach Jr, Erick Machado, Renata C. de Souto, Gabriel C. C. Gomes, Claudio J. A. Mota          | O-040 |
| 1076 | 2.2 | <i>Complex analysis of Al siting and distribution in ferrierites. Combined multispectroscopic and periodic DFT study</i>                                   | Stepan Sklenak, Jiri Dedecsek, Chenbin Li, Fei Gao, Melissa Lucero, Petr Klein, Martina Urbanova, Zdena Tvaruzkova, Zdenek Sobalik      | O-041 |
| 756  | 3.2 | <i>Vapor Phase Ion Exchange of Zeolites</i>                                                                                                                | <u>Karl Seff</u>                                                                                                                        | O-042 |
| 966  | 3.2 | <i>Cation budget in the treatment of zeolite-amended soils with a municipal sewage</i>                                                                     | Buondonno A., Capra G.F., Coppola E., Duras M.G., Vacca S., Colella C.                                                                  | O-043 |
| 840  | 3.2 | <i>Tuning the Hydrophobicity of Mesoporous Solids for selective Adsorption of Organic Pollutant in Wastewater</i>                                          | Adeline Trouvé, Isabelle Batonneau-Gener, Ruben Palacio, Sabine Valange, Magali Bonne, Matteo Guidotti, Maila Sgobba and Samuel Mignard | O-044 |
| 1019 | 2.1 | <i>Microwave Synthesis of Hierarchical Mesoporous Zeolites</i>                                                                                             | Sang-Eon Park, Hailian Jin, Dae-Yong OK, Young-Ki Kim                                                                                   | O-045 |
| 792  | 1.1 | <i>Introduction of mesoporosity in zeolite H-SSZ-13 by desilication</i>                                                                                    | Linn Sommer, Davide Mores, Stian Svelle, Michael Stöcker, Bert Weckhuysen, Unni Olsbye                                                  | O-046 |
| 832  | 1.1 | <i>Preparation of 2D-Hexagonal Ru-Based Mesoporous Metals by Repeated Templating</i>                                                                       | Yoji Doi, Azusa Takai, Yusuke Yamauchi, Kazuyuki Kuroda                                                                                 | O-047 |
| 929  | 1.1 | <i>Design of mesoporous zeolite catalysts through the hierarchy factor</i>                                                                                 | Javier Pérez-Ramírez, Danny Verboekend, Adriana Bonilla, Sònia Abelló                                                                   | O-048 |
| 930  | 1.1 | <i>Synthesis, Characterization and Catalytic Performance of Hierarchical TS-1 with Polyquaternium-7 as mesoporous Template</i>                             | Xiaoxing Wang, <u>Gang Li</u>                                                                                                           | O-049 |
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| 498  | 3.1 | <i>Selective Amination of Ethylene Oxide over La/HZSM-5 Zeolite</i>                                                                                        | Deju Wang, Ruming Feng, Zhongneng Liu, Zaiku Xie and Yi Tang                                                                            | O-053 |
| 835  | 3.1 | <i>Acylation of ferrocene with bulky acylating agents over zeolites</i>                                                                                    | M. Voláková-Bejblová, J. Vlk, D. Procházková and J. Čejka                                                                               | O-054 |

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| 1229 | 3.1 | <i>Development and Utilization of Zeolites in Chemical Industry</i>                                                                                     | Bilge Yilmaz, Ulrich Mueller                                                                                                                                                               | O-057 |
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| 1278 | 3.1 | <i>Enhanced CO<sub>2</sub>/N<sub>2</sub> separation over surface functionalized MFI-type membranes</i>                                                  | Puyam S. Singh, Abhijeet Avhale, Thangaraj Selvam, Amer Inayat1, Sofia Lopez-Orozco Hendryk Partsch, Jeanne D. Fanche and Wilhelm Schwieger                                                | O-063 |
| 1373 | 3.1 | <i>Gas permeation through ZSM-5 membranes in the presence of NOx adsorbed species</i>                                                                   | Indra Perdana, Derek Creaser, Jonas Lindmark, Jonas Hedlund                                                                                                                                | O-064 |
| 796  | 4.1 | <i>Assembling protozeolitic nanoclusters of MFI type into a mesostructured material of wormhole-layered arrangement and acidic properties</i>           | M. Derewinski, V. Pashkova, P. Sarv                                                                                                                                                        | O-065 |
| 671  | 1.1 | <i>Mesoporous Alumina in Macroporous Al<sub>2</sub>O<sub>3</sub>/Al Composites</i>                                                                      | S. F. Tikhov, D. F. Khabibulin, O. B. Lapina, A. N. Salanov, V. A. Sadykov, Yu.N.Bespalko, N.A.Pakhomov, A. I. Ratko, T. F. Kuznetsova, V. E. Romanenkov, S. I. Eremenko                   | O-066 |
| 783  | 1.1 | <i>Surfactant templated functionalized silica spheres</i>                                                                                               | Sabine Scholz and Johannes A. Lercher                                                                                                                                                      | O-067 |
| 1174 | 1.1 | <i>Siliceous Zeolites from Ionic Liquids</i>                                                                                                            | Paul S. Wheatley, Phoebe K. Allan, Simon J. Teat, Sharon E. Ashbrook and Russell E. Morris                                                                                                 | O-068 |
| 1248 | 1.1 | <i>Mesoporous Metal Oxides with Controlled Morphology by Nanocasting: Crystal Growth and Gas-Sensing Properties</i>                                     | Stefanie Haffer, Thomas Waitz, Thorsten Wagner, Michael Tiemann                                                                                                                            | O-069 |
| 1336 | 1.1 | <i>New mesoporous materials from silica-chitin nanocomposites</i>                                                                                       | Bruno Alonso, Thomas Cacciaguerra, Emmanuel Belamie                                                                                                                                        | O-070 |
| 1330 | 1.1 | <i>MCM-41 coated on microcellular ceramic foams</i>                                                                                                     | Teresa Granato, Francesco Le Piane, Flaviano Testa, Andrea Katović, Rosario Aiello                                                                                                         | O-071 |
| 451  | 1.1 | <i>A New Approach to Synthesis of Mesostructured Metal Oxide Thin Films</i>                                                                             | Cüneyt Karakaya, Yurdanur Türker, Cemal Albayrak, Ömer Dag                                                                                                                                 | O-072 |
| 658  | 1.1 | <i>Monte Carlo Modelling of Crystal Growth in Zeolites</i>                                                                                              | Michael W. Anderson, Ayako Umemura, Sam M. Stevens, Osamu Terasaki and Pablo Cubillas                                                                                                      | O-073 |
| 691  | 1.1 | <i>Dynamic Interplay of Nanoparticle Aggregation-Dislocation Mechanism with Crystal Growth in Silicalite-1 Formation</i>                                | Feifei Gao, Belén Albela, Laurent Bonnevot                                                                                                                                                 | O-074 |
| 1262 | 2.2 | <i>Unravelling how templates influence zeolite crystal morphology</i>                                                                                   | K.E. Jelfs, W. Gren, S.C. Parker, D. J. Willock, B.Slater                                                                                                                                  | O-075 |
| 340  | 2.2 | <i>Assembling the Si33 oligomers in pentasil zeolites</i>                                                                                               | B.M. Szyja, R.A. van Santen, E.J.M. Hensen                                                                                                                                                 | O-076 |
| 1389 | 2.1 | <i>HRSEM Observations of Nanoporous Materials</i>                                                                                                       | Shunsuke Asahina, Miia Klingstedt, Changhong Xiao, Kanghee Cho, Kyoungsoo Kim, Sam M. Steve, Ayako Umemura, Keiichi Miyasaka, Michael W Anderson, Ryong Ryoo, Ferdi Schüth; Osamu Terasaki | O-077 |
| 762  | 1.2 | <i>New Insight into the Formation of Open-framework Aluminophosphates</i>                                                                               | Wenfu Yan, Xiaowei Song, Jihong Yu, Ruren Xu                                                                                                                                               | O-078 |
| 356  | 1.2 | <i>Morphology-dependent MFI-type zeolite intergrowth structures leading to distinct internal and outer-surface molecular diffusion barriers</i>         | Lukasz Karwacki, Marianne H. F. Kox and Bert M. Weckhuysen                                                                                                                                 | O-079 |
| 974  | 1.2 | <i>Unusual zeolite morphologies from oriented aggregation of nanoparticles</i>                                                                          | R. Benabdallah, F. Hamidi, R. Arletti, A. Bengueddach, F. Di Renzo                                                                                                                         | O-080 |
| 789  | 4.2 | <i>Bio-inspired Mesopores as Heterogeneous Catalysts</i>                                                                                                | David Xuereb, Joanna Dzierzak, Robert Raja                                                                                                                                                 | O-081 |
| 1352 | 4.2 | <i>Biocompatibility of Porous Bioactive Glass Ceramics</i>                                                                                              | Hui-suk Yun, Jin-woo Park, and Sang-Hyun Kim                                                                                                                                               | O-082 |

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| 1253 | 4.2 | <i>A Novel Delivery Platform for Camptothecin to Cancer Cells Based in Mesoporous Silica Nanoparticles</i>                                                                                                                                                                                                         | P. Botella, I. Abasolo, C. Muniesa, J. Ruiz, Y. Fernández, M. Quesada, A. Corma, S. Schwartz, Jr.                                   | O-084 |
| 1267 | 4.2 | <i>Mesoporous Silica Microparticles in Molecular Delivery and Imaging</i>                                                                                                                                                                                                                                          | Jeremy Steinbacher, Sherrill Lathrop, Jedd Hillegass, Arti Shukla, Kai Cheng, Steven Blumen, Brooke Mossman, and Christopher Landry | O-085 |
| 708  | 4.2 | <i>Porous MOFs nanocarriers as a potential platform for drug delivery and imaging</i>                                                                                                                                                                                                                              | P. Horcajada, T. Chalati, T. Baati, D. Heurtaux, J. Eubank, C. Serre, G. Férey, P. Couvreur, R. Gref                                | O-086 |
| 337  | 3.2 | <i>Texture and adsorption properties of multilayer ordered mesoporous films</i>                                                                                                                                                                                                                                    | Jiri Rathousky, Vit Kalousek, Christine Walsh, Alexis Bourgeois                                                                     | O-087 |
| 579  | 3.2 | <i>One-pot Synthesis and Adsorption Property of Large Pore and Short-channeled SBA15 Platelet Materials</i>                                                                                                                                                                                                        | Shih-Yuan Chen, Yi-Ting Chen, Soofin Cheng                                                                                          | O-088 |
| 633  | 3.2 | <i>Diffusion of short n-alkanes in rigid MIL-47(V) and flexible MIL-53(Cr) Metal Organic Frameworks</i>                                                                                                                                                                                                            | N. Rosenbach Jr., H. Jobic, A. Ghofu, P. Yot, D. Kolokolov, F. Salled, T. Devic, C. Serre, G. Férey, G. Maurin                      | O-089 |
| 1135 | 3.2 | <i>Controlling the polarity of LTA and FAU zeolites for achieving CO<sub>2</sub> / CH<sub>4</sub> separation</i>                                                                                                                                                                                                   | Avelino Corma, Miguel Palomino, Fernando Rey, Susana Valencia, Caterina Rizzo, Marco Tagliabue                                      | O-090 |
| 1274 | 3.2 | <i>Mesoporous materials as scaffolds to prepare by melt infiltration nanoconfined metals for hydrogen storage and catalysis</i>                                                                                                                                                                                    | J. Gao, P. Adelhelm, R. Bogerd, K.P. de Jong, P.E. de Jongh                                                                         | O-091 |
| 477  | 4.1 | <i>Sonochemical synthesis of an interpenetrated metal organic framework Cu-TATB for CO<sub>2</sub> adsorption</i>                                                                                                                                                                                                  | Jun Kim, Jaheon Kim, Wha-Seung Ahn                                                                                                  | O-092 |
| 408  | 3.2 | <i>Functionalization of MCM-41 for CO<sub>2</sub> Capture</i>                                                                                                                                                                                                                                                      | Dr Jennifer Williams, Dr Tina Duren, Prof Nigel Seaton                                                                              | O-093 |
| 1119 | 4.1 | <i>Experimental and Computational Studies on the Adsorption of CO, CO<sub>2</sub> and N<sub>2</sub> on MOF-74-Mg</i>                                                                                                                                                                                               | C.O. Areán, S. Bordiga, S. Chavan, B. Civalieri, G.T. Palomino, L. Valenzano, J.G. Vitillo and K. Sumida                            | O-094 |
| 461  | 3.1 | <i>Hierarchical macroporous mesoporous materials for biodiesel synthesis</i>                                                                                                                                                                                                                                       | Jean-Philippe Dacquin, Adam F. Lee and Karen Wilson                                                                                 | O-095 |
| 1045 | 3.1 | <i>Lipase on SBA-15 mesoporous silica as a biocatalyst for Biodiesel synthesis</i>                                                                                                                                                                                                                                 | Andrea Salis, Mani Shankar Bhattacharyya, Maura Monduzzi, and Vincenzo Solinas                                                      | O-096 |
| 1269 | 3.1 | <i>Zeolite-catalyzed Isomerisation of Triose Sugars into Methyl Lactate</i>                                                                                                                                                                                                                                        | Martin Spangsberg Holm, Shunmugavel Saravanamurugan, Jianmin Xiong, Ryan M. West, Esben Taarning, Claus Hviid Christensen           | O-097 |
| 646  | 3.1 | <i>Unique performance and shape-selectivity of nitrogen-containing MFI silicalite-1 for base-catalyzed reactions</i>                                                                                                                                                                                               | Masaru Ogura, Taku Hasegawa, and Cheralathan K. Krishnan                                                                            | O-098 |
| 838  | 3.1 | <i>Transformation of n-heptane in presence of guaiacol over HY and HZSM-5 zeolites</i>                                                                                                                                                                                                                             | I. Graça, J. M. Lopes, M. F. Ribeiro, M. Badawi, S. Laforge, P. Magnoux, F. Ramôa Ribeiro                                           | O-099 |
| 1325 | 3.1 | <i>The role of weak acid sites in micro and mesoporous solid acid catalysts to control the selectivity in the synthesis of biofuels by etherification of 5-hydroxymethylfurfural (5-HMF) with bioethanol</i>                                                                                                       | M. Esther Leena Preethi, P. Lanzafame, S. Perathoner, S. Miertus and G. Centi                                                       | O-100 |
| 335  | 1.1 | <i>1-Ethyl-3-methylimidazolium bis(oxalato)borate ionic liquid as solvent and reactant: ionothermal synthesis of a new cobalt borophosphate (NH<sub>4</sub>)<sub>7</sub>Co<sub>4</sub>(H<sub>2</sub>O)[B<sub>2</sub>P<sub>4</sub>O<sub>15</sub>(OH)<sub>2</sub>][H<sub>2</sub>PO<sub>4</sub>][HPO<sub>4</sub>]</i> | Miao Yang, Feifei Xu, Qingshan Liu, Peifang Yan, Xiumei Liu, Urs Welz-Biermann                                                      | O-101 |
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| 887  | 4.1 | <i>Templated Nano-Graphite Crystallites: A Study of Shape Selectivity and Applications in Catalysis</i>                                                                                                         | F. de Clippel, A. Harkiolakis, T. Vosch, X. Ke, G. Van Tendeloo, G. Baron, P. Jacobs, J. Denayer, B.F. Sels                                                                                      | O-201 |
| 482  | 4.2 | <i>Monolithic Polymers and Carbons with Ordered Mesostructure for Application in Dehydrogenation of Propane to Propylene</i>                                                                                    | Lei Liu, Gao-Song Shao, Zhong-Yong Yuan                                                                                                                                                          | O-202 |
| 672  | 3.1 | <i>Decomposition of tert-butanethiol on zeolites for the new desulfurization process of residential fuel cell systems</i>                                                                                       | Shigeo Satokawa, Shintaro Hayano, Mitsuo Toya, Kohei Urasaki, Toshinori Kojima                                                                                                                   | O-203 |
| 1056 | 4.1 | <i>Time-Resolved in situ Diffraction Study of the Crystallisation of MOFs and the Structural Effects of the Nature of Solvents on breathing</i>                                                                 | Franck Millange, Manuela Medina, Nathalie Guillou, Gérard Férey, Kathryn M. Golden, Richard I. Walton                                                                                            | O-204 |
| 1141 | 4.1 | <i>A joined study, by XPS and in-situ FTIR spectroscopy of adsorbed pyrrole, of oxygen sites on Periodic Mesoporous Organosilicas</i>                                                                           | B. Camarota <sup>1</sup> , Y. Goto, S. Inagaki, E. Garrone and B. Onida                                                                                                                          | O-205 |
| 1386 | 4.1 | <i>Advanced Characterization of Pore Structure and Surface Chemistry of Periodic Mesoporous Organosilica Materials (PMO) and Ordered Micro-Mesoporous Carbons (CMK) by Water, Nitrogen and Argon Adsorption</i> | Matthias Thommes, Juergen Morell, and Michael Froeba                                                                                                                                             | O-206 |

## SHORT ORAL PRESENTATIONS

| Code | Topic | Title                                                                                                                                                                                  | Authors                                                                                              | Order Number |
|------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------|
| 333  | 1.1   | <i>Synthesis of Multi-shelled Mesoporous Silica Hollow Nanospheres and their Application in Controlled Release of Drug</i>                                                             | Jian Liu, Sandy Budi Hatono, Max Lu, Shi Zhang Qiao                                                  | SO-01        |
| 463  | 1.1   | <i>Microwave-assisted synthesis of pure AIPO-31/SAPO-31 framework using Diquat-6/7 as a novel template</i>                                                                             | Shivanand M. Pai, Bharat L. Newalkar and Nettem V. Choudary                                          | SO-02        |
| 681  | 1.1   | <i>Imidazolium derivatives as structure-directing agents in zeolite synthesis</i>                                                                                                      | Jean-Louis Paillaud, Mathias Dodin, Yannick Lorgouilloux, Philippe Caullet and Nicolas Bats          | SO-03        |
| 758  | 1.1   | <i>Formation of Narrow Mesopores in Zeolite Y by the Combination of Desilication and Steam Treatment</i>                                                                               | Xuejun Zhang, Gang Wang, Rui Meng, Zhongmin Liu                                                      | SO-04        |
| 801  | 1.1   | <i>Synthesis of H-ZSM-5/Silicalite-1 core-shell composite via Epitaxial Growth</i>                                                                                                     | Easir A. Khan, Yunyang Liu, Zhiping Lai and Arvind Rajendran                                         | SO-05        |
| 914  | 1.1   | <i>A green and efficient synthesis of ZSM-5: Effects of seed type, gel aging and silica source</i>                                                                                     | Pan Huihua                                                                                           | SO-06        |
| 985  | 1.1   | <i>The Significant Effects of the Alkali-metal Ions and the Haloid Anions on ZSM-5 Zeolite Synthesis: from Mechanism to Morphology and Catalysis</i>                                   | Chunyan Liu, Wenying Gu, Zhiqi Shen, Lijuan Song, Xiangchen Fang, Hongchen Guo                       | SO-07        |
| 1036 | 1.1   | <i>Characterisation of carbonaceous deposits formed on mordenite during methanol to hydrocarbon conversion.</i>                                                                        | Liam France, Justin Hargreaves, Evert Ditzel, John Liggat, John Lewicki, Debra Todd, David Apperley  | SO-08        |
| 1088 | 1.1   | <i>Synthesis and Characterization of Pd/ZSM-5/MCM-48 Biporous Catalysts with Superior Activity for Benzene Oxidation</i>                                                               | Chi He, Baojun Dou, Peng Li, Jie Cheng, Zhengping Hao                                                | SO-09        |
| 1102 | 1.1   | <i>Structural and Diffusion Characterizations of Mesostructured Zeolite composite BFZ</i>                                                                                              | Jiajun Zheng, Jinghong Ma, Qinghu Zeng, Xiweng Zhang, Wangfu Sun and Ruifeng Li                      | SO-10        |
| 1251 | 1.1   | <i>Combinatorial Screen of the Structure Directing Capabilities of Choline for Aluminosilicate Compositions: A Detailed Examination of Fine Effects</i>                                | Mark A. Miller and Gregory J. Lewis                                                                  | SO-11        |
| 562  | 1.2   | <i>Incorporation Titanium into the framework of Natural Mordenite: Towards a Low-cost Titanium Silicalites</i>                                                                         | Liping Xiao, Jing Yang, Hui Zhou, Jie Fan, Hui Lou, Xiaoming Zheng                                   | SO-12        |
| 636  | 1.2   | <i>The synthesis of colloidal beta zeolite- What is limiting the crystalline yield</i>                                                                                                 | Anthony S.T. Chiang, Chien-Sheng Wu, Shun-Yi Fang                                                    | SO-13        |
| 769  | 1.2   | <i>Investigation of synthesizing MFI/FAU composite zeolite</i>                                                                                                                         | Zhizhi Zhang, Yu Jie, Xiwen Zhang, Qin Bo, Fengxiang Ling, Wanfu Sun                                 | SO-14        |
| 1184 | 1.2   | <i>A comparison of the synthesis and properties of AIPO4-5 and AIPO4 STA-15, a new structure type from a well studied synthetic system</i>                                             | A. Lorena Picone, Zhongxia Han, Lucy Clark, Sharon E. Ashbrook, Wuzong Zhou, Paul A. Wright          | SO-15        |
| 1038 | 1.2   | <i>Solid State NMR Characterization of Phenylbenzimidazole Sulfonic Acid Co-encapsulated with Cetyltrimethylammonium in Mesoporous Silica Materials</i>                                | Raphaël Bongur, Claire Marichal, Bénédicte Lebeau and Philippe Guarilloff                            | SO-16        |
| 1272 | 2.1   | <i>Characterization of microstructural defects in ZSM-5 and their role in the activity in MTG reaction</i>                                                                             | Katia Barbera, Francesca Bonino, Silvia Bordiga, Ton V.W. Janssens, Pablo Beato                      | SO-17        |
| 555  | 2.2   | <i>The periodic DFT investigation of the effect of the Al content on the properties of the acid zeolite H-FER.</i>                                                                     | L. Grajciar, C.O. Arean, A. Pulido, P. Nachtigall                                                    | SO-18        |
| 908  | 2.2   | <i>Predicting the Extraframework Cation Distribution in Faujasite X, Y and in Zeolite A by Monte Carlo Simulations</i>                                                                 | G.D. Pirngruber, A. DiLella, K. Barthelet                                                            | SO-19        |
| 1242 | 2.2   | <i>Redox activity modeling of alkaline earth exchanged zeolites</i>                                                                                                                    | A.A. Rybakov, A.V. Larin, G.M. Zhidomirov, D.P. Vercauteren                                          | SO-20        |
| 328  | 3.1   | <i>Selective Production Propylene from Olefins over Zeolites</i>                                                                                                                       | Yasuyoshi Iwase, Akimitsu Miyaji, Ken Motokura, Toru Koyama and Toshihide Baba                       | SO-21        |
| 343  | 3.1   | <i>SBA-15-pr-SO3H as catalyst for alkylation i-butylene/n-pentane</i>                                                                                                                  | Freddy Imbert, Yenny Guerrero, Edder Garcia, Álvaro Uzcátegui, Pedro Rodríguez and Marlin Villarroel | SO-22        |
| 359  | 3.1   | <i>Kinetics and Mechanisms for Cracking Alkanes over Silicalite under Conditions of Industrial Interest</i>                                                                            | Hayim Abrevaya                                                                                       | SO-23        |
| 450  | 3.1   | <i>One-Pot Glycerol Conversion into 1,2-Propanediol in Absence of Added Hydrogen: Bifunctional Catalysis with Pt/NaY</i>                                                               | Stijn Van de Vyver, Els D'Hondt, Bert F. Sels, Pierre A. Jacobs                                      | SO-24        |
| 575  | 3.1   | <i>Direct Conversion of Natural Gas to Aromatics (GTA), Ethylene (GTE) and Hydrogen under Non-Oxidative Condition using Mo loaded on HZSM-5 and Hydro-fluorinated HZSM-5 Catalysts</i> | Ahmed K. Aboul-Gheit, Ahmed E. Awadallah                                                             | SO-25        |
| 682  | 3.1   | <i>Influence of O<sub>2</sub> concentration on the selective catalytic reduction of NO with ammonia over Fe/zeolite and</i>                                                            | Yasuyuki Takamitsu, Yuuki Ito                                                                        | SO-26        |

| Cu/zeolite |     |                                                                                                                                                     |                                                                                                                        |       |
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| 767        | 3.1 | Highly selective formation of hydroquinone in the phenol oxidation with H <sub>2</sub> O <sub>2</sub> over Ti-MCM-68 zeolite catalyst               | Taku Yamada, Yuya Sato, Satoshi Inagaki, Yoshihiro Kubota                                                              | SO-27 |
| 872        | 3.1 | The investigation of silica modification on the structure and cracking properties for industrial mesoporous alumina materials                       | Zheng Jinyu, Luo Yibin, Mu Xuhong, Shu Xingtian                                                                        | SO-28 |
| 899        | 3.1 | The synthesis of Beta/MCM-48 composite zeolites and the corresponding HDS performance of diesel                                                     | Chengyin Wang, Aijun Duan, Dengqian Zhang, Zhen Zhao, Mingcheng Jin, Keng Chung                                        | SO-29 |
| 944        | 3.1 | Thermal Stability of Framework Aluminum in Zeolites                                                                                                 | Michael G. Gatter                                                                                                      | SO-30 |
| 1069       | 3.1 | Effect of hydrothermal conditions for the synthesis of CTA SiMCM 41 on its catalytic activity to transesterification                                | Fernanda Tátia Cruz and Dilson Cardoso                                                                                 | SO-31 |
| 1018       | 3.1 | Dehydroalkylation of benzene with ethane over Pt/H-MFI in the presence of hydrogen scavengers                                                       | V.V. Ordonsky, L.I.Rodionova, I.I.Ivanova, F. Luck                                                                     | SO-32 |
| 1127       | 3.1 | Zeolites based catalysts for synthesis of polyols ketals - new biofuel components                                                                   | A.L.Maximov, A.B.Kulikov, A.I.Nekhayev, D.S.Shlakhtincev                                                               | SO-33 |
| 1254       | 3.1 | Etherification of Glycerol with Alcohols Catalyzed by Acidic Zeolites                                                                               | Bianca P. Pinto, Claudio J. A. Mota                                                                                    | SO-34 |
| 1156       | 3.1 | Applications of zeolites to hydrocarbon obtaining from CO and H <sub>2</sub> via dimethyl ether                                                     | Natalia Kolesnichenko, Ruslan Kulumbegov, Natalia Markova, Ekaterina Biryukova, Tatyana Goryainova, Salambek Khadzhiev | SO-35 |
| 1381       | 3.1 | Au-FER as catalyst for CO oxidation                                                                                                                 | P. Ciambelli, D. Sannino, E. Palo, A. Martucci, A. Alberti                                                             | SO-36 |
| 341        | 3.2 | Removal of odours using gold containing zeolites and oxides                                                                                         | Izabela Sobczak, Hubert Pawlowski, Katarzyna Szrama, Maria Ziolek                                                      | SO-37 |
| 751        | 3.2 | Water sorption studies on new binderless molecular sieves of Type X and A for heat storage and heat transformation applications                     | J. Jänchen, A. Brandt, J. Schmeißer, B. Unger, H. Stach, U. Hellwig                                                    | SO-38 |
| 768        | 3.2 | Adsorption of CO <sub>2</sub> on a zeolitic material. Bench scale experimental study                                                                | E. Ruiz; J.M. Sanchez; M. Maroño; J. Otero                                                                             | SO-39 |
| 780        | 3.2 | Orientation-sensitive observation of adsorption in zeolites by second-harmonic generation and SHG-microscopy                                        | M. A. van der Veen, T. Verbiest, D.E. De Vos                                                                           | SO-40 |
| 843        | 3.2 | Competitive Hydrocarbon Adsorption in Automotive Exhaust Gas on Selected Zeolites                                                                   | M. D. Patil and J. L. Williams                                                                                         | SO-41 |
| 1173       | 3.2 | Novel Inorganic Adsorbents for Natural Gas Sweetening                                                                                               | M. Tagliabue, G. Bellussi, A. Carati, E.F. Gambarotta, P. Pollesel, P. Broccia and C. Rizzo                            | SO-42 |
| 772        | 3.1 | Zeolite as a catalyst for the synthesis of 5-substituted 1H-tetrazoles via [2+3] cycloaddition of nitriles and sodium azide                         | Abbas Teimouri, Alireza Najafi Chermahini                                                                              | SO-43 |
| 388        | 4.1 | Generic Post-Functionalization route from Amino-derived Metal-organic Frameworks                                                                    | Marie Savonnet, Delphine Bazer-Bachi, Nicolas Bats, Erwann Jeanneau, Vincent Lecocq, Catherine Pinel, David Farrusseng | SO-44 |
| ---        | 4.1 | Sol-gel assisted preparation of nanocomposite films for future ultra high density magnetic data storage                                             | D. Grosso, M. Faustini, C. Laberty, D. Lantiat, P. Krone, C. Schulze, D. Makarov, and M. Albrecht                      | SO-45 |
| 660        | 4.1 | Synthesis and characterization of inorganic-organic composite materials with anion-exchange groups based on mesoporous silicates                    | E.V. Borodina, F. Roessner, S.I. Karpov, V.F. Selemenev                                                                | SO-46 |
| 823        | 4.1 | Bi-functional Titanosilicate with Intra-particle Voids                                                                                              | Chunfeng Shi, Bin Zhu, Min Lin, and Jun Long                                                                           | SO-47 |
| 978        | 4.1 | Hydrodesulfurization of dibenzothiophene catalyzed by Pd supported on the overgrowth-type MCM-41/HY micro-mesoporous material: the reaction network | Feng Zhou, Anjie Wang, Xiang Li, Linying Wang, and Yongkang Hu                                                         | SO-48 |
| 1081       | 4.1 | Isorecticular coordination polymers with honeycomb topology                                                                                         | Pascal D. C. Dietzel, Rune E. Johnsen, Morten Frøseth, Richard Blom, Helmer Fjellvåg                                   | SO-49 |
| 1158       | 4.1 | Molybdenum-supported hybrid poly-glycidyl methacrylate-SBA-15 materials. Highly active and reusable catalysts in olefin epoxidation                 | J. Iglesias, J. Moreno, J.A. Melero, D.C. Sherrington, J. Asensio, A. Lamaro                                           | SO-50 |
| 1290       | 4.1 | Surface functionalised silicalite-1 (MFI) inside a styrene-butadiene-styrene (SBS) matrix induces ordered phase separation                          | G.Golemme, M.G.Buonomenna, M.P. De Santo, F.Ciuchi, A.Figoli                                                           | SO-51 |
| 1344       | 4.1 | Catalytic Properties of Cubic SBA-1 Mesoporous Titanosilicate Prepared in Alkaline Condition                                                        | Tsung-Han Lin, Jy-Fu Lee, Ling-Yun Jang, and Soofin Cheng                                                              | SO-52 |
| 917        | 4.2 | Building of Multifluorescent Mesoporous Silica Nanoparticles                                                                                        | Jinlong Zhang, Juying Lei and Lingzhi Wang                                                                             | SO-53 |
| 987        | 4.2 | Natural Zeolite in the Anti-cancer Therapy                                                                                                          | Alberto Martín, L. Charles de Ménorval, Marian Hernández and Aramis Rivera                                             | SO-54 |

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| <b>1015</b> | <b>4.2</b> | <i>Fluorescent Mesostructured Nanoparticles: Effect of the Preparation Method on the Photophysical Performances of the Hybrids</i> | Ivana Miletto, Emanuela Bottinelli, Giuseppe Caputo, Salvatore Coluccia and Enrica Gianotti                                                                                     | <b>SO-55</b> |
| <b>1236</b> | <b>4.2</b> | <i>Sensitive improvement of capacitive gas sensor with a differential measurement</i>                                              | Urbiztondo, M., García, G., Pellejero, I., Pina, M.P., Santamaria, J.                                                                                                           | <b>SO-56</b> |
| <b>465</b>  | <b>4.3</b> | <i>Synthesis and Catalytic Property of High Hydrothermally Stable Mesoporous Aluminosilica Spheres with Radiate Channels</i>       | Xin Gu, Qian Peng, Haixiang Tao, Xiaohui Liu, Jiawen Ren, Yanqin Wang                                                                                                           | <b>SO-57</b> |
| <b>1300</b> | <b>4.3</b> | <i>Spectroscopic Characterization of Iron Oxides on Natural Zeolite from Palmarito de Cauto, Cuba</i>                              | Arturo Manzo-Robledo, Inocente Rodríguez-Iznaga, Daria Tito Ferro, Beatriz Concepción-Rosabal, Fernando Chávez-Rivas, R. Zamorano-Ulloa, Rocio Guerrero and Edilso Reguera-Ruiz | <b>SO-58</b> |



## POSTER PRESENTATIONS

| Code | Topic | Title                                                                                                                                                      | Authors                                                                                                                   | Order Number |
|------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------|
| 399  | 1.1   | <i>Synthesis of mesoporous Chromium silicates molecular sieves in strong acidic media by assembly of preformed CrS1 precursors with triblock copolymer</i> | K. Bendahou a, F. Hamidi a, L. Chérif *a, S. Siffert b,c, A. Bengueddach e, A. Aissat b,c, F. Casier b,d, A. Aboukais b,c | P-001        |
| 707  | 1.1   | <i>Effect of preparation conditions on the species present and the textural and acid characteristics of tungstophosphoric acid-zirconia composites</i>     | Luis Pizzio, Mirta Blanco                                                                                                 | P-002        |
| 1002 | 1.1   | <i>Fabrication and characterization of zeolite X – nanosilicalite core shell zeolite composites</i>                                                        | Ranjeet K Singh, Gang Li, Liyang Liu, and Paul A. Webley                                                                  | P-003        |
| 369  | 1.1   | <i>Study of the Formation of Germanosilicate with UTL Topology</i>                                                                                         | Nataliia Kasian, Alexander Aerts, Elena Gobechiya, Oleksiy V. Shvets, Johan A. Martens, Christine E. A. Kirschhock        | P-004        |
| 729  | 1.1   | <i>Catalytically Stable and Active Nanoreactor with a Novel Macroporous Core@ Ordered Mesoporous Shell Structure</i>                                       | Xiao-Yu Yang 1, 2, Li Yu 1, 2, Guस्ताaf Van Tendeloo 3, and Bao-Lian Su 1, 2 a *                                          | P-005        |
| 781  | 1.1   | <i>Comparison of synthesis routes to nanocrystalline Cu<sub>3</sub>(BTC)<sub>2</sub> encapsulated Keggin-type phosphotungstic acid</i>                     | L. H. Wee, S. R. Bajpe, N. Janssens, C. E. A. Kirschhock and J. A. Martens                                                | P-006        |
| 879  | 1.1   | <i>Tuning the zeolitic and the mesoporous characteristics of Ti-containing silicates in a one-pot templating synthesis</i>                                 | Jarian Vernimmen (a), Vera Meynen (a), Myrjam Mertens (b), Oleg I. Lebedev (c), Gustaaf Van Tendeloo (c), Pegie Cool (a)  | P-007        |
| 1071 | 1.1   | <i>Synthesis of ordered mesoporous silica at room temperature and stable quasi neutral pH</i>                                                              | Jasper Jammaer, Alexander Aerts, Jan D'Haen, Jin Won Seo, Johan A. Martens                                                | P-008        |
| 605  | 1.1   | <i>Hierarchically ordered macro-mesoporous alumina catalysts produced by dual soft template method</i>                                                     | L. Martins, M. A. A. Rosa, D. Cardoso, S. H. Pulcinelli and C. V. Santilli                                                | P-009        |
| 606  | 1.1   | <i>Macro-mesoporous zirconia ceramic foams prepared by air-liquid foam template</i>                                                                        | Marinalva A. Alves Rosa, Leandro Martins, Sandra H. Pulcinelli, Celso V. Santilli                                         | P-010        |
| 608  | 1.1   | <i>Synthesis and Characterization of SAPO-34 and MeAPSO-34 Samples</i>                                                                                     | Bianca Figueirôa de Souza, Fagner Calegário Sena and Lindoval Domiciano Fernandes*                                        | P-011        |
| 910  | 1.1   | <i>Cobalt modified mesoporous molecular sieves analogous to MCM-48</i>                                                                                     | José Augusto dos Santos Jr., Martin Wallau                                                                                | P-012        |
| 932  | 1.1   | <i>Mesoporous silica spheres analogous to MCM-41 – Influence of the synthesis parameters on its diameter –</i>                                             | Andrieli D. Martins, Mary Rosane R. Coutinho, Martin Wallau                                                               | P-013        |
| 937  | 1.1   | <i>Influence of the synthesis parameters on the diameter of mesoporous silica spheres analogous to MCM-48</i>                                              | Giseli Rodrigues Crizel, Priscila Bueno Ferreira, Mary Rosane Rodrigues Coutinho, Martin Wallau                           | P-014        |
| 1043 | 1.1   | <i>Aluminium modified mesoporous silica spheres</i>                                                                                                        | Marcus Andrei Ullmann, Juliana Villela Maciel, Isabel Cristina Pinheiro Candia, Martin Wallau                             | P-015        |
| 1065 | 1.1   | <i>Ionic-liquids effects observed during zeolites synthesis</i>                                                                                            | Marcelo L. Mignoni,a, Michèle O. de Souza,a, Sibebe B. C. Pergher,b, Roberto F. de Souza,a, Katia Bernardo-Gusmão,a       | P-016        |
| 659  | 1.1   | <i>Preparation and characterization of oriented zeolite MFI layers</i>                                                                                     | P. Hrabánek1, A. Zikánová1, J. Drahokoupil2, V. Fila3, B. Bernauer3, L. Brabec1, M. Kočířik1                              | P-017        |
| 890  | 1.1   | <i>Application of semi-open Wicke-Kallenbach cell to recognize stages of TPA+ removal from composite ZSM-5-<math>\alpha</math>-alumina layers</i>          | Arlette Zikanovaa, Vlastimil Filab, Pavel Hrabaneka, Bohumil Bernauerb, Ivan Jirkaa, Libor Brabeca, Milan Kocirika        | P-018        |
| 363  | 1.1   | <i>Centimeter-Sized Zeolite Bodies: Evolution of the Binder during Secondary Growth Process</i>                                                            | Lama Itani, Valentin Valtchev, Joël Patarin, Severinne Rigolet                                                            | P-019        |
| 533  | 1.1   | <i>Bronsted/Lewis acid site discrimination in Ga-SBA15 mesoporous silica by I.R. spectroscopy of adsorbed lutidine</i>                                     | Thomas Onfroy, Franck Launay, Jean-Luc Bonardet                                                                           | P-020        |
| 597  | 1.1   | <i>Liquid phase adsorption of p-cresol onto ultra-hydrophobic silicalite I</i>                                                                             | J.L. Paillaud 1, H.Pizzala 2, P. Boulet 2, B. Kuchta 2, C. Vagner 2, R. Denoyel 2, O.Schäff 2*                            | P-021        |
| 626  | 1.1   | <i>New generation of zeolites beta films and microspheres</i>                                                                                              | T. Jean DAOU,1 Alexandra JAKOB,1 Natacha LAURIDANT,1 Michel SOULARD,1 Joël PATARIN,1 Delphine FAYE 2                      | P-022        |



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| 770  | 1.1 | <i>Advances on the Ionothermal Synthesis of Molecular Sieves</i>                                                                                     | Elie Fayad, Nicolas Bats, Christine Kirschhock, Virginie Moizan-Basle, Anne-Agathe Quoineaud and Johan Martens                                                                                                                                                                         | P-023 |
| 855  | 1.1 | <i>Investigation of pore topology of a new zeolite: IZM-2</i>                                                                                        | E.Guillon, E.Rabeyrin, A.Fecant, C.Leroux and N.Bats                                                                                                                                                                                                                                   | P-024 |
| 856  | 1.1 | <i>Atmospheric Stable Metal Sulfide Clusters Confined In Nanosized Zeolite</i>                                                                       | Ka-Lun Wong, Abdelhafid Souici, Vincent De Waele, Mehran Mostafavi, Till H. Metzger and Svetlana Mintova                                                                                                                                                                               | P-025 |
| 867  | 1.1 | <i>A new hybrid inorganic-organic zincophosphate, stable in water, prepared with histidine</i>                                                       | Djilali Mekhatria <sup>1,2</sup> , Angélique Simon-Masseron <sup>1*</sup> , Séverinne Rigolet <sup>1</sup> , Christoph Janiak <sup>3</sup> , Mohammed Abdelkrim Hasnaoui <sup>2</sup> , Abdelkader Bengueddach <sup>2</sup>                                                            | P-026 |
| 903  | 1.1 | <i>In-situ autocombustion as a simple and efficient route to supported nanocrystalline oxides and mixed-oxides</i>                                   | Magali Bonne <sup>1</sup> , Djamilia Sellam <sup>2</sup> , Jean-Philippe Dacquain <sup>3</sup> , Adam Fraser Lee <sup>3</sup> , Karen Wilson <sup>3</sup> , Andrea Cognigni <sup>4</sup> , Patrice Marécot <sup>1</sup> , Sébastien Royer <sup>1*</sup> and Daniel Duprez <sup>1</sup> | P-027 |
| 1037 | 1.1 | <i>Release properties of octylmethoxycinnamate co-encapsulated in mesoporous silica matrices with alkyltrimethylammonium</i>                         | Raphaël Bongur <sup>1</sup> , Claire Marichal <sup>1</sup> , Bénédicte Lebeau <sup>1</sup> and Philippe Guarilloff <sup>2</sup>                                                                                                                                                        | P-028 |
| 1040 | 1.1 | <i>Influence of the zeolite structure type on the properties of nanocasted porous carbons</i>                                                        | Claire Ducrot-Boisgontier, Julien Parmentier, Ovidiu Ersen, Joël Patarin                                                                                                                                                                                                               | P-029 |
| 1055 | 1.1 | <i>Influence of the compensating cation of Y-zeolite on its activity and on the manner to neutralize it</i>                                          | V. Santos <sup>(1)</sup> , K.Barthelet <sup>(1)</sup> , P.Magnoux <sup>(2)</sup>                                                                                                                                                                                                       | P-030 |
| 1117 | 1.1 | <i>Influence of pore geometry and pore size on the incorporation of metallic nanoparticles in Ag@SiO<sub>2</sub> nanocomposites</i>                  | E. Bloch, P. L. Llewellyn and V. Hornebecq                                                                                                                                                                                                                                             | P-031 |
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