

## 17<sup>th</sup> International Seminar on Inclusion Compounds and Porous Materials

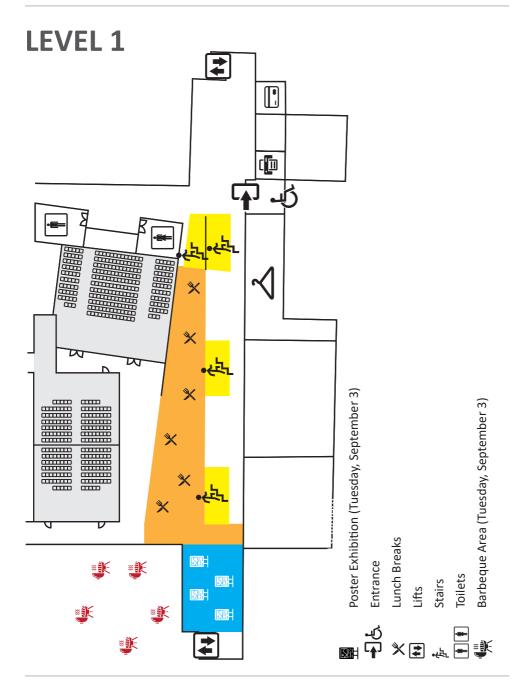
Poznań, Poland, 2-6 September 2024



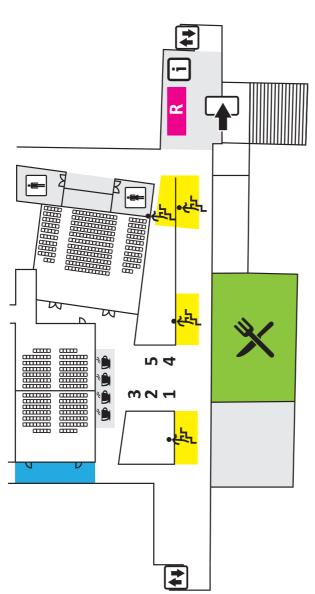
# 17 ISIC PROGRAMME

Sunday, Se	ptember 1, 2024	Monday, September 2, 2024			Tuesday, September 3, 2024			
16:30 - 17:30	Registration	8:30 - 9:00		Registration	8:30 - 9:00		Registration	
17:30 - 20:00	Welcome Reception	9:00 - 9:30		Opening Remarks	9:00 - 9:40	IL 5	Len Barbour	
		9:30 - 10:30	PL1	Jean-Marie Lehn	9:40 - 10:20	IL 6	Michaele Hardie	
		10:30 - 11:00		Coffee Break	10:20 - 10:40	06	Anna Pietrzak	
		11:00 - 11:40	IL 1	Reiko Kuroda	10:40 - 11:10		Coffee Break	
		11:40 - 12:20	IL 2	Consiglia Tedesco	11:10 - 11:50	IL 7	Valentina Colombo	
		12:20 - 12:40	01	Maura Malińska	11:50 - 12:30	IL8	Scott Dalgarno	
		12:40 - 13:00	02	Zarik Yusaf	12:30 - 12:50	07	David Gonzalez Rodrigue	
		13:00 - 13:10		Photo Group	12:50 - 13:00		Sebastian Machowski	
		13:00 - 14:30		Lunch	13:00 - 13:10		Photo Group	
		14:30 - 15:10	IL 3	Harshita Kumari	13:00 - 14:30		Lunch	
		15:10 - 15:30	03	Priya Paul	14:30 - 15:30	PL 2	Niveen Khashab	
		15:30 - 16:00		Coffee Break	15:30 - 16:00		Coffee Break	
		16:00 - 16:40	IL 4	Kathi Edkins	16:00 - 16:40	IL 9	Daniel Maspoch	
		16:40 - 17:00	04	Carsten Lenczyk	16:40 - 17:00	08	Agnieszka Czapik	
		17:00 - 17:20	05	Andrew J. Davies	17:00 - 18:30		Poster Session	
		19:30 - 21:00		Poznań Sightseeing by old-fashion Tram	17:30 - 20:30		Barbecue	

Wednesday, September 4, 2024			Thursday, September 5, 2024			Friday, September 6, 2024		
9:00 - 9:40	IL 10	Stefan Kaskel	9:00 - 9:40	IL 13	Michael Zaworodko	9:00 - 10:00	PL 5	Jerry Atwood
9:40 - 10:00	09	Alan Eaby	9:40 - 10:20	IL 14	Takafumi Kitazawa	10:00 - 10:40	IL 18	Janusz Lipkowski
10:00 - 10:20	O 10	Kyriaki Koupepidou	10:20 - 10:40	0 17	Yizhi Xu	10:40 - 11:10		Coffee Break
10:20 - 10:40	0 11	Sebastian Ehrling	10:40 - 11:10		Coffee Break	11:10 - 11:30	0 21	Shaheen Sultana
10:40 - 11:10		Coffee Break	11:10 - 11:50	IL 15	Kari Rissanen	11:30 - 11:45	O 22	Yassin H. Andaloussi
11:10 - 11:50	IL 11	Silvia Bracco	11:50 - 12:20	0 18	Clive Oliver	11:45 - 12:05	O 23	Krzysztof Oliwa
11:50 - 12:10	O 12	Volodymyr Bon	12:20 - 12:40	0 19	Szymon Sobczak	12:05 - 12:25	0 24	Shumaial Razzaque
12:10 - 12:30	0 13	Mihails Arhangelskis	12;40 - 13:00	O 20	Ivana Brekalo	12:25 - 12:45	O 25	Seyed Soroush Mousav Khadem
12:30 - 12:50	0 14	Damian Jędrzejowski	13:00 - 14:30		Lunch	12:45 - 13:00		Closing Remarks
12:50 - 13:00		Adam Fordon	14:30 - 15:30	PL 4	Tomislav Frisic	13:40 - 14:30		Lunch
13:00 - 14:30		Lunch	15:30 - 16:00		Coffee Break			
14:30 - 15:30	PL 3	Omar M. Yaghi	16:00 - 16:40	IL 16	K. Travis Hollman			
15:30 - 16:00		Coffee Break	16:40 - 17:20	IL 17	Mohamed Eddaoudi			
16:00 - 16:40	IL 12	Jan J. Weigand						
16:40 - 17:00	O 15	Michał Chmielewski						
17:00 - 17:20	O 16	Wojciech Bury						
20:00 - 00:00		Gala Dinner						



## LEVEL 2



**Exhibitors 1-5:** 

Merck

SYL & ANT Instruments

Testchem

3p Instruments 4.

Bruker

Ŋ.

Stairs

Canteen

**\*** 

Main Entrance Information

Coffee Breaks

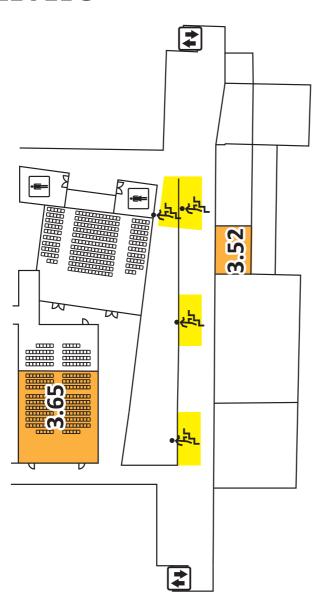


Registration Desk





## LEVEL 3



Conference room

3.65

## 17 ISIC PATRONS, ORGANIZER, SPONSORS, PARTNER

#### **FINANCIAL SUPPORT**

The 17ISIC -

a task financed by the Minister of Education and Science allocated from the "Doskonała Nauka II" program



Ministry of Education and Science Republic of Poland



#### HONORARY PATRONAGE







#### **ORGANIZER**





#### **GOLD SPONSOR**



#### SILVER SPONSOR



#### **BRONZE SPONSORS**







#### **SPONSORS**













#### **PARTNER**





Programme Overview	. 2
Floor Plan of the Faculty of Chemistry	. 4
Patrons, Organizer, Sponsors, Partner	. 7
Content	. 8
Committee	. 9
Welcome Note by the Conference Chairperson	. 10
Welcome Note by the Dean of Faculty of Chemistry	. 11
General Information	. 12
Accompanying Events	. 19
informations for presenters	. 21
Scientific programme   Monday, September 2, 2024	. 22
Scientific programme   Tuesday, September 3, 2024	. 24
Scientific programme   Wednesday, September 4, 2024	. 26
Scientific programme   Thursday, September 5, 2024	. 28
Scientific programme   Friday, September 6, 2024	. 30
Poster presentations	. 31
List of participants	34



#### **International Advisory Board**

Jerry Atwood Vitaly Kalchenko (Ukraine)

(USA)

Janusz Lipkowski

Len Barbour (South Africa)

(Poland)

**Anthony Coleman** 

(France)

Luigi Nassimbeni (South Africa)

**Scott Dalgarno** 

Jonathan Steed (UK)

Mike Zaworotko

(UK)

**Travis Holman** Kinga Suwińska

(USA) (Poland)

Janusz Jurczak

(Poland) (Ireland)

#### **Local Organizing Committee**

Agnieszka Janiak – chairperson Maciej Kubicki

> Paweł Piszora Kornel Roztocki

Joanna Drwęska

Wiktoria Gromelska

Szymon Sobczak (MSc)

Artur Korzański

#### **Honorary Members of the Organizing Committee**

Janusz Lipkowski Kinga Suwińska

#### WELCOME NOTE BY THE CONFERENCE CHAIRPERSON

Dear ISIC Friends, Ladies and Gentlemen,

We cordially invite you to Poznań, to attend the 17<sup>th</sup> International Seminar on Inclusion Compounds and Porous Materials (ISIC&PM).

The ISIC series was initiated in 1987 in Poland (Jaszowiec) and then continued in Slovakia, Ukraine, Czech Republic, South Africa, Moldova, Turkey, UK, Russia and Poland, in some countries more than once.



Originally, this scientific event was aimed primarily at young academics who faced limited opportunities to attend larger scientific gatherings. However, it has gradually evolved over time into a significant periodic scientific event that encompasses a broad range of topics. It is not only dedicated to pure inclusion phenomena, recognition and supramolecular chemistry, but also to the porous, nano- and advanced 'smart' materials and the methods of their research. Furthermore, the upcoming edition will introduce a novel dimension by including the exploration of MOF, COF, and ZIF type porous materials, along with their potential applications.

The main goal of this meeting is to bring together both young and 'experienced' scientists from across the world for healthy discussion at all levels as well as an exchange of ideas within this society.

The 17<sup>th</sup> International Seminar on Inclusion Compounds and Porous Materials will be held on September 2nd - 6th, 2024 at the Faculty of Chemistry, Adam Mickiewicz University in Poznań, Poland. Poznań, situated on the banks of the Warta River, is a city steeped in history and renowned for its historical heritage, industry, and commerce. It is also one of the largest academic centers in Poland. Boasting more than 10 universities and a student population exceeding 100,000, it serves as a vibrant hub for higher education. These remarkable features, along with numerous other captivating tourist attractions, contribute to Poznań's allure.

We are looking forward to welcoming you in Poznań.

Agnieszka Janiak Chairman 17<sup>th</sup> ISIC&PM

#### WELCOME NOTE BY THE DEAN OF FACULTY OF CHEMISTRY

Ladies and Gentlemen, Dear Colleagues,

Welcome to Poland! Welcome to Poznań! It is my great honor and privilege to welcome you to the Faculty of Chemistry at Adam Mickiewicz University, the host of the 17<sup>th</sup> International Seminar on Inclusion Compounds and Porous Materials.



Poznań is an ancient and beautiful city, one of the largest academic and research hubs in Poland. It is also one of the oldest and most historically significant cities in the country. In fact, many scholars – including groups from our university - argue that Poland, as a nation, was born right here over a thousand years ago. I truly hope that you will have the opportunity (and rest assured, the organizers will ensure this) to visit some of the most important historical sites during your stay.

Our academic tradition dates back to the early 17th century when the first educational institutions of university rank were established here. Since then, despite the interruptions caused by the turbulent history of this part of Europe, scholars and students have been an integral part of the Poznań community. The modern academic history of Poznań began after the First World War, following Poland's restoration of independence. Adam Mickiewicz University, originally known as Poznań University, is now one of the leading universities in Poland. Despite challenging times, our university community of scholars and students continues to grow and thrive. The new Morasko Campus, which includes the new Collegium Chemicum where this meeting is held, is a testament to this ongoing development.

Thank you for attending the 17<sup>th</sup> International Seminar on Inclusion Compounds and Porous Materials, for visiting the Faculty of Chemistry at Adam Mickiewicz University, and for coming to Poznań. I am confident that these next few days will be filled with fruitful exchanges of ideas, the development of new concepts and connections, and the opportunity to explore this unique and beautiful part of Poland.

**Professor Maciej Kubicki**Dean and Professor, Faculty of Chemistry

## 17 ISIC GENERAL INFORMATION

#### Venue:

Adam Mickiewicz University in Poznań Faculty of Chemistry Uniwersytetu Poznańskiego 8, 61-614 Poznań

#### Date:

02-06 September 2024

#### **Conference Language:**

The lectures will be in English.

#### **Registration:**

The Registration Desk will be open during the following hours:

Sunday: 16:30 - 17:30

Monday – Wednesday: 8:00 – 17:00

Please be prepared to present your ID and, if applicable, a proof of your student status.

#### Name Badge:

Participants, accompanying persons and exhibitors are kindly requested to wear their name badge during all conference events. Admittance to the scientific sessions, exhibition and social events will be refused if the required badge cannot be presented. Lost badges will be replaced at the Registration Desk upon presentation of an identity card.

The name badge entitles to travel all public transport lines in Poznań.

Badge is valid only with ID.

#### Internet:

A "17ISIC" Wi-Fi network will be set up for the duration of the conference.

Every participant of the conference will receive an individual email and password to log on to the network.

## 17 ISIC GENERAL INFORMATION

#### **Catering:**

Free lunches and soft drinks will be offered to all participants during Lunch Breaks at the catering area. Tea and coffee will be available free of charge in the morning and in the afternoon during Coffee Breaks.

#### **Meteor Student House:**

Uniwersytetu Poznańskiego 9, 61-614 Poznań

Meteor is open 24/7, but the office will be closed on Saturday and Sunday. The reception, however, works 24/7.

The hotel day is from 14:00 to 10:00. In case of arrival at night or before the hotel day, please inform us in advance.

Meteor is a new complex with amenities such as: rooms designed for students with disabilities, separate kitchens with dining areas, laundry rooms, patio, sports field, chill out area, canteen, students club, kindergarten, minimarket (6:00-23:00), gym.

Buffet breakfasts will be served at the Ostoja Restaurant in the Faculty of Chemistry building, 1st floor, 2 minutes' walk from Meteor. Breakfasts will be served from 7:00 a.m. to 9:00 a.m.

All rooms have a bathroom and are equipped with a kitchenette and a fridge.

#### **Hotel Accommodation:**

A broad range of hotels as well as budget accommodation are available in Poznań. Please see <a href="https://www.17isic.com/accommodation">https://www.17isic.com/accommodation</a> for more details.

#### **Gala Dinner Venue:**

Hanka Residence Al. Niepodległości 26, 61-714 Poznań

## 17 ISIC GENERAL INFORMATION

#### Move around the city:

The Faculty of Chemistry owns an outdoor parking (free of charge).

For planning a trip by public transport please visit page:

https://www.ztm.poznan.pl/en/rozklad-jazdy/

We recommend reaching the conference venue by public transport.

We recommend you download the free application jakdojade.pl which contains the current timetables of public transport along with the maps. The app is available in English. If you allow it to see your location, it can show you the best connection from wherever you are (it shows both buses and trams).

You can also use the application free of charge on the website:

https://jakdojade.pl/poznan/trasa

## From Poznań-Ławica Airport to Poznań Main Railway Station ("Poznań Główny/Poznań Main Station"):

Bus line: 159

Estimated time: 20min

Getting on: bus stop "Port Lotniczy Ławica" Getting off: bus stop "Poznań Główny"

## From Poznań Main Railway Station ("Poznań Główny /Poznań Main Station") to the Faculty of Chemistry:

Tram lines: 12

Estimated time: 20min

Getting on: tram stop "Poznań Główny"

Getting off: tram stop "Os. Sobieskiego" + 10min of walk (see map, next page)

#### From "Rondo Kaponiera" to the Faculty of Chemistry:

Tram lines: 15

Estimated time: 15min

Getting on: tram stop "Rondo Kaponiera"

Getting off: tram stop "Os. Sobieskiego" + 10min of walk (see map, next page)

#### From "Rondo Kaponiera PST" to the Faculty of Chemistry:

Tram stop "Rondo Kaponiera PST" is underground.

Tram lines: 12, 14
Estimated time: 15min

Getting on: tram stop "Rondo Kaponiera PST"

Getting off: tram stop "Os. Sobieskiego" + 10min of walk (see map, next page)

#### From "Most Teatralny" to the Faculty of Chemistry:

Tram lines: 16

Estimated time: 15min

Getting on: tram stop "Most Teatralny"

Getting off: tram stop "Os. Sobieskiego" + 10min of walk (see map, next page)

#### **TAXI** in Poznań:

Available taxis can be found on the website:

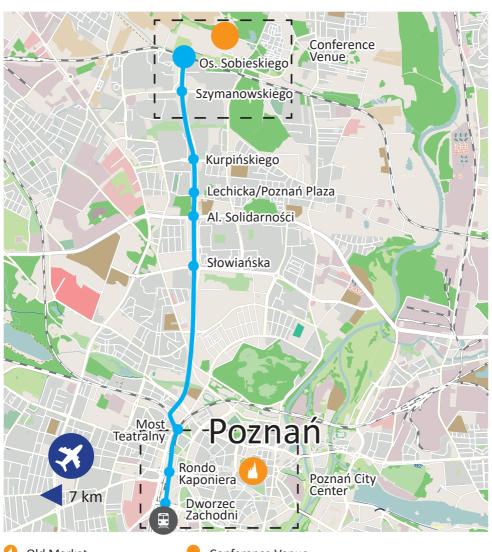
https://www.poznan.pl/mim/main/taxi,poi,116,6142/

You can also use Uber and Bolt services.

#### **Currency:**

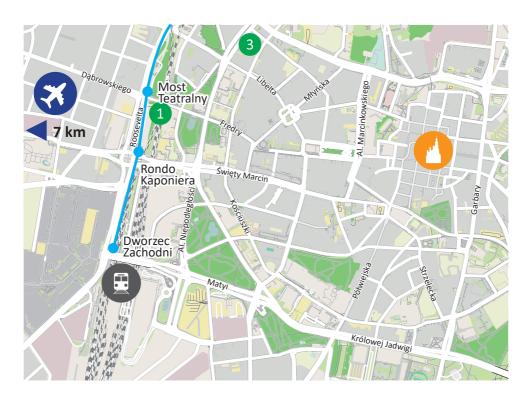
The currency in Poland is Polish zloty (PLN), 1 zloty is worth approximately 0.23 EUR.

### Poznań City Map



- Old Market
- "Poznań Główny" **Railway Station**
- Conference Venue
- Tram line
- Tram station

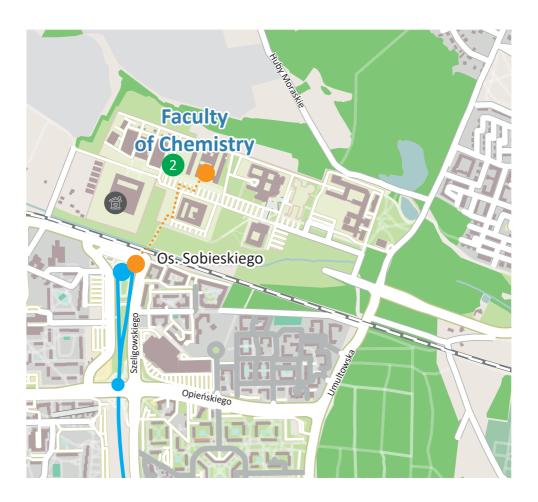
## Poznań City Center



- "Poznań Główny" Railway Station
- Meeting Point for Poznań Sightseeing by old-fashion Tram
- 3 Hanka Residence (Gala Dinner Venue)

- Old Market Square
- Tram line
- Tram station

### **Conference Venue**



- 2 Barbecue Area
- Meteor Student House
- •···• Route from the tram stop to the Conference Venue (c.a. 10 min. by foot)
- Tram line
- Tram station

## 17 ISIC ACCOMPANYING EVENTS

#### **Welcome Reception**

Date: Sunday, September 1 Venue: Faculty of Chemistry

Start: 17:30

The welcome evening will be graced by guitarist Matthew Kelly.

Matthew Kelly is an Irish guitarist, who has been stationed in Poznań for several years and plays eclectic music from the border of jazz and ambient, but also genres such as funk, soul, blues, salsa, swing and reggae.

If you are interested in the acoustic performance of the greatest hits of popular music, we invite you to the first meeting with other delegates, in a relaxed atmosphere with music and light refreshments.

The Welcome Reception is included in the registration fee. On Sunday, the registration will be open from 16:30-17:30.

#### **Opening Remarks**

The 17<sup>th</sup> International Seminar on Inclusion Compounds and Porous Materials will officially start on Monday, September 2, 2024 at 9:00 at room 3.65 (Conference Room).

The 17ISIC Chairperson will welcome all delegates.

#### Poznań Sightseeing by old-fashion Tram

Date: Monday, September 2

Venue: Meeting Point "Most Teatralny"

Start: 19:30

What could be a better idea for a city tour

than a ride on a retro tram?

In our opinion, it's definitely the best option! A good commentary with sense of



humour is a must, but it is not enough to keep the audience engaged. To make sure you won't fall asleep, we use several gadgets and tricks. If possible, the guide puts on an old-

## 17 ISIC ACCOMPANYING EVENTS

school tram-staff uniform, we punch your retro tickets and on your seats you are going to find mysterious packed objects. We are going to unpack them together! All of them are somehow connected with the city and will help you understand its culture. All that comes with a pinch of salt, of course. The route will include the city's magnificent tourist sites (e.g. Cathedral on the Cathedral Island, Imperial Castle and Imperial District), which we will admire during sunset.

#### **Barbecue**

Date: Tuesday, September 3 Venue: Faculty of Chemistry

Start: 17:30

On the second day of the conference there will be a barbecue on the square next to the Collegium Chemicum building. The barbecue will be a wonderful opportunity to enjoy conversations and create long-lasting memories. Meat and beer will be provided. We hope that the aromas and general ambiance of the barbecue will provide you a pleasant experience outside of the conference room.

#### Gala Dinner - Hanka Residence

Date: Wednesday, September 4

Venue: Hanka Residence

Start: 20:00

On Wednesday evening we will meet for a gala dinner in a historic Poznań Residence. During dinner we will have the opportunity to try one of the best cuisines in Poland



with the sounds of music. Jan Adamczewski Trio is a Group of Poznań saxophonist Jan Adamczewski, pianist and double bassist. The brand focuses on it is own compositions and thrilling improvisations. During the concert you can hear well-known film works, standards of pop and jazz music in their own arrangements and, of course, compositions by artists.

## 17 ISIC INFORMATIONS FOR PRESENTERS

#### **Presentation upload room**

If you are scheduled to make an Oral presentation at the conference, please visit Hall 3.65 on the 3<sup>th</sup> level of the building to upload your files with the AV Technician. Please ensure that your files are uploaded the DAY PRIOR to your scheduled presentation date. There will be an AV Technician available on Sunday afternoon at the Registration desk between 16:30 and 17:30hrs for files to be uploaded and ready for Monday morning. In extraordinary cases, files should be uploaded no later than the coffee break before the session. Preferred files are PowerPoint and PDF files. Alternatively, it is possible to use your own laptop with an HDMI connection. However, please try it first with the AV Technician, to make sure that everything is working fine.

#### **Posters**

Posters will be displayed throughout the conference at the Poster Exhibition. Authors are asked to place their poster on the appropriate poster board with the materials provided by Tuesday, September 3 before 5:00 p.m. (Posters may hang throughout the conference.) Poster boards have the same number as the titles in the conference program. Poster presenters are asked to be present during the poster session. Poster boards are made of cork and are 980 mm x 1220 mm (width x height). Posters should not be laminated. Mounting materials will be provided on site.

#### Legend to the scientific programme and posters

PL - Plenary Lecture

II - Invited Lecture

O - Oral Communications

P - Poster

### SCIENTIFIC PROGRAMME | MONDAY, SEPTEMBER 2, 2024

8:30 - 9.00	Registration
9:00 - 9:30	Opening Remarks
9:30 - 10:30 PL-1	Chair: Maciej Kubicki  Jean-Marie Lehn  From Supramolecular Chemistry Towards Adaptive Chemistry
10:30 - 11:00	Coffee Break
11:00 - 11:40 IL-1	Reiko Kuroda Guest Molecules in Inclusion Crystals Play Key Roles in Chirality Recognition
11:40 - 12:20 IL-2	Consiglia Tedesco Molecular Conformation, Self-Assembly And Host-Guest Chemistry Of Cyclic Peptoids
12:20 - 12:40 O-1	Maura Malińska Untangling Amino Acid-Cucurbit[7]uril Binding in Water: Hydrophobic Effect versus Ion-Dipole Interactions
12:40 - 13:00 O-2	Zarik Yusaf Organic Cage Rotaxanes
13:00 - 13:10	Photo Group
13:00 - 14:30	Lunch

### SCIENTIFIC PROGRAMME | MONDAY, SEPTEMBER 2, 2024

14:30 - 15:10 IL-3	Chair: Consiglia Tedesco  Harshita Kumari  Engineering Supramolecular Assemblies in Solution and Soft Materials
15:10 - 15:30 O-3	Priya Paul Exploration of Supramolecular Organogelators: Effect of Gelation and Degelation on Specific End Group and Chain Length of Alcohols
15:30 - 16:00	Coffee/Tea Break
16:00 - 16:40 IL-4	Kathi Edkins Supramolecular Recognition in Pharmaceutical Drug Materials – from Fundamental Prediction to Application
16:40 - 17:00 O-4	Carsten Lenczyk Uncovering the Details: Get the Most out of Your MOF/COF Samples Gold Sponsor – BRUKER
17:00 - 17:20 O-5	Andrew J. Davies Vapour Adsorption Studies of Porous Materials

**Surface Measurement Systems** 

### SCIENTIFIC PROGRAMME | TUESDAY, SEPTEMBER 3, 2024

8:30 - 9.00	Registration
9:00 - 9:40 IL-5	Chair: Kari Rissanen  Len Barbour  Perspectives from More Than a Decade of In Situ Structural Analysis of Porous Materials
9:40 - 10:20 IL-6	Michaele Hardie Metal-Directed Cage and Network Assemblies from Pyramidal Host- Type Ligands
10:20 - 10:40 O-6	Anna Pietrzak Ambiguous Faces Of Water-Based Inclusion Compounds: Case Study of Intercalato-Clathrate Of Pt(II) Complex
10:40 - 11:10	Coffee/Tea Break
11:10 - 11:50 IL-7	Valentina Colombo In situ insights into adsorption and catalysis in Metal-Organic Framework
11:50 - 12:30 IL-8	Scott Dalgarno Calix[4]arenes as Highly Versatile Platforms for Self- and Metal-Directed Assembly
12:30 - 12:50 O-7	David Gonzalez Rodriguez  Host-Guest Chemistry within Novel Adaptable Porphyrin Nanocages
12:50 - 13:00	Sebastian Machowski Bronze Sponsor - TESTCHEM Sponsor presentation
13:00 - 13:10	Photo Group
13:00 - 14:30	Lunch

## SCIENTIFIC PROGRAMME | TUESDAY, SEPTEMBER 3, 2024

	Chair: Kathi Edkins
14:30 - 15:30 PL-2	Niveen Khashab Porous Supramolecular Hosts: From Energy Intensive Separations to Sensors and Soft Robotics
15:30 - 16:00	Coffee/Tea Break
16:00 - 16:40 IL-9	Daniel Maspoch Clip-off Chemistry: Synthesis by Bond Cleavage
16:40 - 17:00 O-8	Agnieszka Czapik From Triangles to Squares – Highly Solvated Overcrowded Chiral Macrocycles
17:00 - 18:30	Poster Session

### SCIENTIFIC PROGRAMME | WEDNESDAY, SEPTEMBER 4, 2024

9:00 - 9:40 IL-10	Chair: Len Barbour  Stefan Kaskel  Stimuli Responsive Metal-organic Frameworks
9:40 - 10:00 O-9	Alan Eaby An ultramicroporous physisorbent sustained by a trifecta of directional supramolecular interactions
10:00 - 10:20 O-10	Kyriaki Koupepidou Structural Transformations in a Transiently Porous Coordination Network
10:20 - 10:40 O-11	Sebastian Ehrling The Limits of Surface and Pore Volume Characterization
10:40 - 11:10	Coffee/Tea Break
11:10 - 11:50 IL-11	Silvia Bracco Rotor dynamics, luminescent properties and gas reorientation in crystalline nanoporous architectures
11:50 - 12:10 O-12	Volodymyr Bon Boosting the Negative Gas Adsorption Transitions Using Multivariate Framework Approach
12:10 - 12:30 O-13	Mihails Arhangelskis Computational Crystal Structure Prediction for the Design of Functional Metal-Organic Frameworks
12:30 - 12:50 O-14	Damian Jędrzejowski Click and Collect: Versatile Covalent Functionalization of Novel Tetrazine-Based MOFs
12:50 - 13:00	Adam Fordon Bronze Sponsor - 3P and UNI-EXPORT Sponsor presentation
13:00 - 14:30	Lunch

### SCIENTIFIC PROGRAMME | WEDNESDAY, SEPTEMBER 4, 2024

14:30 - 15:30 PL-3	Chair: Michael Zaworotko  Omar M. Yaghi  Organic Chemistry and Molecular Weaving in All Dimension - online lecture
15:30 - 16:00	Coffee/Tea Break
16:00 - 16:40 IL-12	Jan J. Weigand Well-defined Polyhedral Coinage-Metal Phosphinidenides as Isolable Building Blocks for Polydimensional Metal-Organic Frameworks
16:40 - 17:00 O-15	Michał Chmielewski The Inner Life of a MOF: Templated Self-Organization of Linkers in a Pillared-Layer MOF
17:00 - 17:20 O-16	Wojciech Bury Pre- and Postsynthetic Strategies Applied To Zr-Based MOFs –S'elected Catalytic Applications

## SCIENTIFIC PROGRAMME | THURSDAY, SEPTEMBER 5, 2024

9:00 - 9:40 IL-13	Chair: Michaele Hardie  Michael Zaworotko  Crystal Engineering: Then, Now and Next
9:40 - 10:20 IL-14	<b>Takafumi Kitazawa</b> Supramolecular Soma-Iwamoto type Spin Crossover Coordination polymer Compounds
10:20 - 10:40 O-17	Yizhi Xu Ab initio Crystal Structure Prediction of Metal-Organic Frameworks with Machine-Learned Potentials
10:40 - 11:10	Coffee/Tea Break
11:10 - 11:50 IL-15	Kari Rissanen Supramolecular Halogen(I) Chemistry
11:50 - 12:20 O-18	Clive Oliver Structurally-Dynamic, 2-Periodic MOFs as Hosts for Included Solvents, Gases and Water Vapour
12:20 - 12:40 O-19	Szymon Sobczak Solvent-Solute Interactions Probed by Piezosolvatochromism
12:40 - 13:00 O-20	Ivana Brekalo The Use of Computationally Informed Mechanochemistry in the Synthesis of New Zinc Imidazolate Forms
13:00 - 14:30	Lunch

### SCIENTIFIC PROGRAMME | THURSDAY, SEPTEMBER 5, 2024

	Chair: Scott Dalgarno
14:30 - 15:30	Tomislav Frisic
PL-4	Mechanochemistry: Unlocking Rapid, Scalable and Green Synthesis of Covalent, Supramolecular and Framework Targets
15:30 - 16:00	Coffee/Tea Break
16:00 - 16:40	K. Travis Hollman
IL-16	Sorbent Properties of Dimethoxypillar[5]arene (DMP5)
16:40 - 17:20	Mohamed Eddaoudi
IL-17	to be anounced

### SCIENTIFIC PROGRAMME | FRIDAY, SEPTEMBER 6, 2024

9:00 - 10:00 PL-5	Chair: Kinga Suwińska & Kornel Roztocki  Jerry Atwood  to be anounced
10:00 - 10:40 IL-18	Janusz Lipkowski Inclusion Compounds Chemistry – Historical Remarks and Introduction to Conference Series
10:40 - 11:10	Coffee/Tea Break
11:10 - 11:30 O-21	Shaheen Sultana Exploration [2+2] Reactions for Dimerizations and Polymerizations in the Metal-Organic Gels and Single Crystals of Coordination Polymers
11:30 - 11:45 O-22	Yassin H. Andaloussi Dinuclear copper sulfate-based switching adsorbent layered materials for water harvesting and hydrocarbon selectivity
11:45 - 12:05 O-23	Krzysztof Oliwa Development of a Characterisation Toolbox for Porous Liquid Solutions to Understand Their Gas Inclusion and Selectivity Capabilities
12:05 - 12:25 O-24	Shumaial Razzaque Hypercrosslinked Polymers for the electrocatalytic Oxygen Reduction Reaction
12:25 - 12:45 O-25	Seyed Soroush Mousavi Khadem Photocatalytic conversion of CO2 into Valuable Products by Porphyrin based Metal-Organic Frameworks
12:45 - 13:00	Closing Remarks Granting Diplomas and Prizes for the best Poster Presentations
13:00 - 14:30	Lunch

## 17 ISIC POSTER PRESENTATIONS

#### P1 – Agata Tabero

Anhydrous proton conduction in imidazole-filled ordered mesoporous materials

#### P2 - Krzysztof Oliwa

Development of a Characterisation Toolbox for Porous Liquid Solutions to understand their Gas Inclusion and Selectivity Capabilities

#### P3 – Martyna Mańka

Enhanced Electrochemical Sensing of Aldehydes Using Zeolitic Imidazolate Frameworks

#### P4 - Kornel Roztocki

Mechanistic Insights into Flexible MOFs for Gas Storage, Separation, Logic Construction, and Sensing Applications

#### P5 - Sergiu Shova

New MOFs Formed By Azamacrocyclic Ni(II), Zinc(II) And Copper(II) Cations and [3,2-b] thiophene-2,5-dicarboxylate As Linker

#### P6 – Wiktoria Gromelska

Synthesis and Characterization of d10 Metal-Organic Frameworks Utilizing 2,5-Bis(4-(pyridin-4-yl)phenyl)thiazolo[5,4-d]thiazole and V-Shaped Dicarboxylate

#### P7 – Bramantya Bramantya

Computational design of magnetic metal-organic frameworks (MOFs)

#### P8 – Mateusz Adam Baluk

New MOF-based composites for photocatalysis

#### P9 - Szymon Sobczak (PhD)

Multi-directional ferroelastic strain coupled to the conformation of linkers and the metal cation coordination

#### P10 - Paweł Piszora

Spatial Distribution of Microstrains in the Crystal Lattice of MOFs Differing in the Degree of Structure Opening

#### P11 - Narhari Sapkota

Tuning Porphyrin based Metal—Organic Frameworks Topology by Selection of Auxiliary Ligands and Lanthanide Nodes - Syntheses, Structures and Electrochemical Properties

#### P12 – Szymon Sobczak (MSc)

Theoretical and Experimental Insights into Stimuli Responses of Two Isostructural MOFs Differing by a Single Atom

## 17 ISIC POSTER PRESENTATIONS

#### P13 – Joanna Drwęska

A Theoretical And Experimental Study On CO2 Binding Sites And Transformability Of CALF-20 Metal-Organic Framework

#### P14 - Joanna Drwęska

The Inclusion Phenomena In Chiral Macrocyclic Compounds

#### P15 - Alexios Vicatos

In Situ Crystallographic Visualisation Of Gas Uptake By A Trianglimine Molecular Crystal

#### P16 - Joseph Marret

Mechanochemical Synthesis of Carcerands

#### P17 – David Rincón

Exploring Halogen Bonding in Water: Cucurbit[7]uril Interactions with Halogenated 1-Phenylpiperazine Molecules

#### P18 - Oksana Danylyuk

Pentamidine and Alexidine Fold in the Bowl-Shaped Cavity of a Macrocyclic Host

#### P19 – Magdalena Ceborska

Unclosed cryptands as matrices stabilizing water clusters in the solid state

#### P20 – Maura Malinska

Improving solubility and separation efficiency of antidepressant drugs through cucurbituril complexetion

#### P21 - Zarik Yusaf

**Organic Cage Rotaxanes** 

#### P22 – Kateryna Kravets

Diversity of p-sulfonatocalix[4]arene-benzamidine complexes caused by counterion and crystal "aging" in the mother liquor

#### P23 – Agnieszka Czapik

Intermolecular Interactions in Design of Self-Organizing Macrocyclic Compounds

#### P24 – Pavlo Hyziuk

Enhanced Catalytic Performance of Cucurbit[7]uril-Gold Nanoparticle Assemblies

#### P25 - Klaudia Chuchracka

Chirality Of Flexible Triphenylamine Propellers Ruled By Chiral Substituent In Solution And In Solid Phase

## 17 ISIC POSTER PRESENTATIONS

#### P26 – Ewa Patyk-Kaźmierczak

Supramorecularly Assembled Metal-Free Negative Linear Compressibility Material

#### P27 - Ewelina Wieczorek-Szweda

Dipyromethene and azadipyromethene complexes as a new approach in photodynamic therapies

#### P28 – Dominika Prętka

Crystal Engineering of Lanthanide(III) Supramolecular Systems

#### P29 - Mateusz Gołdyn

Mechanochemistry as an effective method for the synthesis of multicomponent systems containing praziquantel

#### P30 - Gracjan Kurpik

Unlocking The Potential Of Pyridyl- $\beta$ -diketonate Ligands For Constructing Functional Coordination Nanostructures With Applications In Catalysis

#### P31 – Adrianna Szmulewicz

Supramolecular Polymers Based on Biphenyldiimides – Side-chain Influence on the Thermodynamics of the Self-assembly Process

#### P32 – Agnieszka Bajer

Guest-Induced Transformation of Tmeda-Based Water-Soluble Coordination Cage

#### P33 – Weronika Wachowicz

Developing Novel Heterometallic Dynamic Cages: Synthesis, Structural Design, and Applications

#### P34 – Wiktoria Adamska

Design and Functionalization of Hydrogen-Bonded Octameric Capsules for Targeted Guest Encapsulation and Separation

#### P35 – Khushal Kapadiya

A Green Approach to Synthesis of 2-Amino Thiophene Derivatives by Using PEG-400: Antioxidant and Anti-cancer Studies

#### P36 - Aizhamal Subanbekova

Hybrid Coordination Network Family with Metal-dependent Dynamic Behavior

#### Α

Adamska Wiktoria Adam Mickiewicz University/Poland wikada2@amu.edu.pl

Arhangelskis Mihails University of Warsaw/Poland m.arhangelskis@uw.edu.pl

Atwood Jerry L.
University of Missouri-Columbia/
United States
atwoodi@missouri.edu

#### В

Bajer Agnieszka Adam Mickiewicz University/Poland agnbaj@amu.edu.pl

Baluk Mateusz Adam University of Gdansk/Poland mateusz.baluk@phdstud.ug.edu.pl

Barbour Len Stellenbosch University/South Africa lib@sun.ac.za

Bon Volodymyr Technische Universität Dresden/Germany volodymyr.bon@tu-dresden.de

Bracco Silvia University of Milano-Bicocca/Italy silvia.bracco@unimib.it

Bramantya Bramantya University of Warsaw/Poland b.bramantya@uw.edu.pl Brekalo Ivana Ruder Boskovic Institute/Croatia ibrekalo@irb.hr

Bury Wojciech University of Wrocław/Poland wojciech.bury@uwr.edu.pl

#### C

Ceborska Magdalena Cardinal Stefan Wyszyński University/ Poland m.ceborska@uksw.edu.pl

Chmielewski Michał
University of Warsaw/Poland
michmi2@gmail.com

Chuchracka Klaudia Adam Mickiewicz University/Poland klachu1@amu.edu.pl

Colombo Valentina
University of Milan/Italy
valentina.colombo@unimi.it

Czapik Agnieszka Adam Mickiewicz University/Poland agnieszka.czapik@amu.edu.pl

#### D

Dalgarno Scott Heriot-Watt University/Great Britain s.i.dalgarno@hw.ac.uk

Danylyuk Oksana Institute of Physical Chemistry Polish Academy of Sciences/Poland odanylyuk@ichf.edu.pl

Davies Andrew Surface Measurement Systems/ Great Britain adavies@surfacemeasurementsystems. com

Drwęska Joanna Adam Mickiewicz University/Poland jdrweska@amu.edu.pl

#### Ε

Eaby Alan University of Limerick/Ireland alan.eaby@ul.ie

Edkins Katharina University of Strathclyde/Great Britain katharina.edkins@strath.ac.uk

Ehrling Sebastian 3P Instruments/Germany sebastian.ehrling@3p-instruments.com

#### F

Fordon Adam Uni-Export Instruments Polska sp. z o.o./ 3P Instruments/Poland adam.fordon@uni-export.com.pl

Friscic Tomislav University of Birmingham/Great Britain t.friscic@bham.ac.uk

#### G

Gołdyn Mateusz Adam Mickiewicz University/Poland mateusz.goldyn@amu.edu.pl Gonzalez Rodriguez David Universidad Autónoma de Madrid/Spain david.gonzalez.rodriguez@uam.es

Gromelska Wiktoria Adam Mickiewicz University/Poland wikgro2@amu.edu.pl

#### н

Hardie Michaele University of Leeds/Great Britain m.j.hardie@leeds.ac.uk

Hjiej Andaloussi Yassin University of Limerick/Ireland vassin.h.andaloussi@ul.ie

Holman Travis Georgetown University/United States kth7@georgetown.edu

Hyziuk Pavlo Institute of Physical Chemistry Polish Academy of Sciences/Poland phyziuk@ichf.edu.pl

#### J

Janiak Agnieszka Adam Mickiewicz University/Poland agnieszk@amu.edu.pl

Jaswal Vishakha BITS-Pilani/India vishakhajaswal@gmail.com

Jędrzejowski Damian Jagiellonian University/Poland damian.jedrzejowski@doctoral.uj.edu.pl

Jóźwiak Agnieszka Merck Life Science Sp. z o.o./Poland agnieszka.jozwiak@merckgroup.com

#### K

Kapadiya Khushal RK University/India khushal.kapadiya@rku.ac.in

Kaskel Stefan
Technische Universität Dresden/Germany
sekretariat-ac1@mailbox.tu-dresden.de

Khashab Niveen
KAUST/Saudi Arabia
niveen.khashab@kaust.edu.sa

Kitazawa Takafumi Toho University/Japan kitazawa@chem.sci.toho-u.ac.jp

Korzański Artur Adam Mickiewicz University/Poland artur\_ko@amu.edu.pl

Koupepidou Kyriaki University of Limerick/Ireland kyriaki.koupepidou@ul.ie

Kravets Kateryna
Institute of Physical Chemistry Polish
Academy of Sciences/Poland
kkravets@ichf.edu.pl

Kubicki Maciej Adam Mickiewicz University/Poland mkubicki@amu.edu.pl

Kumari Harshita University of Cincinnati/United States kumariha@ucmail.uc.edu Kuroda Re Chubu University/Japan rkuroda@isc.chubu.ac.jp

Kurpik Gracjan Adam Mickiewicz University/Poland gracjan.kurpik@amu.edu.pl

#### L

Lehn Jean-Marie University of Strasbourg/France lehn@unistra.fr

Lenczyk Carsten
Bruker AXS/Germany
carsten.lenczyk@bruker.com

Lipkowski Janusz Cardinal Stefan Wyszyński University/ Poland janusz.lipkowski@wp.pl

#### M

Machowski Sebastian TESTCHEM/Poland smachowski@testchem.pl

Malinska Maura University of Warsaw/Poland m.malinska@uw.edu.pl

Mańka Martyna Adam Mickiewicz University/Poland martyna.manka@amu.edu.pl

Marrett Joseph University of Birmingham/Great Britain jmm289@student.bham.ac.uk

Maspoch Daniel Catalan Institute of Nanoscience and Nanotechnology/Spain daniel.maspoch@icn2.cat

Mousavi Khadem Seyed Soroush Gdansk University of Technology/Poland seykhade@pg.edu.pl

#### 0

Oliver Clive University of Cape Town/South Africa clive.oliver@uct.ac.za

Oliwa Krzysztof Imperial College London/Great Britain kjo3118@ic.ac.uk

#### P

Patyk-Kaźmierczak Ewa Adam Mickiewicz University/Poland ewapatyk@amu.edu.pl

Paul Priya IIT Kharagpur/India priyapaulskm@kgpian.iitkgp.ac.in

Pietrzak Anna Łódź University of Technology/Poland anna.pietrzak.1@p.lodz.pl

Piszora Paweł Adam Mickiewicz University/Poland pawel@amu.edu.pl

Prętka Dominika Adam Mickiewicz University/Poland dominika.pretka@amu.edu.pl

#### R

Razzaque Shumaila Institute of Physical Chemistry Polish Academy of Sciences/Poland srazzaque@ichf.edu.pl

Rincón David University of Warsaw/Poland d.rincon-daza@uw.edu.pl

Rissanen Kari University of Jyväskylä/Finland kari.t.rissanen@jyu.fi

Roztocki Kornel Adam Mickiewicz University/Poland korroz1@amu.edu.pl

Rybak Piotr Syl&Ant Instruments Sp. z o.o./Poland piotr.rybak@sylant.pl

#### S

Sapkota Narhari University of Turku/Finland nasapk@utu.fi

Shova Sergiu "Petru Poni" Institute of Macromolecular Chemistry/Romania shova@icmpp.ro

Smith Vincent Rhodes University/South Africa v.smith@ru.ac.za

Sobczak Szymon (MSc)
Adam Mickiewicz University/Poland szysob@amu.edu.pl

Sobczak Szymon (PhD) Adam Mickiewicz University/Poland szymon.sobczak@amu.edu.pl

Subanbekova Aizhamal University of Limerick/Ireland aizhamal.subanbekova@ul.ie

Sultana Shaheen
IIT Kharagpur/India
ss.chem@iitkgp.ac.in

Suwińska Kinga Cardinal Stefan Wyszyński University/Poland k.suwinska@uksw.edu.pl

Szmulewicz Adrianna Adam Mickiewicz University/Poland adrszm@amu.edu.pl

#### т

Tabero Agata Adam Mickiewicz University/Poland agatab2@amu.edu.pl

Takamizawa Satoshi Yokohama City University/Japan staka@yokohama-cu.ac.jp

Tedesco Consiglia University of Salerno/Italy ctedesco@unisa.it

#### V

Vicatos Alexios Stellenbosch University/South Africa aiv@sun.ac.za

#### W

Wachowicz Weronika Adam Mickiewicz University/Poland werwac2@amu.edu.pl

Weigand Jan J. Technische Universität Dresden/Germany jan.weigand@tu-dresden.de

Wesołowska Kinga Adam Mickiewicz University/Poland kiwes21@gmail.com

Wieczorek-Szweda Ewelina Adam Mickiewicz University/Poland ewelina.wieczorek-szewda@amu.edu.pl

#### Х

Xu Yizhi University of Warsaw/Poland y.xu7@student.uw.edu.pl

#### Υ

Yaghi Omar University of California, Berkeley/United States yaghi@berkeley.edu

Yusaf Zarik Imperial College London/Great Britain zzy115@ic.ac.uk

#### Z

Zaworotko Michael University of Limerick/Ireland xtal@ul.ie

#### **Editors**

Poznan Science and Technology Park Professional Congress Organizer Rubież Street 46 61-612 Poznań, Poland e-mail: bok@ppnt.poznan.pl

> Zofia Ekert Antoni Guliński

#### Design

Drukarnia Akcygraf Miklaszewska, Biegańska, Mysior Spółka Jawna Drukarnia offsetowa i cyfrowa | Studio graficzne



## 17<sup>th</sup> International Seminar on Inclusion Compounds and Porous Materials

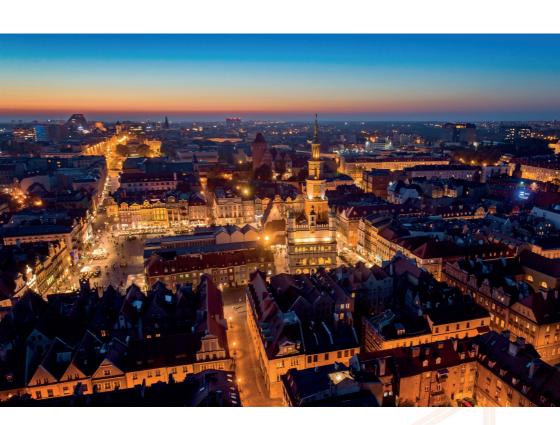
Poznań, Poland, 2-6 September 2024

www.17isic.com



## 17<sup>th</sup> International Seminar on Inclusion Compounds and Porous Materials

Poznań, Poland, 2-6 September 2024



# 17 ISIC BOOK OF ABSTRACTS







Honorary Patronage of the Mayor of Poznań









Poznan Science and Technology Park

