DECHEMA
Gesellschaft für Chemische Technik
und Biotechnologie e.V.

FINAL PROGRAMME & BOOK OF ABSTRACTS

11 – 14 October 2015
Kongresshotel Potsdam
am Templiner See (nearby Berlin)

1st European Conference on Metal Organic Frameworks and Porous Polymers

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EURO mof 2015

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KEYNOTE LECTURE

Prof. Dr. Markus Antonietti
Max-Planck-Institut für Kolloid- und Grenzflächenforschung, Potsdam, Germany
Carbon frameworks with controlled chemistry and pore architecture by supramolecular preorganization

Dr. Mircea Dinca
Massachusetts Institute of Technology (MIT), Cambridge, USA
Intrinsic charge transport in microporous metal-organic frameworks: fundamentals and applications

Dr. Donglin Jiang
Institute for Molecular Science, Okazaki, Japan
Covalent Organic Frameworks: a platform for crystalline optoelectronics

Prof. Dr. Freek Kapteijn
Delft University of Technology, The Netherlands
Metal Organic Framework based mixed matrix membranes: a solution for highly efficient CO_2 capture?

Prof. Dr. Susumu Kitagawa
Kyoto University, Japan
Soft porous coordination polymers – structures and functions

Prof. Dr. Guillaume Maurin
Université de Montpellier, CNRS-Institut Charles Gerhardt Université, France
Accelerating development of MOFs using molecular modelling

EVENING LECTURE

Prof. Dr. Gérard Férey
Université de Versailles St. Quentin, Paris, France
A personal view of the past, present and future of MOFs, PCPs and related solids

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Sunday, 11 October 2015

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Monday, 12 October 2015

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Monday, 12 October 2015

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16:30	**EM structural study on fine structures of MOFs and related crystals** Z. Liu[1]; S. Asahina[2]; Y. Ma[3]; P. Oleynikov[3]; Y. Zhao[4]; O. Yaghi[4]; O. Terasaki[3], [1] Advanced Industrial Science and Technology, Tsukuba/J; [2] JEOL Ltd, Akishima/J; [3] Stockholm University/S; [4] UC Berkeley/USA	66
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M. Dinca, Massachusetts Institute of Technology (MIT), Cambridge/USA

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Metal-Organic Framework thin film based sensors for sensitive and selective chemical sensing
M. Tu[1]; S. Wannapaiboon[1]; R. Fischer[1], [1] Ruhr University Bochum/D

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Design and synthesis of Metal-Organic Frameworks for sensing hydrogen sulfide and five-membered-ring energetic heterocyclic explosives
X. Feng[1], [1] Beijing Institute of Technology/CN

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Metal-Organic Frameworks for drug delivery. From controlled release to metabolic pathway understanding
C. Orellana-Tavra[1]; E. Baxter[1]; T. Tian[1]; T. Bennett[1]; A. Cheetham[1]; R. Forgan[2]; D. Fairen-Jimenez[1], [1] University of Cambridge/UK; [2] University of Glasgow/UK

12:35 Lunch Break

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Tuesday, 13 October 2015

Room: Kongress-Saal

Chair: M. Antonietti, Max-Planck-Institut für Kolloid- und Grenzflächenforschung, Potsdam/D

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Covalent Organic Frameworks: a platform for crystalline Optoelectronics
D. Jiang, Institute for Molecular Science, Okazaki/J

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J. Roeser[1]; A. Trewin[2]; A. Thomas[1], [1] Technische Universität Berlin/D; [2] Lancaster University/UK

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C. Doonan[1], [1] The University of Adelaide/AUS

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F. Morel[1]; A. Beloqui Redondo[1]; M. Ranocchiari[2]; J. van Bokhoven[3], [1] ETH Zurich/CH; [2] Paul Scherrer Institute (PSI), Villigen/CH; [3] ETH Zürich /CH

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Covalent Triazine Framework supported iridium catalyst for reversible hydrogen storage using CO_2
A. Bavykina[1]; M. Goesten[1]; M. Makkee[1]; F. Kapteijn[1]; J. Gascon[1], [1] Delft University of Technology/NL

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Supported metal catalysts on Covalent Triazine Frameworks in the selective aerobic oxidation of 5-HMF
J. Artz[1]; R. Palkovits[1], [1] RWTH Aachen University/D

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Computational prediction of MOF structures from the entire periodic table: AuToGraFS + UFF4MOF
M. Addicoat[1]; D. Coupry[1]; T. Heine[1], [1] Jacobs University Bremen/D

17:35 KEYNOTE LECTURE — 86
Carbon frameworks with controlled chemistry and pore architecture by supramolecular preorganization
M. Antonietti, Max-Planck-Institut für Kolloid- und Grenzflächenforschung, Potsdam/D

18:20 **Poster session B for poster number starting with B** (18:20 – 20:30)

Tuesday, 13 October 2015

Room 0.241

Short Oral Poster Presentations 1

Catalysis

Chair: D. De Vos, KU Leuven/B

09:50 B06.01 **Highly active and stable Fischer-Tropsch catalysts obtained through unconventional Metal-Organic Framework mediated synthesis**
T. Wezendonk[1]; V. Santos[2]; J. Delgado Jaen[3]; I. Dugulan[1]; A. Chojecki[2]; S. Sartipi[4]; A. Hakeem[1]; A. Koeken[2]; M. Ruitenbeek[2]; G. Meima[2]; X. Sun[1]; M. Nasalevich[5]; S. Gopinathan[6]; H. Islam[6]; F. Kapteijn[5]; M. Makkee[1]; J. Gascon[5], [1] TU Delft/NL; [2] Dow, Terneuzen/NL; [3] University of Cadiz/E; [4] Shell Global Solutions, Amsterdam/NL; [5] Delft University of Technology/NL; [6] University College London/UK

10:00 B06.02 **Phosphazene decorated porous polymeric aromatic frameworks: an heterogeneous catalyst for Ring-Opening Polymerization**
M. Liras Torrente[1]; F. Sanchez[2]; E. Verde-Sesto[3]; M. Iglesias[4], [1] Instituto de Química Orgánica General (CSIC), Alcorcon/E; [2] Inst. Quimica Organica, Madrid/E; [3] Instituto de Ciencia y Tecnología de Polímeros, Madrid/E; [4] Institute of Materials Science of Madrid-CSIC, Madrid/E

10:10 B.06.03 **Dirhodium coordination polymers and their application in cyclopropanation**
J. Liu[1]; Y. Xu[1]; A. Thankamony[1]; T. Gutmann[1]; G. Buntkowsky[1], [1] Technische Universität Darmstadt/D

10:20 B.06.04 **Analysis of chemical stability and structural integrity of UiO-66 and HKUST -1 for technical applications**
C. Piscopo[1]; A. Polyzoidis[1]; M. Schwarzer[1]; S. Loebbecke[1], [1] Fraunhofer Institute for Chemical Technology, Pfinztal/D

10:50 Coffee Break

Synthesis

Chair: C. Serre, CNRS, Versailles/F

11:15 B01.01 **Room-temperature synthesis of Covalent Organic Frameworks through vapor-assisted conversion**
J. Rotter[1]; D. Medina[1]; Y. Hu[1]; V. Werner[1]; M. Dogru[1]; F. Auras[1]; J. Markiewic[1]; S. Herbert[1]; P. Knochel[1]; T. Bein[1], [1] Ludwig-Maximilians-University Munich/D

11:25 B01.02 **Stability through flexibility: mechanical properties of Zr and Hf MOFs from single crystal techniques**
R. Forgan[1], [1] University of Glasgow/UK

11:35 B01.03 **Microwave-enhanced grafting of peptides inside Metal-Organic Framework**
J. Canivet[1]; D. Farrusseng[1], [1] CNRS, Villeurbanne/F

11:45 B01.04 **Microreactor flow synthesis of zeoltiic imidazolate framework particles with controlled size, shape and adsorption properties**
S. Ohsaki[1]; K. Takada[1]; S. Watanabe[1]; K. Mae[1]; M. Miyahara[1], [1] Kyoto University/J

11:55 B01.05 **Fast and efficient synthesis of Ce(IV)-based MOF with $[M(IV)_6O_4(OH)_4]_{12}^+$ type clusters**
N. Stock[1]; M. Lammert[1]; M. Wharmby[3], [1] Christian-Albrechts-Universität zu Kiel/D; [3] Diamond Light Source Ltd., Didcot/UK

LECTURE PROGRAMME

Tuesday, 13 October 2015

Room 0.241

Short Oral Poster Presentations 1

12:05 B01.06 **Colloidal poly(melamine-formaldehyde) dispersions as precursor for mesoporous xerogels and adsorber material**
D. Schwarz[1]; J. Weber[1], [1] University of Applied Science Zittau Goerlitz, Zittau/D

12:15 B01.07 **Deeper insights into the modulated synthesis of MOFs**
P. Behrens[1]; F. Kempf[1]; J. Lippke[1]; P. Zerner[1]; I. Bremer[1]; A. Schaate[1], [1] Leibniz Universität Hannover/D

12:25 B01.08 **Solvent-assisted linker exchange: an alternative synthesis method to unattainable de novo Metal-Organic Frameworks**
W. Bury[1]; O. Karagiaridi[2]; J. Mondloch[2]; O. Farha[2]; J. Hupp[2], [1] Warsaw University of Technology/PL; [2] Northwestern University, Evanston/USA

12:35 Lunch Break

New Structures

Chair: N. Stock, Christian-Albrechts-Universität zu Kiel/D

14:50 B02.01 **Next generation MOFs: liquids, glasses and superstrong frameworks**
T. Bennett[1]; A. Cheetham[1]; N. Greaves[1]; D. De Vos[3]; B. Van de Voorde[3]; J. Tan[4]; R. Ameloot[5] [1] University of Cambridge/UK; [3] KU Leuven/B; [4] University of Oxford/UK; [5] KU Leuven/B

15:00 B02.02 **Extraction of photogenerated electrons and holes from a COF integrated heterojunction**
M. Calik[1]; F. Auras[1]; L. Salonen[3]; M. Handloser[1]; D. Medina[1]; M. Dogru[1]; F. Löbermann[1]; D. Trauner[1]; A. Hartschuh[1]; T. Bein[1], [1] Ludwig-Maximilians-University Munich, München/D; [3] International Iberian Nanotechnology Laboratory, Braga/P

15:10 B02.03 **Coordination polymers derived from 5-alkoxy isophthalic acids**
L. McCormick[1]; S. Morris[1]; S. Teat[2]; Y. Andreev[1]; R. Morris[1], [1] University of St Andrews/UK; [2] Advanced Light Source, Berkeley/USA

15:20 B02.04 **Acid- and base-stable porous organic cages: shape persistence and pH stability via post-synthetic 'tying' of a flexible amine cage**
M. Liu[1]; M. Little[1]; S. Chong[1]; T. Hasell[1]; A. Cooper[1]; K. Jelfs[4], [1] University of Liverpool/UK; [4] Imperial College London/UK

15:30 B02.05 **Ordered defects in Metal-Organic Frameworks by crystal engineering**
B. Tu[1]; D. Wu[1]; Q. Pang[1]; W. Yan[1]; E. Ning[1]; Y. Qi[1]; Q. Li[1], [1] Fudan University, Shanghai/CN

15:40 B02.06 **P-MOFs with potentially coordinating secondary sites**
T. Stein[1]; F. Hoffmann[1]; M. Fröba[1], [1] Universität Hamburg/D

15:50 B02.07 **Investigation of the Van-der-Waals driven stacking in a two dimensional Covalent Organic Framework**
F. Haase[1]; V. Vyas[1]; B. Lotsch[1], [1] Max-Planck Institute for Solid State Research, Stuttgart/D

16:05 Coffee Break

Tuesday, 13 October 2015

Room 0.241

Short Oral Poster Presentations 1

Sensing & Device Integration

Chair: P. Falcaro, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Clayton/AUS

16:35 B07.01 **Nanoporous polymers as highly sensitive active material in chemiresistive gas sensors**
F. Wisser[1]; J. Grothe[1]; S. Kaskel[1], [1] Technische Universität Dresden/D

16:45 B07.02 **Optical isotherms – characterizing potential sensors based on microporous luminescent materials**
F. Schönfeld[1]; D. Reichenbach[1]; L. Meyer[2]; K. Müller-Buschbaum[3], [1] Quantachrome, Odelzhausen/D; [2] [3] University of Würzburg/D

16:55 B07.03 **Electrically conducting copper paddle-wheel Metal-Organic Frameworks**
C. Schneider[1]; V. Stavila[2]; A. Talin[2]; F. Léonard[2]; M. Foster[2]; R. Fischer[1]; M. Allendorf[2], [1] Ruhr-University Bochum/D; [2] Sandia National Laboratories, Livermore/USA

17:05 B07.04 **Luminescence of N-functionalized MOFs for chromaticity tuning and sensing**
K. Müller-Buschbaum[1], [1] Universität Würzburg/D

17:15 B07.05 **Photoswitching in thin films of MOFs: optically triggered release of guest molecules**
L. Heinke[1]; Z. Wang[1]; M. Cakici[2]; S. Bräse[2]; C. Wöll[1], [1] Karlsruhe Institute of Technology (KIT), Eggenstein-Leopoldshafen/D; [2] Karlsruhe Institute of Technology (KIT), Karlsruhe/D

18:20 **Poster session B for poster number starting with B** (18:20 – 20:30)

Tuesday, 13 October 2015

Room 0.214

Short Oral Poster Presentations 2

Energy Application

Chair: C. Janiak, Universität Düsseldorf/D

09:50 B04.02 **Exploration of the mechanical properties of a new family of flexible fumarate-based Metal-Organic Frameworks**
P. Yot[1], [1] Universite Montpellier, Montpellier/F

10:00 B04.03 **Design of MOFs-salts based composites for heat transfer applications**
A. Permyakova[1]; S. Wang[1]; E. Courbon[2]; F. Nouar[3]; P. Normand[4]; P. Billemont[4]; G. De Weireld[4]; M. Frere[2]; N. Steunou[3]; C. Serre[5], [1] Institut Lavoisier de Versailles/F; [2] Université Mons/B; [3] Institut Lavoisier de Versailles, UVSQ/F; [4] University of Mons/B; [5] CNRS, Versailles/F

10:10 B04.04 **Understanding Proton Transport in a Zr-Based Metal-Organic Framework**
D. Damasceno Borges[1]; S. Devautour-Vinot[1]; F. Paesani[2]; H. Jobic[3]; G. Maurin[4], [1] Institut Charles Gerhardt, Montpellier/F; [2] University of California, San Diego/USA; [3] Université Lyon 1, Villeurbanne/F; [4] Institut Charles Gerhardt Montpellier UMR 5253 CNRS, Université de Montpellier/F

10:20 B04.05 **MOFs based on metal phosphonates: structurally diverse platforms as proton conductors**
M. Papadaki[1]; R. Colodrero[2]; E. Ramírez Losilla[2]; P. Olivera-Pastor[2]; K. Papathanasiou[1]; A. Cabeza[2]; K. Demadis[1], [1] University of Crete, Heraklion/GR; [2] University of Malaga/E

10:45 Coffee Break

Biological Application

Chair: P. McCloskey, MOF Technologies, Belfast/UK

11:15 B09.01 **Biomimetically mineralized Metal-Organic Frameworks and potential biotechnological applications**
K. Liang[1], [1] CSIRO, Clayton/AUS

11:25 B09.02 **Highly porous zirconium-containing Metal-Organic Frameworks for drug and gene delivery**
M. Teplensky[1]; T. Wang[2]; O. Farha[2]; J. Hupp[2]; D. Fairen-Jimenez[1], [1] University of Cambridge/UK; [2] Northwestern University, Evanston/USA

11:35 B09.03 **Polymer functionalized MOF nanoparticles for biomedical applications**
U. Lächelt[1]; A. Zimpel[1]; T. Preiß[1]; R. Röder[1]; H. Engelke[1]; J. Rädler[1]; E. Wagner[1]; T. Bein[1]; S. Wuttke[1], [1] Ludwig-Maximilians Universität München (LMU), Munich/D

11:45 B09.04 **Postsynthetic gel conversion of SURMOFs for biological application**
S. Schmitt[1]; M. Tsotsalas[1]; H. Gliemann[1]; C. Wöll[1], [1] Karlsruhe Institute of Technology (KIT), Eggenstein-Leopoldshafen/D

Tuesday, 13 October 2015

Room 0.214

Short Oral Poster Presentations 2

Scale up & Shaping

Chair: P. McCloskey, MOF Technologies, Belfast/UK

11:55 B03.01 **Converting (waste) PET bottles into MOFs: PET as a cheap linker source and/or support**
W. Deleu[1]; R. Ameloot[1]; D. De Vos[1], [1] KU Leuven/B

12:05 B03.02 **Industrial scale continuous mechanochemical synthesis of MOFs**
J. Casaban[1]; C. Hamill[1]; P. McCloskey[1]; S. James[2], [1] MOF Technologies, Belfast/UK; [2] Queen's University Belfast - MOF Technologies/UK

12:15 B03.03 **Manufacturing methods for achieving macroscopic MOF parts**
M. Ahlhelm[1]; H. Richter[1]; T. Moritz[1], [1] Fraunhofer IKTS, Dresden/D

12:25 B03.04 **Hydrothermal syntheses of robust Metal-Organic Frameworks and their applications to adsorption-driven heat transformation**
U. Lee[1]; Y. Hwang[1]; J. Chang[1]; C. Serre[2]; S. Humphrey[3], [1] Korea Research Institute of Chemical Technology, Daejeon/ROK; [2] CNRS, Versailles/F; [3] University of Texas at Austin/USA

12:35 Lunch Break

Adsorption and Separation

Chair: F. Kapteijn, Delft University of Technology/NL

14:50 B05.01 **Porous polymers in the selective liquid phase adsorption of biogenic platform chemicals**
K. Schute[1]; R. Palkovits[1]; M. Rose[1], [1] RWTH Aachen University, Aachen/D

15:00 B05.02 **Highly selective CO_2 capture by small pore MOFs assessed by real coadsorption measurements and molecular simulations**
R. Pillai[1]; M. Prakash[1]; N. Ramsahye[1]; G. Maurin[1]; P. Normand[2]; P. Billemont[2]; G. De Weireld[2]; V. Benoit[3]; P. Llewellyn[3]; M. Benzaqui[4]; F. Nouar[4]; C. Sicard[4]; N. Steunou[4]; C. Serre[8]; M. Lozinska[5]; A. Orsi [6]; P. Wright [6], [1] Institut Charles Gerhardt Montpellier UMR 5253 CNRS, Université de Montpellier/F; [2] University of Mons/B; [3] Laboratoire MADIREL UMR 7246, Université d'Aix Marseille, Marseille/F; [4] Institut Lavoisier UMR CNRS 8180, Université de Versailles/F; [5] CNRS, Versailles/F; [6] Eastchem School of Chemistry, University of St Andrews/UK

15:10 B05.03 **What is specific of using MOFs in gas chromatography?**
A. Münch[1]; T. Böhle[1]; F. Mertens[1], [1] Technische Universität BergakademieFreiberg/D

15:20 B05.04 **Surface polarity estimation of Metal-Organic Frameworks by 1H NMR spectroscopic liquid-phase adsorption studies**
M. Sin[1]; C. Kutzscher[1]; I. Senkovska[1]; S. Kaskel[1]; E. Brunner[1], [1] Technische Universität Dresden/D

15:30 B05.05 **Selective gas sorption in stimuli-responsive MOFs**
G. Minguez Espallargas[1]; N. Calvo Galve[1]; J. López-Cabrelles[1]; M. Giménez-Marqués[2]; E. Coronado[1]; F. Rey[3]; M. Palomino[3]; G. Sastre[3]; J. Rodríguez-Velamazán[4]; M. Jiménez-Ruiz[5], [1] Universidad de Valencia, Paterna/E; [2] Institut Lavoisier - Université de Versailles St Quentin-en-Yvelines/F; [3] Universidad Politecnica de Valencia/E; [4] CSIC and Universidad de Zaragoza/E; [5] Institut Laue-Langevin, Grenoble/F

Tuesday, 13 October 2015

Room 0.214

Short Oral Poster Presentations 2

15:40 B05.06 **A new use for MOFs: Stopping Physical Aging in Glassy Polymers for Exceptional Separation Performance**
C.H. Lau[1]; P.T. Nguyen[2]; K. Konstas[1]; C.M. Doherty[1]; L. Bourgeois[3]; T.J. Bastow[1]; A.J. Hill[1]; D.L. Gin[2]; R.D. Noble[2]; M.R. Hill[1], [1] CSIRO, Clayton South MDC/AUS; [2] University of Colorado, Boulder, CO/USA; [3] Monash University, Clayton/AUS

15:50 B05.07 **Adsorptive separation of olefin/paraffin mixtures with ZIF-4**
M. Hovestadt[1]; U. Böhme[1]; C. Paula[1]; M. Hartmann[1], [1] Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen/D

16:05 Coffee Break

In situ Characterization / Modelling

Chair: F. Coudert, CNRS, Paris/F

16:35 B10.01 **Host-guest interaction triggers adsorption phenomenon in flexible Metal-Organic Framework DUT-49**
S. Krause[1]; U. Stoeck[1]; V. Bon[1]; I. Senkovska[1]; S. Kaskel[1], [1] TU Dresden, Dresden/D

16:45 B10.02 **Surprising insights into well studied systems: high-pressure gas loading and GCMC simulations of different gases in ZIF-8**
C. Hobday[1]; C. Woodhall[1]; S. Moggach[1]; C. Morrison[1]; T. Duren[3], [1] University of Edinburgh/UK; [3] University of Bath/UK

16:55 B10.03 **Structural flexibility in prototypical Zeolitic Imidazolate Frameworks**
M. Wharmby[1]; S. Henke[2]; T. Bennett[2]; C. Mellot-Draznieks[3]; Y. Yue[4]; A. Cheetham[2], [1] Diamond Light Source Ltd., Didcot/UK; [2] University of Cambridge/UK; [3] Lab. de Chimie et Procédés Biologiques, Collège de France, Paris/F; [4] University of Aalborg/DK

17:05 B11.01 **A combined computational and spectroscopic exploration of the interactions between MOF surfaces and both polymers and gas**
R. Semino[1]; L. Boudjema[1]; N. Ramsahye[1]; G. Maurin[2]; A. Ghoufi[3]; G. Clet[4]; A. Vimont[5]; M. Daturi[4]; M. Benzaqui[6]; C. Sicard[7]; N. Steunou[7]; C. Serre[8], [1] Institut Charles Gerhardt Montpellier/F; [2] Institut Charles Gerhardt Montpellier UMR 5253 CNRS, Université de Montpellier/F; [3] Institut de Physique de Rennes/F; [4] Laboratoire Catalyse et Spectrochimie, ENSICAEN, Caen/F; [5] Laboratoire de Catalyse et Spectrochimie (LCS), Caen/F; [6] Institut Lavoisier UMR CNRS 8180,- Université de Versailles/F; [7] Institut Lavoisier de Versailles, UVSQ, Versailles/F; [8] CNRS/F

17:15 B11.02 **Cluster ensembled Cu-tetrazolate frameworks: hypothetical structures and aminoacid separation capabilities**
A. Ruiz-Salvador[1]; S. Hamad[1]; S. Calero[1]; L. Rodriguez Albelo[2]; N. Muñoz Padial[2]; E. Barea[2]; J. Rodriguez Navarro[2]; D. Lewis[3]; A. Gomez[4], [1] University Pablo de Olavide, Seville/E; [2] University of Granada/E; [3] University College London/UK; [4] Canadian Light Source, Saskatoon/CDN

17:25 B11.03 **Chemical intuited large-scale screening of MOFs by Artificial Neural Networks**
T. Stergiannakos[1]; M. Frysali[1]; G. Borboudakis[1]; E. Klontzas[2]; I. Tsamardinos[1]; G. Froudakis[1], [1] University of Crete, Heraklion Crete/GR

18:20 **Poster session B for poster number starting with B** (18:20 – 20:30)

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Wednesday, 14 October 2015

Room: Kongress-Saal

Chair: G. Maurin, Université de Montpellier, CNRS-Institut Charles Gerhardt Université/F

Chair: J. Denayer, Vrije Universiteit Brussels/B

Page

Wednesday, 14 October 2015

Room: Kongress-Saal

Chair: S. Kaskel, Technische Universität Dresden/D

» **Poster numbers starting with A:**
The posters should preferably be put up before Monday, 12 October 2015, 9:00 a.m. and are welcome to stay until Monday, 12 October 2015, 8:30 p.m.

Poster Session A is open on Monday, 12 October 2015, from 6:15 p.m. till 8:30 p.m.
The authors with **A numbers** are expected to present their posters during this session.

» **Poster numbers starting with B:**
The posters should preferably be put up on Tuesday, 13 October 2015 until 9:00 a.m., and are welcome to stay until the end of the conference.

Poster Session B is open on Tuesday, 13 October 2015, from 6:20 p.m. till 8:30 p.m.
The authors with **B numbers** are expected to present their posters during this session.

There are **additional posters at Session B** on Tuesday, 13 October 2015, please see the programme pages 14-20.

Synthesis

A01.01	**Light switchable DAE-PIMs** D. Becker[1]; A. Thomas[1], [1] TU Berlin, Berlin/D
A01.02	**Synthesis of new calcium- and barium-MOFs based on polycarboxylate aromatic linkers** D. Briones[1]; P. Leo[1]; G. Orcajo[1]; A. Rodríguez-Dieguez[2]; B. Fernandez[2]; F. Martínez Castillejo[1]; R. Sanz[1]; G. Calleja[1], [1] Rey Juan Carlos University, Mostoles, Madrid/E; [2] Univerisity of Granada, Granada/E
A01.03	**A facile synthesis route for Covalent Triazine Frameworks (CTFs)** S. Kücken[1]; A. Thomas[1], [1] TU Berlin, Berlin/D
A01.04	**Comparing porous and flat substrates: LPE growth and characterization of ZIF-8 SURMOF membranes on Al2O3 and Gold substrates for gas separation applications** E. Valadez Sánchez[1]; D. Gliemann[1]; D. Haas-Santo[1]; P. Wöll[1]; P. Dittmeyer[1], [1] Karlsruher Institut für Technologie, Karlsruhe/D
A01.05	**Continuous flow microwave assisted synthesis of Metal-Organic Frameworks** M. Taddei[1]; D. Steitz[2]; M. Ranocchiari[1]; J. van Bokhoven[2], [1] Paul Scherrer Institut, Villigen/CH; [2] Eidgenössische Technische Hochschule, Zürich/CH
A01.06	**Continuous flow-synthesis of carboxylate- and phosphonate-based MOFs under non-solvothermal reaction conditions** S. Waitschat[1]; M. Wharmby[2]; N. Stock[1], [1] Christian-Albrechts-Universität zu Kiel, Kiel/D; [2] Diamond Light Source Ltd., Oxfordshire/UK
A01.07	**Fluorinated Metal-Organic Frameworks based on trimesic acid** U. Ruschewitz[1]; J. Krautwurst[1], [1] University of Cologne, Cologne/D
A01.08	**Giant M14-molecular building block in hydrogen-bonded network** S. Mondal[1]; A. Kelling[1]; U. Schilde[1]; H. Holdt[1], [1] Universität Potsdam, Potsdam/D
A01.09	**High-valent metal cations based stable MOFs** S. Wang[1]; A. Permyakova[1]; N. Guillou[1]; C. Martineau[1]; G. Maurin[2]; N. Steunou[1]; C. Serre[3], [1] Institut Lavoisier de Versailles, Versailles/F; [2] Institut Charles Gerhardt Montpellier UMR 5253 CNRS, Université de Montpellier, Montpellier/F; [3] CNRS, Versailles/F

A01.10 **Incorporation of new functionalites into MOFs for catalysis and metal binding**
F. Yazigi[1]; J. Kennedy[1]; C. Wilson[1]; R. Forgan[1], [1] University of Glasgow, Glasgow/UK

A01.11 **Isoreticular Metal-Organic Framework series based on zirconium clusters and dicarboxylate spacers**
N. Muñoz Padial[1]; L. Rodriguez Albelo[1]; E. Barea[1]; E. Oltra Ferrero[1]; J. Rodriguez Navarro[1], [1] University of Granada, Granada/E

A01.12 **Liquid phase epitaxial growth of MOF-on-MOF thin films using supermolecular building layer (SBL) approach**
V. Chernikova[1]; O. Shekhah[1]; M. Eddaoudi[1], [1] King Abdullah University of Science and Technology (KAUST), Thuwal/SAR

A01.13 **Macro-porous materials by controlled aggregation of colloidal polymer particles**
A. Cingolani[1]; G. Storti[1]; M. Morbidelli[1], [1] ETH Zürich, Zürich/CH

A01.14 **Mechanochemical synthesis of covalent organic frameworks and nanosheets**
B. Biswal[1]; S. Chandra[1]; G. Das[1]; R. Banerjee[1], [1] National Chemical Laboratory, Pune/IND

A01.15 **Microwave-assisted synthesis of microporous Zn(II)- and Co(II)-imidazolate-4-amide-5-imidate frameworks**
K. Behrens[1]; I. Baburin[2]; S. Leoni[3]; J. Weber[4]; H. Holdt[1], [1] Universität Potsdam, Potsdam/D; [2] TU Dresden, Dresden/D; [3] Cardiff University, Cardiff/UK; [4] Hochschule Zittau/Görlitz, Zittau/D

A01.16 **Missing linkers in the spotlight: insights into the defect formation, structure and reactivity in Zr-MOFs**
O. Gutov[1]; A. Shafir[1], [1] Institute of Chemical Research of Catalonia (ICIQ), Tarragona/E

A01.17 **Multifunctionality in lanthanide Metal-Organic Frameworks**
Y. Gao[1]; N. Yan[1]; M. Mittelmeijer-Hazeleger[1]; G. Rothenberg[1]; S. Tanase Grecea[1], [1] University of Amsterdam, Amsterdam/NL

A01.18 **POM@MOFs: impregnation versus direct synthesis**
W. Salomon[1]; C. Roch-Marchal[1]; P. Mialane[1]; M. Haouas[2]; A. Dolbecq[1]; L. Ruhlmann[3], [1] Université de Versailles St-Quentin en Yvelines, Versailles/F; [2] Institut Lavoisier de Versailles, Versailles/F; [3] Institut de Chimie, Univ. Strasbourg, Strasbourg/F

A01.19 **Porous nitrogen-doped carbon materials generated from fractal gels for CO_2 capture**
A. Beltzung[1]; L. Bosetti[1]; H. Wu[1]; G. Storti[1]; M. Morbidelli[1], [1] ETH Zürich/CH

A01.20 **Porphyrin-based covalent organic frameworks as efficient solid photosenzitizers**
J. Demel[1]; J. Hynek[1]; K. Lang[1], [1] Institute of Inorganic Chemistry of the Czech Academy of Science, Rez/CZ

A01.21 **Postsynthetic inner surface modification of Zr based Metal-Organic Framework**
F. Drache[1]; I. Senkovska[1]; V. Bon[1]; S. Kaskel[1], [1] TU Dresden, Dresden/D

A01.22 **Postsynthetic modification of Zr-MOFs through nitrile oxide cycloaddition**
T. von Zons[1]; L. Brokmann[1]; A. Godt[1]; J. Lippke[2]; A. Schaate[2]; B. Peter[2]; E. Mühlbauer[3]; S. Wuttke[3], [1] Universität Bielefeld, Bielefeld/D; [2] Leibniz Universität Hannover, Hannover/D; [3] LMU München, München/D

A01.23 **Preparation and characterization of new light-harvesting Metal-Organic Frameworks**
T. Kim[1]; C. Lee[1], [1] Incheon National University, Incheon/ROK

B01.09 **MOF/SLOlica composites: a step towards improved hydrothermal stability of MOFs**
M. Mazaj[1]; T. Cendak[1]; N. Zabukovec Logar[1], [1] National Institute of Chemistry, Ljubljana/SLO

B01.10 **Sequential pore wall modification in a Covalent Organic Framework**
M. Lohse[1]; G. Naudin[1]; S. Wuttke[1]; D. Medina[1]; T. Bein[1], [1] Ludwig-Maximilians Universität München (LMU), München/D

B01.11 **Single crystal to single crystal mechanical contraction of Metal-Organic Frameworks through stereoselective post-synthetic bromination**
R. Marshall[1]; S. Griffin[1]; C. Wilson[1]; R. Forgan[1], [1] University of Glasgow, Glasgow/UK

B01.12 **Preparation of ZIF-coated polystyrene microspheres b y transformation of ZnO precursors**
M. del Rio Clar[1]; C. Palomino Cabello[1]; F. Maya Alejandro[1]; V. Cerdà Martín[1]; G. Turnes Palomino[1], [1] University of the Balearic Islands, Palma de Mallorca/ES

B01.13 **Size and functionality control of Covalent Organic Frameworks through a modulator-based synthesis**
T. Sick[1]; M. Calik[1]; F. Auras[1]; T. Bein[1], [1] Ludwig-Maximilians Universität München (LMU), München/D

B01.14 **Stability of MOFs with differently functionalized organic linkers**
E. Mühlbauer[1]; T. von Zons[2]; A. Klinkebiel[3]; O. Beyer[3]; U. Lüning[3]; A. Godt[2]; S. Wuttke[1]; T. Bein[1], [1] Ludwig-Maximilians Universität München (LMU), München/D; [2] Universität Bielefeld, Bielefeld/D; [3] CAU Kiel, Kiel/D; [4]

B01.15 **Synthesis and selective surface functionalization of MOF composites**
A. Ayala Hernandez[1], [1] ICN2-Institut Catala de Nanociencia i Nanotecnologia/UAB, Barcelona/E

B01.16 **Synthesis of an anionic microporous polymeric network through polymerisation of weakly coordinating anions**
N. Chaoui[1]; M. Trunk[1]; S. Fischer[1]; J. Schmidt[1]; A. Thomas[1], [1] TU Berlin, Berlin/D

B01.17 **Synthesis of chiral molecular building blocks for the construction of chiral networks**
I. Wessely[1]; M. Tsotsalas[2]; E. Vulpe[2]; W. Hosseini[2]; S. Bräse[1], [1] Karlsruher Institut für Technologie, Karlsruhe/D; [2] Université de Strasbourg, Strasbourg/F

B01.18 **Toward easily scalable synthesis of nanoMOFs**
M. Benzaqui[1]; E. Gkaniatsou[2]; F. Nouar[2]; C. Sicard[2]; N. Steunou[2]; C. Serre[3], [1] Institut Lavoisier UMR CNRS 8180, Université de Versailles, Versailles/F; [2] Institut Lavoisier de Versailles, UVSQ, Versailles/F; [3] CNRS, Versailles/F

B01.19 **Tuning properties by metal substitution: mixed metal MOFs**
J. Bergmann[1]; U. Junghans[1]; M. Kobalz[1]; K. Stein[1]; R. Gläser[1]; H. Krautscheid[1]; M. Lange[2]; J. Möllmer[2]; R. Staudt[2], [1] Universität Leipzig, Leipzig/D; [2] Institut für Nichtklassische Chemie e.V., Leipzig/D

B01.20 **Tuning the imperfections: unprecedented systematic enhancement of the porosity and reactivity of UiO-66 via defect engineering**
G. Shearer[1]; S. Bordiga[2]; S. Svelle[1]; K. Lillerud[1], [1] University of Oslo, Oslo/N; [2] University of Turin, Turin/I

B01.21 **Crystal clear: direct observation of reactions on MOF single crystals**
B. Bouchevreau[1], S. Øien-Ødegaard[1]; K. Hylland[1]; M. Tilset[1]; K. Lillerud[1]; S. Bordiga[2]; C. Lamberti[2], [1] University of Oslo, Oslo/N; [2] University of Turin, Turin/I

B01.23 **Spray-drying for new strategy to encapsulated nanoparticles simultaneous Metal-Organic Frameworks synthesis**
S. Chaemchuen[1], [1] Wuhan University of Technology, Wuhan/CN

B01.24 **Synthesis of novel pyrazole derivatives using organophosphorus, arsine and stibine reagents and their antitumor activities**
N. El Sayed[1]; E. Fawzy Ewies[1]; L. Boulos[1], [1] National Research Centre, Giza/ET

New Structures

A02.01 **Terminology guidelines and database issues for topology representations in Metal-Organic Frameworks**
L. Öhrström[1]; M. O'Keeffe[2]; S. Bourne[3]; D. Proserpio[4]; V. Blatov[5]; M. Soo Lah[6]; J. Eon[7]; J. Garcia-Martinez[8]; S. Batten[9]; S. Hyde[10]; S. Wiggin[11], [1] Chalmers Tekniska Högskola, Göteborg/S; [2] Arizona State University, Tempe/USA; [3] University of Cape Town, Rondebosch/ZA; [4] Universita' degli Studi di Milano, Milano/I; [5] Samara State University, Samara/RUS; [6] Ulsan National Institute of Science and Technology, Ulsan/ROK; [7] Universidade Federal do Rio de Janeiro, Rio de Janeiro/BR; [8] Universidad de Alicante, Alicante/E; [9] Monash University, Victoria/AUS; [10] Australian National University, Canberra/AUS; [11] Cambridge Crystallographic Data Centre, Cambridge/UK

A02.02 **A new 3D dynamic MOF with porous cationic framework encapsulating chlorine containing solvents**
R. Fernández de Luis[1]; E. Serrano Larrea[2]; M. Arriortua Marcaida[2], [1] Basque Center for Materials, Applications & Nanoestructures, Derio/E; [2] University of the Basque Country. Mineralogy and Petrology Department., Bilbao/E

A02.03 **Variation in porous coordination polymer structure due to deprotonation level of hydroxyl groups of a flexible bifunctional linker**
A. Bezrukov[1]; K. Törnroos[1]; P. Dietzel[1], [1] University of Bergen, Bergen/N

A02.04 **A novel keto-functionalized Covalent Organic Framework**
L. Salonen[1]; E. Carbó-Argibay[1]; F. Almeida Paz[2]; C. Rodríguez-Abreu[1], [1] International Iberian Nanotechnology Laboratory, Braga/P; [2] CICECO, University of Aveiro, Aveiro/P

A02.05 **CAU-17 - a new bismuth-triarylcarboxylate sythesized in methanol**
M. Köppen[1]; A. Inge[1]; M. Feyand[1]; N. Stock[1], [1] Christian-Albrechts-Universität zu Kiel, Kiel/D

A02.06 **Design and applications of light-responsive bi-stable Metal-Organic Frameworks**
A. Goulet-Hanssens[1]; V. Trinh[1]; L. Abdullahu[1]; S. Hecht[1], [1] Humboldt-Universität zu Berlin, Berlin/D

A02.07 **Design and synthesis of crystalline metal-fullerene frameworks**
A. Kraft[1]; P. Roth[1]; J. Stangl[1]; K. Müller-Buschbaum[1]; F. Beuerle[1], [1] Universität Würzburg, Würzburg/D

A02.08 **Flexible Ti- and Zr-MOFs based on 1,4-trans-cyclohexanedicarboxylate linkers**
B. Bueken[1]; F. Vermoortele[1]; H. Reinsch[2]; M. Cliffe[3]; M. Wharmby[4]; C. Tsou[5]; D. Vanpoucke[6]; R. Ameloot[1]; V. Van Speybroeck[6]; F. Taulelle[1]; A. Goodwin[3]; J. Mayer[5]; D. De Vos[1], [1] KU Leuven, Leuven/B; [2] University of Oslo, Oslo/N; [3] University of Oxford, Oxford/UK; [4] Diamond Light Source Ltd., Didcot/UK; [5] Yale University, New Haven/USA; [6] Ghent University, Ghent/B

A02.09 **From synthesis of small organic molecules to material assembly and characterization: synthesis of linker molecules for Metal-Organic Frameworks.**
K. Hylland[1]; S. Oien-Odegaard[1]; K. Lillerud[1]; M. Tilset[1], [1] University of Oslo, Oslo/N

A02.10 **High methane storage capacity in functionalized MOFs with an expanded tbo-type structure**
I. Spanopoulos[1]; K. Tsagkarakis[1]; E. Klontzas[1]; G. Froudakis[1]; P. Trikalitis[1], [1] University of Crete, Heraklion/GR

A02.11 **Linear coordination polymers as model systems for complex Metal-Organic Frameworks**
B. Hoppe[1]; F. Kempf[1]; L. Bußfeld[1]; P. Behrens[1], [1] Leibniz Universität Hannover, Hannover/D

A02.12 **Metal-Organic Frameworks (MOFs) with urea-functionalized ligands for H-bond controlled gas and liquid phase separations**
S. Glomb[1]; C. Janiak[1], [1] Heinrich Heine Universität, Düsseldorf/D

A02.13 **Novel carborane-based dipyridine linkers for Metal-Organic Frameworks: enhancing water stability?**
M. Tsang[1]; F. Teixidor[1]; C. Viñas[1]; J. Giner Planas[1]; D. Choquesillo-Lazarte[2]; C. Verdugo Escamilla[2]; K. Stylianou[3]; S. Rodriguez-Hermida[3]; I. Imaz[3]; D. Maspoch[3], [1] Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), Bellaterra/E; [2] Laboratorio de Estudios Cristalográficos, IACT,CSIC-Universidad de Granada, Granada/E; [3] ICN2; Institut Catala de Nanociencia i Nanotecnologia, Barcelona/E

A02.14 **Porous bidentate polyimines as ligands for transition metals: catalysts for transfer hydrogenation of furfural**
E. Maya[1]; J. G de la Campa[1]; M. Iglesias[1], [1] Instituto de Ciencia y Tecnologia de Polimeros, CSIC, Madrid/E

A02.15 **Rational synthesis of large area, free-standing 2D supramolecular polymer single-layer sheets**
R. Dong[1]; M. Pfeffermann[2]; H. Liang[2]; Z. Zheng[1]; X. Zhu[1]; J. Zhang[1]; X. Feng[1], [1] TU Dresden, Dresden/D; [2] Max Planck Institute for Polymer Research, Mainz/D

B02.08 **Syntheses, structures and properties of zinc pillared-layered MOFs based on isonicotinoyl hydrazone and various dicarboxylate acids**
K. Roztocki[1]; W. Nitek[1]; D. Matoga[1]; I. Senkovska[2]; S. Kaskel[2], [1] Jagiellonian University, Krakow/PL; [2] TU Dresden, Dresden/D

B02.09 **Synthesis and structural study of a keto-functionalized Zr-based Metal-Organic Framework**
A. Mohmeyer[1]; A. Schaate[1]; G. Zahn[1]; P. Behrens[1], [1] Leibniz Universität Hannover, Hannover/D

B02.10 **Synthesis of Zr-based Metal-Organic Nanocapsules**
A. Schaate[1], [1] Leibniz Universität Hannover, Hannover/D

B02.11 **Synthesis, structure, stability and properties of a samarium-based Metal-Organic Framework**
A. Pathak[1]; F. Chen[2]; K. Lu[1], [1] Acdemia Sinica, Taipei/TW; [2] National Tsing Hua University, Hsinchu/TW

B02.12 **The new metal-organic coordination frameworks based on heteroaromatic dicarboxylic acid**
E. Saparbayev[1]; S. Sapchenko[1]; D. Samsonenko[1]; D. Dybtsev[1]; V. Fedin[1], [1] Nikolaev Institute of Inorganic Chemistry SB RAS, Novosibirsk/RUS

B02.13 **The taming of the screw – creating Covalent Organic Frameworks with an exceptionally high degree of crystallinity**
L. Ascherl[1]; T. Sick[1]; M. Calik[1]; C. Hettstedt[1]; K. Karaghiosoff[1]; M. Döblinger[1]; F. Auras[1]; T. Bein[1], [1] Ludwig-Maximilians Universität München (LMU), München/D

B02.14 **The versatility of Zr-based MOFs: novel materials with different degrees of framework interpenetration**
J. Lippke[1]; S. Lilienthal[1]; F. Kempf[1]; A. Schneider[1]; P. Behrens[1]; T. von Zons[2]; T. Preuße[2]; B. Brosent[2]; M. Hülsmann[2]; A. Godt[2], [1] Leibniz Universität Hannover, Hannover/D; [2] Universität Bielefeld, Bielefeld/D

B02.15 **Triindole dimers as models for 2D microporous polymers**
C. Ruiz[1]; B. Gómez-Lor[1]; J. Lopez-Navarrete[2]; M. Ruiz Delgado[2], [1] Instituto de Ciencia de Materiales de Madrid, Madrid/E; [2] University of Malaga, Málaga/E

Scale up & Shaping

A03.01 **Robust ZIF-8 monoliths with enhanced electrical conductivity**
E. Ramos Fernandez[1]; D. Carpena-Montesinos[1]; S. Rico-Frances[1]; A. Sepulveda-Escribano[1], [1] University of Alicante, Alicante/E

A03.02 **Synthesis of Metal-Organic Framework ZIF-8 on nanocellulose in aqueous medium**
J. Thunberg[1]; M. Hasani[1]; G. Westman[1]; L. Öhrström[1]; S. Zacharias[2], [1] Chalmers Tekniska Högskola, Göteborg/S; [2] University of Cape Town,, Rondebosch/ZA

A03.03 **Advancements in Metal-Organic Frameworks electrodeposition**
N. Campagnol[1]; I. Stassen[1]; K. Binnemans[1]; D. De Vos[1]; J. Fransaer[1], [1] KU Leuven, Hverlee Leuven/B

A03.04 **Capable coatings of MIL-101(Cr) and HKUST-1 – methanol-stable adsorbents for fast heat transformation purposes**
H. Kummer[1]; S. Henninger[1], [1] Fraunhofer ISE, Freiburg/D

A03.05 **Fast and safe continuous synthesis of ZIF-8 nanoparticles**
A. Polyzoidis[1]; C. Piscopo[1]; M. Schwarzer[1]; S. Loebbecke[1], [1] Fraunhofer Institute for Chemical Technology, Pfinztal/D

A03.06 **Hierarchical MOF-xerogel monolith composites from embedding Metal-Organic Frameworks in resorcinol-formaldehyde xerogels for water adsorption applications**
M. Wickenheisser[1]; A. Herbst[1]; C. Janiak[1], [1] Heinrich Heine Universität, Düsseldorf, Düsseldorf/D

A03.07 **Nano-sized Metal-Organic Frameworks through combination of microwave irradiation and reverse microemulsion**
I. Gruber[1]; C. Janiak[1], [1] Heinrich-Heine-Universität, Düsseldorf/D

B03.05 **Solar energy-assisted production of Zr-fumarate Metal-Organic Framework (MOF)**
J. Ren[1]; N. Musyoka[1]; H. Langmi[1]; B. North[1]; M. Mathe[1], [1] Council for Scientific and Industrial Research (CSIR), Pretoria/ZA

B03.06 **Study of scaled continuous flow production of Metal-Organic Frameworks**
M. Rubio Martinez[1]; T. Hadley[1]; K. Constanti Carey[1]; M. Batten[1]; A. Polyzos[1]; K. Seng-Lim[1]; M. Hill[3], [1] CSIRO, Clayton/AUS; [2] Commonwealth Scientific & Industrial Research Organisation, Melbourne/AUS

B03.07 **Surface modification of MOFs to create stable suspensions for shaping processes**
J. Eggebrecht[1]; J. Kaufmann[1]; A. Lieb[1], [1] Otto-von-Guericke-Universität Magdeburg, Magdeburg/D

Energy Application

A04.01 **High ionic conductivity in Zeolitic Midazolate Framework 8**
P. Barbosa[1]; R. Soares[1]; M. Pinto[2]; F. Paz[1]; F. Figueiredo[1], [1] University of Aveiro, Aveiro/P; [2] Uni. Lisboa, Lisboa/P

A04.02 **Fe-CFA-6 – investigations on photophysical and electrical properties**
S. Spirkl[1]; D. Volkmer[1], [1] Universität Augsburg, Augsburg/D

A04.03 **MOF composite with enhanced thermal conductivity for mobile CH_4-storage**
H. Niemeyer[1]; E. Schieferstein[1]; G. Deerberg[1], [1] Fraunhofer Institut für Umwelt-, Sicherheits-, Energietechnik UMSICHT, Oberhausen/D

A04.04 **Organic optoelectronics using conjugated covalent organic frameworks**
F. Auras[1]; M. Calik[1]; L. Ascherl[1]; T. Sick[1]; T. Bein[1], [1] Ludwig-Maximilians Universität München (LMU), München/D

A04.05 **Photocatalytic hydrogen evolution by organic frameworks**
V. Vyas[1]; F. Haase[1]; B. Lotsch[1], [1] Max Planck Institute for Solid State Research, Stuttgart/D

A04.06 **Photocurrent response of highly orientated 2D porphyrin-based Metal-Organic Framework thin films fabricated with liquid-phase epitaxy**
W. Zhou[1]; J. Liu[1]; J. Liu[1]; E. Redel[1]; C. Wöll[1], [1] Karlsruhe Institute of Technology (KIT), Eggenstein-Leopoldshafen/D

A04.07 **Proton conducting MOF-polymer composites**
M. Erkartal[1]; H. Usta[1]; M. Citir[1]; U. Sen[1], [1] Abdullah Gül University, Kayseri/TR

A04.08 **Proton conduction in microporous organic polymers**
C. Klumpen[1]; B. Lotsch[2]; J. Senker[1], [1] University of Bayreuth, Bayreuth/D; [2] Ludwig-Maximilians-Universität München, München/D

B04.06 **Visible light-driven photoswitchable MOFs**
S. Castellanos-Ortega[1], [1] TU Delft, Delft/NL

B04.07 **Sulphur rich conjugated microporous polymers**
H. Bildirir[1]; T. Wenzel[1]; D. Becker[1]; J. Schmidt[1]; A. Yassin[1]; I. Osken[2]; T. Ozturk[2]; A. Thomas[1], [1] TU Berlin, Berlin/D; [2] Istanbul Technical University, Istanbul/TR

B04.08 **The promise of MOFs for adsorption driven heat pumps and chillers**
M. de Lange[1]; L. Lin[1]; J. Gascon[1]; T. Vlugt[1]; F. Kapteijn[1], [1] TU Delft, Delft/NL

Adsorption and Separation

A05.01 **An experimental and modeling study of the breathing properties of COMOC-2, a VIV based MOF with large capacity**
S. Couck[1]; T. Van Assche[1]; J. Denayer[1]; K. Leus[2]; P. Van Der Voort[2]; Y. Liu[3]
[1] Vrije Universiteit Brussel (VUB), Brussels/B; [2] Ghent University, Gent/B; [3] Dalian University of Technology, Dalian/CN

A05.02 **Characterization of microporous, amorphous polymers by gas adsorption – problems and perspectives**
J. Weber[1], [1] Hochschule Zittau/Görlitz, Zittau/D

A05.03 **Identification of a new stage of the process of decomposition upon exposure to air of the carboxylate-based MOF Basolite C300**
G. Buscarino[1]; M. Todaro[1]; S. Agnello[1]; A. Alessi[2]; F. Messina[1]; L. Sciortino[1]; F. Gelardi[1], [1] University of Palermo, Palermo/I; [2] Laboratoire H. Curien, UMR CNRS 5516, Université de Lyon, Saint-Etienne/F

A05.04 **Mechanical impact of adsorption in compliant nanoporous materials**
F. Mouhat[1]; D. Bousquet[2]; A. Boutin[2]; F. Coudert[3]; A. Fuchs[1], [1] CNRS & Chimie ParisTech, Paris/F; [2] Ecole Normale Supérieure, Paris/F; [3] CNRS, Paris/F

A05.05 **Metal-Organic Frameworks for adsorptive separation of xenon and krypton**
S. Lee[1]; M. Kim[1]; T. Yoon[1]; S. Kim[1]; S. Kim[1]; Y. Bae[1], [1] Yonsei University, Seoul/ROK

A05.06 **Post-synthetic functionalization of Mg-MOF-74 using tetraethylene pentamine and its CO_2/ water vapor adsorption behavior**
X. Su[1]; L. Bromberg[1]; V. Martis[2]; F. Simeon[1]; A. Huq[3]; A. Hatton[1], [1] Massachusetts Institute of Technology, Boston/USA; [2] Surface Measurement Systems, London/UK; [3] Oak Ridge National Laboratory, Oak Ridge/USA

A05.07 **Separation of cis/trans isomers on the MIL-125(Ti) MOF in liquid chromatography**
S. Van der Perre[1]; B. Bueken[2]; D. De Vos[2]; G. Baron[1]; J. Denayer[1], [1] Vrije Universiteit Brussel, Brussels/B; [2] KU Leuven, Leuven/B

A05.08 **Using calorimetry to evaluate and predict the role of open metal sites during gas adsorption**
J. Rodriguez[1]; E. Dundar[1]; E. Bloch[1]; M. Coulet[1]; P. Llewellyn[1], [1] Aix Marseille Université, CNRS, MADIREL UMR 7246, Marseille/F

A05.09 **Ab initio prediction of pure gas and mixture adsorption of CO_2, CH_4, CO, and N_2 in CPO-27-Mg**
K. Sillar[1]; A. Kundu[2]; J. Sauer[2], [1] University of Tartu, Tartu/EST; [2] Humboldt Universität zu Berlin, Berlin/D

A05.10 **Amino-functionalized porous coordination polymer for selective CO_2 sorption**
W. Pengyan[1]; S. Hiroshi[2]; K. Susumu[1], [1] Kyoto University, Kyoto/J; [2] The University of Tokyo, Tokyo/J

A05.11 **Controlling humidity to improve gas adsorption in nanoporous materials**
N. Chanut[1]; S. Bourrelly[1]; E. Bloch[1]; J. Rodriguez[1]; R. Denoyel[1]; B. Kuchta[1]; P. Llewellyn[1], [1] Aix Marseille Université, CNRS, MADIREL UMR 7246, Marseille/F

A05.12 **Coordinatively modulated tunable nanoscale morphologies in MOF: unprecedented 'off-on' porosity and solvatochromic effect in nanoscale**
N. Sikdar[1]; M. Bhogra[1]; U. Waghmare[1]; T. Maji[1], [1] Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore/IND

A05.13 **Crystal structure, SEM-EDX-analyses and gas sorption properties of paddle wheel-based [Cu_1-xZn_x(Me-Et-trz-ia)]**
M. Kobalz[1]; O. Erhart[1]; J. Lincke[1]; D. Fuhrmann[1]; S. Dietrich[1]; M. Lange[2]; J. Möllmer[2]; R. Staudt[2]; R. Gläser[1]; H. Krautscheid[1], [1] Universität Leipzig, Leipzig/D; [2] Institut für Nichtklassische Chemie e.V., Leipzig/D

A05.14 **Defect engineering of UiO-66 for enhanced gas uptake – combined experimental and simulation study**
R. Babarao[1]; W. Liang[2]; D. D'Alessandro[2]; A. Thornton[1], [1] CSIRO, Clayton/AUS; [2] The University of Sydney, Sydney/AUS

A05.15 **Direct crystallisation of aluminium-based Metal-Organic Frameworks (MOFs) via thermal gradient deposition (TGD)**
S. Ernst[1]; F. Jeremias[1]; H.-J. Bart[2], S. Henninger[1], [1] Fraunhofer Institute for Solar Energy Systems (ISE), Freiburg/D; [2] TU Kaiserslautern/D

A05.16 **Fabrication of ultrathin films containing MOFs by the Langmuir-Blodgett technique**
J. Benito[1]; M. Andres[1]; P. Cea[1]; M. Lopez[1]; I. Gascon[1], [1] University of Zaragoza, Zaragoza/E

A05.17 **Gas adsorption experiments on MOFs and their interpretation**
T. Hähnel[1]; G. Kalies[1]; J. Hofmann[2]; J. Möllmer[2]; M. Kobalz[3]; H. Krautscheid[3]
[1] HTW Dresden, Dresden/D; [2] Institut für Nichtklassische Chemie e.V., Leipzig/D; [3] Universität Leipzig, Leipzig/D

A05.18 **Heteronuclear coordination polymers based on 1,2,4-triazolyl dibenzoate linkers**
K. Stein[1]; M. Kobalz[1]; M. Lange[2]; J. Möllmer[2]; M. Wecks[2]; R. Staudt[2]; R. Gläser[1]; H. Krautscheid[1], [1] Universität Leipzig, Leipzig/D; [2] Institut für Nichtklassische Chemie e.V., Leipzig/D

A05.19 **Improved toxic gas removal by MOFs under humid conditions**
R. Morris[1]; M. McPherson[1]; M. Smith[2]; C. Stone[2], [1] University of St. Andrews, St Andrews/UK; [2] dstl, Porton Down/UK

A05.21 **IFP - model MOF-systems for the study of kinetic sorption effects**
J. Möllmer[1]; M. Lange[1]; J. Hofmann[1]; R. Gläser[2]; A. Möller[3]; R. Staudt[4]; S. Mondal[5]; H. Holdt[5], [1] Institut für Nichtklassische Chemie e.V., Leipzig/D; [2] Universität Leipzig, Leipzig/D; [3] Quantachrome GmbH, Leipzig/D; [4] University of Applied Sciences Offenburg, Offenburg/D; [5] Universität Potsdam, Potsdam/D

A05.22 **MOFs for sorption based water generation: MIL-125(Ti)_NH_2**
A. Ferreira[1], [1] FEUP, Porto/P

B05.08 **Poly-functional porous-organic polymers: structure-function relationships in CO_2 sorption**
M. Alkordi[1]; Y. Hassan[1]; R. Haikal[1]; A. Emwas[2], [1] Zewail City of Science and Technology, Sheikh Zayed/ET; [2] King Abdullah University of Science and Technology (KAUST), Thuwal/SAR

B05.09 **Rapid evaluation of porous materials by using optical calorimetry**
M. Wöllner[1]; M. Leistner[1]; W. Grählert[1]; S. Kaskel[2], [1] Fraunhofer Institute for Material and Beam Technology IWS, Dresden/D; [2] TU Dresden, Dresden/D

B05.10 **Rare-earth fcu-MOFs for adsorption and separation of hydrocarbons**
A. Assen[1]; Y. Belmabkhout[1]; K. Adil[1]; P. Bhatt[1]; D. Xue[1]; M. Eddaoudi[1], [1] King Abdullah University of Science and Technology (KAUST), Thuwal/SAR

B05.11 **Selective adsorption and catalytic oxidation of sulfur dioxide in nickel pyrazolates: experimental and computational approach**
L. Rodriguez Albelo[1]; N. Muñoz Padial[1]; E. Lopez-Maya[1]; C. Montoro[1]; A. Ruiz-Salvador[2]; S. Hamad[2]; S. Calero[2]; E. Barea[1]; J. Rodriguez Navarro[1], [1] University of Granada, Granada/E; [2] Universidad Pablo de Olavide, Seville/E

B05.12 **Separation of hydrogen isotopes by an attractive open metal-center in Cu(I)-MFU-4l**
I. Weinrauch[1]; D. Denysenko[2]; S. Souliou[3]; Y. Cheng[4]; A. Ramirez-Cuesta[4]; D. Volkmer[2]; M. Hirscher[1], [1] Max Planck Institute for Intelligent Systems, Stuttgart/D; [2] Universität Augsburg, Augsburg/D; [3] Max Planck Institute for Solid State Research, Stuttgart/D; [4] Oak Ridge National Laboratory, Oak Ridge/USA

B05.13 **Separation of p-Xylene from C_8-aromatics with Metal-Organic Framework**
A. Yonezawa[1]; R. Matsumura[1]; M. Sano[1]; T. Suzuki[1]; T. Miyake[1], [1] Kansai University, Osaka/J

B05.14 **Solvent driven gate opening in MOF-76-Ce: effect on CO_2 adsorption**
J. Ethiraj[1]; F. Bonino[1]; J. Vitillo[1]; K. Lomachenko[1]; C. Lamberti[1]; H. Reinsch[4]; K. Lillerud[4]; S. Bordiga[1], [1] University of Turin, Turin/I; [4] University of Oslo, Oslo/N

B05.15 **Synthesis of porous electrospun nanofiber composites for hydrogen storage applications**
N. Musyoka[1]; J. Ren[1]; P. Annamalai[1]; H. Langmi[1]; B. North[1]; M. Mathe[1]; L. Petrik[2], [1] Council for Scientific and Industrial Research (CSIR), Pretoria/ZA; [2] University of the Western Cape, Cape Town/ZA

B05.16 **Synthesis, structure and sorption properties of series of coordination polymers based on thiophendicarboxylic acid**
V. Bolotov[1], [1] Nikolaev Institute of Inorganic Chemistry, Novosibirsk/RUS

B05.17 **Tuning MIL-101 frameworks for selective host-guest interactions**
T. Wittmann[1]; J. Senker[1], [1] University of Bayreuth, Bayreuth/D

B05.18 **A new family of Zn-Metal-Organic Frameworks with amide-functionalized pores for CO_2 capture**
V. Safarifard[1]; M. Bidgeli[1]; A. Morsali[1]; S. Rodriguez-Hermida[2]; C. Carbonell[2]; V. Guillerm[2]; I. Imaz[2]; D. Maspoch[2], [1] Tarbiat Modares University, Tehran/IR; [2] ICN2; Institut Català de Nanociencia i Nanotecnologia, Bellaterra/E

B05.19 **Water adsorption in MOFs. From structures to applications**
D. Farrusseng[1]; J. Canivet[1], [1] CNRS, Villeurbanne/F

B05.20 **ZIF-8 mixed matrix membranes**
M. Villwock[1]; T. Hoyer[1]; H. Richter[1]; M. Stelter[2], [1] Fraunhofer IKTS, Hermsdorf/D; [2] Center for Energy and Environmental Chemistry, Jena/D

B05.21 **Rational increase in CO2 capture of inexpensive porous polymers by permanent amine grafting**
D. Thirion[1]; C. Yavuz[1], [1] Korea Advanced Institute of Science and Technology (KAIST), Daejeon/ROK

B05.22 **Removal of heavy metals from aqueous solutions by low-cost materials: a review**
I. Nazari Haghighi[1]; B. Shaabani[1]; P. Abbasifar[2], [1] University of Tabriz, Tabriz/IR; [2] Tabriz University of Medical Science, Tabriz/IR

B05.23 **A highly stable nickel-organic framework constructed from nanosized cubical {Ni_{24}} cages and octahedral {Ni_{72}} cages**
X. Zhang[1]; W. Shi[1]; P. Cheng[1], [1] Nankai University, Tianjin/CN

Catalysis

A06.01 **Coordination polymer based on $Mo_6I_8(OOCPh\text{-}PPh_2)_6$ cluster for Suzuki cross-coupling reactions**
D. Bůžek[1]; J. Hynek[1]; K. Kirakci[1]; J. Demel[1]; K. Lang[1], [1] Institute of Inorganic Chemistry of the Czech Academy of Science, Rez/CZ

A06.02 **Functionalized linkers as photosensitizers in UiO-67 MOFs for photocatalytic CO_2 reduction**
E. Thoresen[1]; M. Tilset[1]; K. Lillerud[1]; M. Amedjkouh[1], [1] University of Oslo, Oslo/N

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A06.03 **New MOFs-based catalysts for RWGS application**
M. Ronda-Lloret[1]; S. Rico-Frances[1]; E. Ramos Fernandez[1]; A. Sepulveda-Escribano[1], [1] University of Alicante, Alicante/E

A06.04 **A novel recyclable photocatalyst based on a p-n junction Bi_2O_3@HKUST-1**
W. Guo[1], [1] Karlsruhe Institute of Technology, Karlsruhe/D

A06.05 **Annulation of phenols with methylbutenol over MOFs: impact of the nature and textural features of the catalyst**
M. Opanasenko[1]; M. Shamzhy[1]; J. Cejka[1], [1] J. Heyrovsky Institute of Physical Chemistry, Academy of Sciences of the Czech Republic, Prague/CZ

A06.06 **Chemo-selective reaction over Metal-Organic Frameworks**
Y. Adachi[1]; R. Matsumura[1]; M. Sano[1]; T. Suzuki[1]; T. Miyake[1], [1] Kansai University, Osaka/J

A06.07 **Crystal structure and catalytic activity of $[Zn_7(\mu_4\text{-}O)_2(\mu_2\text{-}O_2CH_3)_{10}(4\text{-tbupy})_2]$**
D. Dittrich[1]; H. Tewes[2]; C. Wölper[1]; D. Bläser[1]; S. Schulz[1]; J. Roll[1], [1] Universität Duisburg-Essen, Essen/D; [2] Westfälische Hochschule, Recklinghausen/D

A06.08 **Design of chiral MOFs based on proline functionalized linkers**
C. Kutzscher[1]; H. Hoffmann[1]; S. Krause[2]; G. Nickerl[2]; I. Senkovska[1]; S. Kaskel[1]; E. Brunner[1], [1] TU Dresden, Dresden/D

A06.09 **Dynamic release/immobilization of Rh-homogeneous hydroformylation catalyst by polyoxometalate-MOF**
M. Valero Romero[1]; S. Sartipi[2]; H. Stil[2]; J. de With[2]; F. Kapteijn[1]; J. Gascon[1], [1] TU Delft, Delft/NL; [2] Shell Global Solutions, Amsterdam/NL

A06.10 **Electronic properties of do photocatalytic MOFs: NH_2-MIL-125(Ti), NH_2-UiO-66(Zr) and NH_2-UiO-66(Hf). Major trends and fundamental differences**
M. Nasalevich[1]; S. Castellanos-Ortega[1]; F. Kapteijn[1]; J. Gascon[1], [1] TU Delft, Delft/NL

A06.11 **Heterogeneous catalytic activity on Mn, Fe and Co-based metalloporphyrinic Solid Coordination Frameworks (SCFs)**
A. Fidalgo-Marijuan[1]; G. Barandika[1]; B. Bazán[1]; M. Urtiaga[1]; E. Larrea[1]; M. Iglesias[2]; M. Arriortua[1], [1] Universidad del País Vasco (UPV/EHU), Leioa/E; [2] Institute of Materials Science of Madrid-CSIC, Madrid/E

A06.12 **Hybrid silk@MOF materials as self-detoxifying filters of toxic compounds**
E. Lopez-Maya[1]; C. Montoro[1]; M. Rodríguez-Albelo[1]; E. Barea[1]; J. Rodriguez Navarro[1]; S. Aznar Cervantes[2]; J. Cenis[2]; A. Lozano-Pérez[2], [1] University of Granada, Granada/E; [2] Departamento de Biotecnología, IMIDA, Murcia/E

A06.13 **Immobilization of L-Proline on MIL-101 and UiO-MOFs**
S. Nießing[1]; C. Janiak[1], [1] Heinrich-Heine-Universität Düsseldorf, Düsseldorf/D

A06.14 **Chiral porous Metal-Organic Frameworks for asymmetric catalysis**
Y. Cui[1], [1] Shanghai Jiao Tong University, Shanghai/CN

A06.15 **Influence of synthesis conditions of MIL-100 (Fe) on its acidity and catalytic activity in isomerization of tetramethylethylene oxide**
F. Faucher[1]; J. Lavalley[1]; D. Villemin[2]; U. Lee[3]; J. Chang[3]; A. Vimont[1], [1] Laboratoire de Catalyse et Spectrochimie (LCS), Caen/F; [2] Ensicaen, UCBN, LCMT-UMR 6507 CNRS, Caen/F; [3] Korea Research Institute of Chemical Technology, Daejeon/ROK

A06.16 **MIL-101 as catalyst for autooxidation of benzylic hydrocarbons**
A. Santiago-Portillo[1]; S. Navalon[1]; F. G. Cirujano[1]; F. Llabres I Xamena[1]; M. Alvaro[1]; H. Garcia[1], [1] Universidad Politécnica de Valencia, Valencia/E

B06.05 **Organocatalysis in MOFs: post-synthetic covalent attachment of organocatalysts inside MOFs**
A. Chołuj[1]; K. Zwoliński[1]; A. Hurko[1]; R. Kutaszewicz[1]; M. Chmielewski[1], [1] University of Warsaw, Warsaw/PL

B06.06 **Phosphine Metal-Organic Frameworks: versatile materials for heterogeneous metal- and organocatalysis**
M. Ranocchiari[1], [1] Paul Scherrer Institute (PSI), Villigen/CH

B06.07 **Postsynthetic metal exchange of Ti(IV) into a series of mixed ligand UiO-MOFs: study of their catalytic applications**
a. Rasero-Almansa[1]; M. Iglesias[1]; F. Sanchez[2], [1] Inst. de Ciencia de Materiales de Madrid, Madrid/E; [2] Inst. Quimica Organica, Madrid/E

B06.08 **Pyranoquinoline synthesis with acid zirconium MOFs**
F. Garcia Cirujano[1]; V. López Rechac[1]; F. Llabres I Xamena[1]; A. Corma[1], [1] Instituto de Tecnología Química, Valencia/E

B06.09 **Reversible water adsorption using Metal-Organic Frameworks with reasonable hydrothermal stabilities**
S. Kim[1]; S. Lee[1]; M. Kim[1]; T. Yoon[1]; Y. Bae[1], [1] Yonsei University, Seoul/ROK

B06.10 **Small molecule activation by heterogeneous frustrated Lewis pairs embedded into porous polymer backbones**
M. Trunk[1]; A. Thomas[1], [1] TU Berlin, Berlin/D

B06.11 **Synthesis of α-Aryl Ketones using Cu-MOF-74 as efficient catalyst**
G. Calleja[1]; F. Martínez Castillejo[1]; G. Orcajo[1]; D. Briones[1]; P. Leo[1], [1] Rey Juan Carlos University, Mostoles. Madrid/E

B06.12 **Systematic modification of framework metal sites in mixed-metal and mixed-linker Cu-BTC catalysts**
W. Kleist[1], [1] Karlsruhe Institute of Technology (KIT), Eggenstein-Leopoldshafen/D

B06.13 **UiO-66: efficient catalyst for the Meerwein-Ponndorf-Verley reduction of furfural**
D. Briones[1]; B. Hernandez[1]; J. Iglesias[1]; P. Leo[1]; G. Orcajo[1]; M. Paniagua[1]; F. Martínez Castillejo[1]; G. Morales[1]; R. Sanz[1]; J. Melero[1]; G. Calleja[1], [1] Rey Juan Carlos University, Mostoles, Madrid/E

B06.14 **Hydrogenation catalysts based on Pd nanoparticles immobilized in mesoporous polymers modified with dendrimers**
E. Karakhanov[1], A. Maximov[1], A. Zolotukhina[1], M. Boronoev[1], [1] Moscow State University, Moscow/RUS

B06.15 **MOFs and COFs as stable supports in liquid phase adsorption and catalysis**
K. Leus[1], P. Van Der Voort[1], [1] Ghent University, Ghent/BE

B06.16 **Activation of small molecules and heterogeneous transformations at single-site active centers in MFU-4l Metal-Organic Frameworks**
D. Denysenko[1]; D. Volkmer[1], [1] Universität Augsburg, Augsburg/D

Sensing & Device Integration

A07.01 **Tetrazine functionalized zirconium MOF as optical sensor for oxidizing gases**
G. Nickerl[1]; I. Senkovska[1]; S. Kaskel[1], [1] TU Dresden, Dresden/D

A07.02 **Breakthrough volumes of BTEX compounds on state of the art MOFs**
M. Rieger[1]; M. Wittek[1]; D. Weishaupt[1]; A. Polyzoidis[1]; S. Löbbecke[1]; H. Krause[1], [1] Fraunhofer Institut für Chemische Technologie ICT, Pfinztal Berghausen/D

A07.03 **Electric transport properties of SURMOFs and the effect of guest molecules loading**
J. Liu[1]; T. Wächter[2]; V. Mugnaini[1]; H. Gliemann[1]; M. Zharnikov[2]; C. Wöll[1], [1] Karlsruhe Institute of Technology (KIT), Eggenstein-Leopoldshafen/D; [2] University of Heidelberg, Heidelberg/D

A07.04 **Functional MOF-films by in-situ coating of nanostructured substrates from lanthanide and transition metals and imidazole**
F. Brede[1]; L. Meyer[1]; K. Müller-Buschbaum[1], [1] Universität Würzburg, Würzburg/D

A07.05 **Investigation of absorption process on flexible metal organic frameworks (MOFs) by UV-Vis spectroscopy**
T. Elkhova[1], [1] TU Dresden, Dresden/D

A07.06 **Metal-Organic Frameworks (MOFs) for sensing and biosensing applications**
H. Abdelhamid[1]; X. Zou[1], [1] Stockholm University, Stockholm/S

A07.07 **Metal-Organic Frameworks as hosts for spiropyranes**
U. Ruschewitz[1]; H. Schwartz[1], [1] University of Cologne, Köln/D

A07.08 **MOF-doping and investigation of metal oxide semiconductor gas sensors for applications in biogas and exhaled breath analysis**
J. Schmucker[1]; J. Schöfer[1]; I. Jesswein[1]; M. Herold[2]; T. Hirth[1]; A. Weber[3], [1] Fraunhofer Institute for Interfacial Engineering and Biotechnology, Stuttgart/D; [2] ams Sensor Solutions Germany GmbH, Reutlingen/D; [3] Fraunhofer IGB, Stuttgart/D

B07.06 **MOFs for trace gas enrichment**
J. Drache[1]; N. Klein[2]; W. Grählert[2]; S. Kaskel[1], [1] TU Dresden, Dresden/D; [2] Fraunhofer-Institut für Werkstoff- und Strahltechnik IWS, Dresden/D

B07.07 **Postsynthetic modification of CAU-1 nanoparticles for integration in one-dimensional photonic crystal sensing devices**
O. von Mankowski[1]; B. Lotsch[1], [1] Ludwig-Maximilians-Universität München, München/D

B07.08 **Post-synthetic stabilization and functionalization of paddle-wheel based MOFs for optical sensor application.**
P. Müller[1]; F. Wisser[1]; V. Bon[1]; R. Grünker[1]; I. Senkovska[1]; S. Kaskel[1], [1] TU Dresden, Dresden/D

Environmental

A08.01 **Unusual storage of NO and its efficient removal by various reducing agents inside one-dimensional micropores of nickel (II) phosphate VSB-5 catalysts**
S. Naito[1]; Z. Chen[1]; W. Shen[1]; A. Yoshida[1], [1] Kanagawa University, Yokohama/J

A08.02 **Covalent Organic Frameworks as porous materials for renewable energy applications**
L. Stegbauer[1]; G. Savasci[1]; C. Ochsenfeld[1]; M. Hahn[2]; A. Jentys[2]; J. Lercher[2]; B. Lotsch[1], [1] Ludwig-Maximilians-Universität München, München/D; [2] TU München, Garching bei München/D

B08.01 **Novel adsorbents for toxic industrial gases: CPO-27 performance against ammonia**
M. Rosnes[1]; A. Gorzkowska-Sobas[2]; J. de Lange Claussen[1]; S. Sellevaag[2]; P. Dietzel[1], [1] University of Bergen, Bergen/N; [2] FFI Norwegian Defence Research Institute, Kjeller/N

B08.02 **Purification of waste water using Metal-Organic Frameworks**
S. Kim[1]; M. Yoon[1], [1] Gachon University, Sungnam/ROK

Biological Application

A09.01 **Benzotriazolate-based MOFs as promising platforms for drug delivery**
H. Bunzen[1]; D. Volkmer[1], [1] University of Augsburg, Augsburg/D

A09.02 **Loading MOFs with CO-releasing molecules**
A. Kautz[1]; C. Janiak[1], [1] Heinrich-Heine-University Düsseldorf, Düsseldorf/D

A09.03 **MOF-based core-shell nanoparticles for biomedical applications**
A. Zimpel[1]; T. Preiss[1]; R. Röder[1]; E. Wagner[1]; J. Rädler[1]; U. Lächelt[1]; S. Wuttke[1], [1] Ludwig-Maximilians Universität München, München/D

A09.04 **Nanoscaled zinc-pyrazolate MOFs as drug delivery systems**
S. Rojas[1]; F. Carmona[1]; C. R. Maldonado[1]; J. Rodriguez Navarro[1]; E. Barea[1]; P. Horcajada[2]; C. Serre[3], [1] Universidad de Granada, Granada/E; [2] Institut Lavoisier, Versailles/F; [3] CNRS, Versailles/F

A09.05 **Optimization of the encapsulation of non conventional metallodrugs into CYCU-3**
F. Carmona Fernandez[1]; C. Rodriguez Maldonado[1]; S. Rojas Macías[1]; P. Sánchez Sánchez[1]; J. Rodriguez Navarro[1]; E. Barea Martínez[1]; H. Jeremias[2]; C. Romão[2]; S. Furukawa[3]; S. Kitagawa[3], [1] University of Granada, Granada/E; [2] Alfama Inc. and Instituto de Tecnologia Química e Biológica da Universidade Nova de Lisboa, Oeiras/P; [3] Kyoto University, Kyoto/J

A09.06 **Synthesis, culture medium stability, and in vitro and in vivo Zebrafish embryo toxicity of Metal-Organic Framework nanoparticles**
J. Espin[1], [1] Institut Catala de Nanociencia i Nanotecnologia (ICN2), Bellaterra/E

B09.05 **Tuning nitric oxide delivery from M-CPO-27 (M = Ni, Mg, Zn) for use in medical applications**
M. Duncan[1]; S. Warrender[1]; D. Cattaneo[1]; R. Morris[1]; D. Mercer[2]; C. Kelsall[3]; I. Megson[3]; R. Castledine[4]; N. Parkinson[4], [1] University of St Andrews, St Andrews/UK; [2] Novabiotics, Aberdeen/UK; [3] University of the Highlands and Islands, Inverness/UK; [4] Fine Organics Ltd, Middlesbrough/UK

In situ Characterization

A10.01 **New insight into ZIF-8 flexibility: inelastic neutron scattering evaluation**
M. Casco[1]; E. Ramos Fernandez[1]; A. Ramirez-Cuesta[2]; J. Silvestre-Albero[1], [1] University of Alicante, Alicante/E; [2] Oak Ridge National Laboratory, Oak Ridge/USA

A10.02 **CO^2 dynamics in a Metal-Organic Framework by solid-state NMR**
F. Grifasi[1]; C. Atzori[1]; A. Masala[1]; F. Bonino[1]; M. Chierotti[1], [1] University of Turin, Turin/I

A10.03 **Direct in situ analysis of milling reactions during the synthesis of Metal-Organic Frameworks and porous coordination polymers**
M. Wilke[1]; L. Batzdorf[1]; F. Fischer[1]; F. Emmerling[1], [1] Federal Institute for Materials Research and Testing, Berlin/D

A10.04 **Effect of ligand substitution on breathing mode of MOFs with MIL-53 type crystal structure**
T. Ahnfeldt[1]; M. Carrion Ramirez[1]; P. Dietzel[1]; M. Enssle[2]; H. Fjellvåg[2], [1] University of Bergen, Bergen/N; [2] University of Oslo, Oslo/N

A10.05 **Investigation of adsorption induced structural expansion in DUT-8(Ni) by in situ techniques**
V. Bon[1]; I. Senkovska[1]; N. Klein[2]; A. Heerwig[1]; J. Getzschmann[1]; S. Kaskel[1]; D. Wallacher[3]; I. Zizak[3]; M. Brzhezinskaya[3]; U. Mueller[3], [1] TU Dresden, Dresden/D; [2] Fraunhofer-Institut für Werkstoff- und Strahltechnik, Dresden/D; [3] Helmholtz-Zentrum Berlin für Materialien und Energie, Berlin/D

A10.06 **New insight in UTSA-16 – CO_2 interaction**
A. Masala[1]; J. Vitillo[1]; F. Bonino[1]; M. Manzoli[1]; C. Grande[1]; S. Bordiga[1]; [1] University of Turin, Turin/I

B10.04 **Second Harmonic Generation Microscopy to identify ferroelectric MOFs**
K. Markey[1]; M. Krüger[2]; H. Reinsch[3]; N. Stock[2]; T. Verbiest[1]; D. De Vos[1]; M. van der Veen[4], [1] KU Leuven, Leuven/B; [2] Christian-Albrechts-Universität zu Kiel, Kiel/D; [3] University of Oslo, Oslo/N; [4] TU Delft, Delft/NL

B10.05 **Temperature and pressure induced structural changes in a typical flexible metal-organic framework MIL-53(Cr): effect of the functionalization**
M. Coulet[1]; I. Beurroies[1]; E. Bloch[1]; J. Rodriguez[1]; R. Denoyel[1]; P. Llewellyn[1]; T. Devic[2]; C. Serre[2], [1] Aix Marseille Université, CNRS, MADIREL UMR 7246, Marseille/F; [2] Institut Lavoisier / CNRS and Université de Versailles St-Quentin, Versailles/F

B10.06 **Tuning the flexibility in MOFs by SBU modification**
N. Kavoosi[1]; V. Bon[1]; I. Senkovska[1]; S. Kaskel[1], [1] TU Dresden, Dresden/D

B10.07 **Ultrafast spectroscopy reveals photo-excited charge transfer pathway of photocatalytic Metal-Organic Frameworks**
J. Garcia-Santaclara[1]; K. Mazur[2]; M. Nasalevich[1]; J. Gascon[1]; F. Kapteijn[1]; A. Houtepen[1]; F. Grozema[1]; M. Bonn[2]; J. Hunger[2]; M. van der Veen[1], [1] TU Delft, Delft/NL; [2] Max-Planck Institute for Polymer Research, Mainz/D

Modelling

A11.01 **Highly tuneable electronic structure and band gaps in breathing Metal-Organic Framework materials**
S. Ling[1]; B. Slater[1], [1] University College London, London/UK

A11.02 **Molecular simulations of bio-MOFs for gas separations**
I. Erucar[1]; S. Keskin[1], [1] Koc University, Istanbul/TR

A11.03 **Ab-initio adsorption thermodynamics of small gas molecules in Mg-MOF-74**
K. Sillar[1]; A. Kundu[2]; J. Sauer[2], [1] University of Tartu, Tartu/EST; [2] Humboldt Universität zu Berlin, Berlin/D

A11.04 **Active site genesis within UiO-66 type Metal-Organic Frameworks: a theoretical rationalization**
M. Vandichel[1]; J. Hajek[2]; A. Ghysels[2]; M. Waroquier[1]; V. Van Speybroeck[1]; D. De Vos[3], [1] Ghent University, Ghent/B; [2] Center for Molecular Modeling, Ghent University, Zwijnaarde/B; [3] KU Leuven, Leuven/B

A11.05 **Computational screening of MOFs' family for identifying the limits for methane storage**
M. Suyetin[1]; Y. Belmabkhout[1]; D. Alezi[1]; M. Eddaoudi[1], [1] King Abdullah University of Science and Technology (KAUST), Thuwal/SAR

A11.06 **Computational view of selective gate-driven diffusion of CO_2 over N_2 in MFU-4**
G. Sastre[1]; J. van den Bergh[2]; F. Kapteijn[2]; D. Denysenko[3]; D. Volkmer[3], [1] CSIC-UPV, Valencia/E; [2] TU Delft, Delft/NL; [3] Universität Augsburg, Augsburg/D

A11.07 **Exploiting large-pore Metal-Organic Frameworks for separations of aromatics using entropic molecular mechanisms**
A. Torres-Knoop[1], [1] University of Amsterdam, Amsterdam/NL

A11.08 **Mechanistic studies of reactions on UiO-66 type Metal-Organic Frameworks**
J. Hajek[1]; M. Vandichel[2]; M. Waroquier[2]; V. Van Speybroeck[2]; B. Van de Voorde[3]; B. Bueken[3]; D. De Vos[3], [1] Center for Molecular Modeling, Ghent University, Zwijnaarde/B; [2] Ghent University, Ghent/B; [3] KU Leuven, Leuven/B

B11.05 **Modelling metal-specific flexibility**
J. Dürholt[1]; R. Schmid[1], [1] Ruhr-Universität Bochum, Bochum/D

B11.06 **Porous metal formates for the separation of small molecules: predictions from dispersion-corrected DFT calculations**
M. Fischer[1], [1] University of Bremen, Bremen/D

B11.07 **CO2 capture in the giant Metal-Organic Framework MIL-100 from large scale DFT calculations**
B. Civalleri[1], M. D'Amore[1], E. Albanese[1], R. Orlando[1], [1] University of Torino, Torino/I

B11.08 **Distribution of BPDC and BPyDC linkers in mixed-linker metal-organic framework DUT-5**
A. Krajnc[1]; T. Kos[1]; N. Zabukovec Logar[1]; G. Mali[1], [1] National Institute of Chemistry, Ljubljana/SLO

Industrial Application

A12.01 **A feasibility study for the use of MOFs as CO_2 adsorbents in industrial applications**
Y. Chen[1]; A. Munn[1]; S. Tang[2]; P. Dunne[1]; E. Lester[3], [1] University of Nottingham, Nottingham/UK; [2] Promethean Particles Ltd, Nottingham/UK; [3] Promethean Particles Ltd/University of Nottingham, Nottingham/UK

B12.01 **Luminescent Ln-MOFs as detector systems for water-sensitive pharmaceutical products**
J. Stangl[1]; L.V. Meyer[1]; L. Meinel[1]; K. Müller-Buschbaum[1]; [1] Universität Würzburg, Würzburg/D

Emerging Technologies

A13.01 **Confinement of luminescent silver nanoclusters in adeninate MOFs**
D. Jonckheere[1]; E. Coutiño-González[1]; M. Roeffaers[1]; J. Hofkens[1]; D. De Vos[1], [1] KU Leuven, Leuven/B

A13.02 **Reversible transformation from amorphous to crystalline state in porous coordination polymer**
T. Panda[1]; S. Horike[1]; S. Kitagawa[1], [1] Kyoto University, Kyoto/J

B13.01 **Zeolitic imidazolate framework (ZIF-8)/Matrimid® mixed-matrix membranes: thermo-mechanical stability and viscoelastic behaviour of nanocomposites**
M. Mahmoud[1]; J. Tan[1], [1] University of Oxford, Oxford/UK

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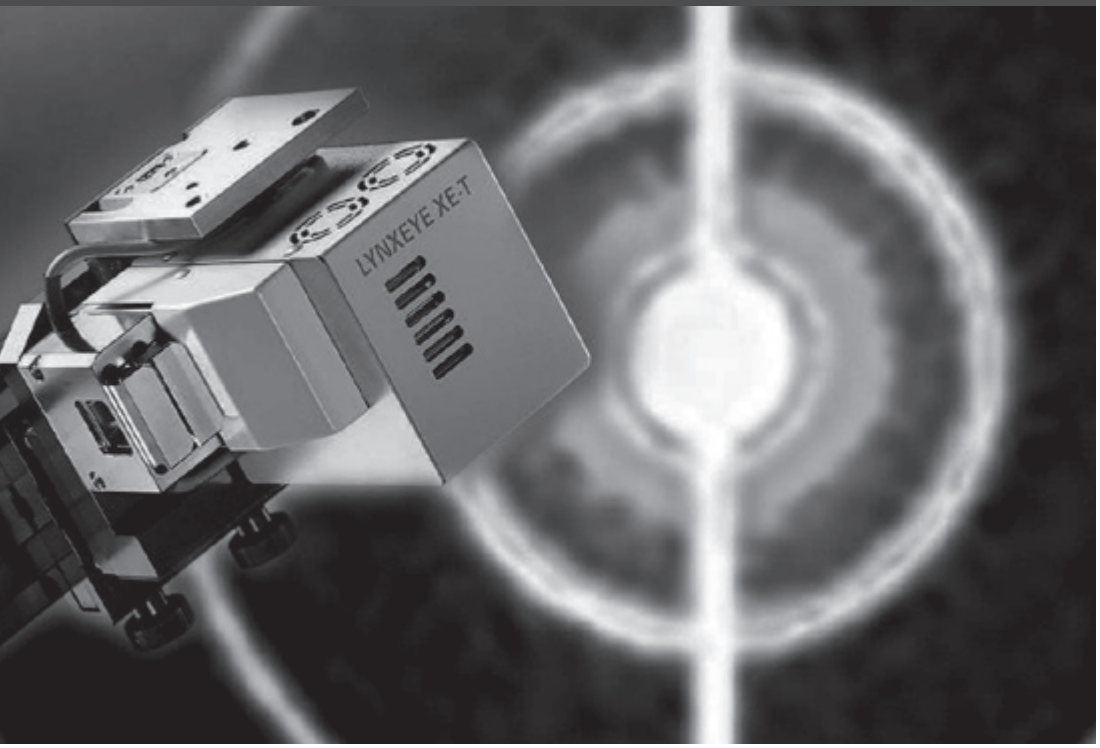

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Sunday, 11 October 2015	
17:00	**Registration & Welcome Reception**
18:30	EVENING LECTURE G. Férey
19:30	End of day 1

Monday, 12 October 2015		Tuesday, 13 October 2015				Wednesday, 14 October 2015	
Kongress-Saal		Kongress-Saal		Parallel room 0.241 for Short Oral Poster Presentations 1	Parallel room 0.214 for Short Oral Poster Presentations 2	Kongress-Saal	
09:00	**Welcome address**						
	Chair: S. Kaskel		*Chair: C. Wöll*	*Chair: S. Löbbecke*	*Chair: C. Janiak*		*Chair: G. Maurin*
09:05	KEYNOTE LECTURE S. Kitagawa	09:00	KEYNOTE LECTURE M. Dinca	Catalysis	Energy Application	09:00	KEYNOTE LECTURE F. Kapteijn
09:50	P. Falcaro	09:45	B. Lotsch			09:45	S. Keskin
10:10	H. Holdt	10:05	M. Tu			10:05	A. Coskun
10:30	G. Mouchaham	10:25	X. Feng			10:25	O. Shekhah
10:50	Coffee Break	10:45	Coffee Break			10:45	Coffee Break
	Chair: A. Thomas		*Chair: J. Gascon*	*Chair: C. Serre*	*Chair: P. McCloskey*		*Chair: J. Denayer*
11:20	M. Mastalerz	11:15	S. Furukawa	Synthesis	Biological Application	11:15	S. James
11:40	A. Slater	11:35	J. Rodriguez Navarro			11:35	R. Howie
12:00	A. Dani	11:55	B. Claes		Scale up & Shaping	11:55	M. Tsotsalas
12:20	I. Imaz	12:15	C. Orellana-Tavra			12:15	E. Ramos Fernandez
12:40	Lunch Break	12:35	Lunch Break			12:35	Lunch Break
	Chair: P. Llewellyn		*Chair: M. Antonietti*	*Chair: N. Stock*	*Chair: F. Kapteijn*		*Chair: S. Kaskel*
14:00	B. Wang	14:00	KEYNOTE LECTURE D. Jiang	New Structures	Adsorption and Separation	13:30	J. Denayer
14:20	Y. Li	14:45	D. Medina			13:50	F. Coudert
14:40	D. Matoga	15:05	J. Roeser			14:10	J. Ornstein
15:00	C. Janiak	15:20	C. Doonan			14:30	End of Conference
15:20	H. Motegi	15:45	F. Morel				
15:40	Coffee Break	16:05	Coffee Break				
	Chair: S. Furukawa		*Chair: A. Cooper*	*Chair: P. Falcaro*	*Chair: F.-X. Coudert*		
16:10	P. Llewellyn	16:35	A. Bavykina	Sensing & Device Integration	In situ Characterization/ Modelling		
16:30	O. Terasaki	16:55	J. Artz				
16:50	M. Rosnes	17:15	M. Addicoat				
17:10	Y. Inokuma	17:35	KEYNOTE LECTURE M. Antonietti				
17:30	KEYNOTE LECTURE G. Maurin						
18:15	**Poster Session A**	18:20	**Poster Session B**				
20:30	End of day 2	20:30	End of day 3				