

## Hybrid events:

## Everything you need to know

Roman Muška
Bas Schot
Prof. Radomír Kužel

## On-site events

Do you miss the on-site meetings as much as we do?



### On-site events

Create a perfect environment for networking, brainstorming and joint problem solving while increasing engagement among all types of attendees.

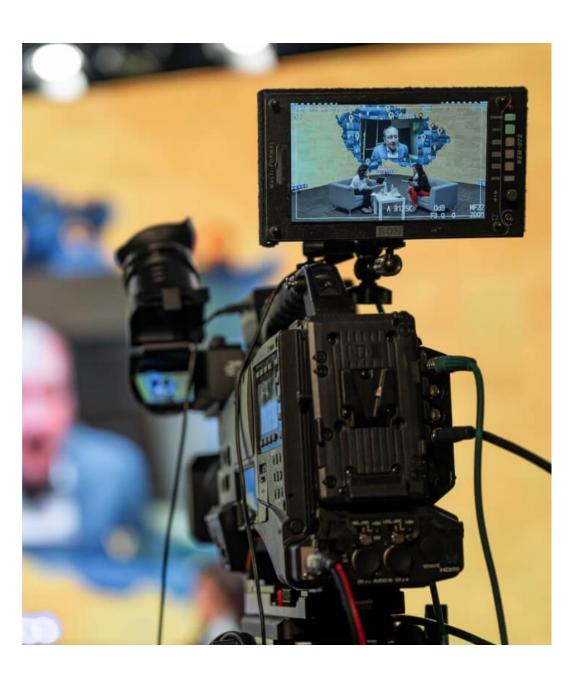
Create connection and build a long-term relationship



### On-site events

Demanding budget (travel, rentals, AV, catering, etc.) They are easily affected by global or local influences. On top of that, environmental impacts may be higher due to mass travel.





## Virtual events

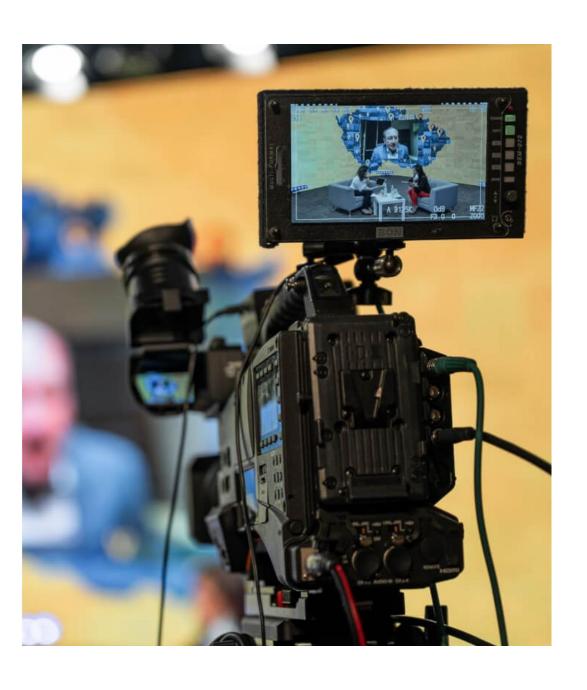
Require less advance planning

than in-person events.

Give more flexibility for

selected last minute changes.

Create more cost-effective event.



#### Virtual events

Provide more accurate data analytics and reports.

Possible wider audience reach.

Content might be available

after the event via recording or

even on-demand

(new revenue stream)

## Hybrid events

Engage features so both groups have a similar or completely different experience.

Include remote speakers.

Overcome meeting space limitations if needed.



## Hybrid events

Additional content to be provided via online platform throughout the year. Continuous engagement with members.

Delegates can choose their experience.

Support accessibility & inclusivity.



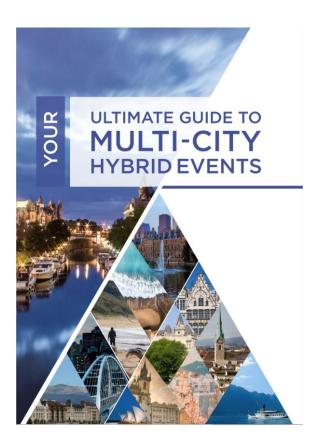
## HYBRID

## CITY ALLIANCE

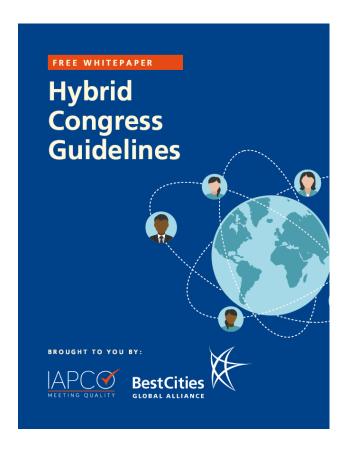


#### Various White Papers created:

https://www.hybridcityalliance.org/



https://www.iapco.org/whitepapers/



## Learnings:

- Structure & modus operandi
- Bid guidelines
- Meeting design
- Finance
- Risk Management
- Sustainability

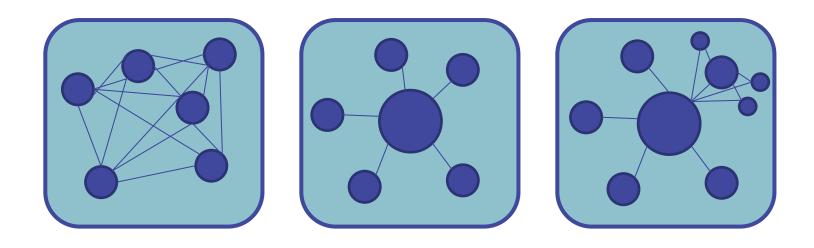
## Multi-City Hybrid Event (MCHE)

An event with an in-person and online component



## Multi-City Hybrid Event (MCHE)

An event which happens in multiple cities





Sustainability



5

Risk Management





## One event with multiple experiences

Design for the delegates at that location



Content and Sessions

Networking

Financing



#### 1. Content and Sessions

#### One event with multiple experiences

Design for the delegates at that location



#### 1. Content and Sessions

01	Create content with the distribution channel in mind	
02	Create content that is relevant for delegates at that location	
03	Create touch points to weave multiple locations together	
04	In person experience should justify the travel	
05	The event takes advantage of having multiple locations	
06	Design for multiple time zones	



#### 2. Networking

#### One event with multiple experiences

Design for the delegates at that location



#### 2. Networking





#### 3. Financing

Do Multi-City Hybrid Events just raise costs?



#### 3. Financing

#### Costs

#### Personnel to 01 create event Personnel at event 02 Speaker / MC 03 Location costs 04 Food & Bev 05 IT fees 06

#### Revenue

01	Delegate Rev
02	Sponsorship Rev

Digital video fees, broadcast fees, collaboration software costs, technical support costs, production fees



#### 3. Financing

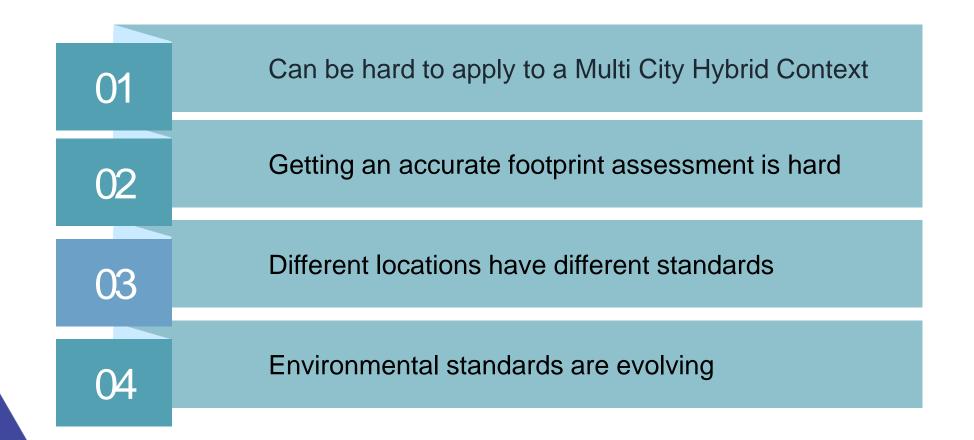
Create an event that meets the event goals, not one that just includes a laundry list of what is possible

# 2

## Sustainability



#### Four pain points



# 2

## Sustainability



#### **Potential ideas**

01	Create a green policy		
02	Find sustainable suppliers for each location		
03	Organize virtual exhibition halls		
04	Engage delegates in sustainability		
05	Minimize printed materials		
06	Make the eco-footprint visible to delegates		
07	Consider more hubs		

## Risk



Technology

Health and Safety

## Risk



### **Technology**

### Challenge: Lack of Skills

01	Event organizers	Full time tech employee
02	Delegates	Pre-training and tech-checks
03	Speakers	Increase staff to work with speakers



## Risk



## **Health and Safety**

01	Event closure	Contract negotiation
02	Situation changes while planning	Local teams, Define health guidelines up front
03	Delegate and Staff safety	Locations, Protocols, Food & Bev

## Special Project - Alliance Event/Fam Trip

Goal: Walk the Talk - showcase

a multi-city event!

#### 24<sup>th</sup> February 2022

Audience: meeting planners, associations or corporates

Programme: 2-day event



## Thank You

www.hybridcityalliance.org



#### General Assembly and Congress of the International Union of Crystallography



www.iucr.org

#### **IUCr**

Czechoslovakia was accepted in the IUCr immediately after the first Congress of the IUCr in Boston in 1948 as the fifth member with USA, UK, Norway and Canada!!!.

General assembly and congress – triennial, 1500-2500 participants

The IUCr is an International Scientific Union. Its objectives are to promote international cooperation in crystallography and to contribute to all aspects of crystallography, to promote international publication of crystallographic research, to facilitate standardization of methods, units, nomenclatures and symbols, and to form a focus for the relations of crystallography to other sciences. Read more >>

JOURNALS

INTERNATIONAL TABLES

NEWSLETTER

CIF



Primary research journals, reference works and monographs of the highest quality

PUBLICATIONS



OUTREACH

Crystallography around the world and its growth through education and capacity-building initiatives



Congress

The most important international conference for structural scientists



SUPPORT

Support for conferences, workshops, Visiting Professorships and more



home

submit

subscribe

open access



FOUNDATIONS ADVANCES

CURRENT ISSUE | SUBMIT



STRUCTURAL BIOLOGY

CURRENT ISSUE | SUBMIT



JOURNAL OF APPLIED CRYSTALLOGRAPHY

CURRENT ISSUE | SUBMIT



**IUCrData** 

CURRENT ISSUE | SUBMIT



STRUCTURAL SCIENCE CRYSTAL ENGINEERING MATERIALS

CURRENT ISSUE | SUBMIT



CRYSTALLOGRAPHIC COMMUNICATIONS

CURRENT ISSUE | SUBMIT



JOURNAL OF SYNCHROTRON RADIATION

CURRENT ISSUE | SUBMIT



STRUCTURAL CHEMISTRY

CURRENT ISSUE | SUBMIT



STRUCTURAL BIOLOGY COMMUNICATIONS

CURRENT ISSUE | SUBMIT



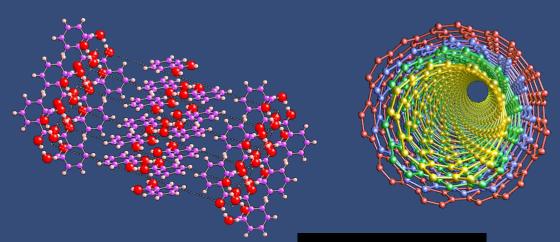
IUCrJ

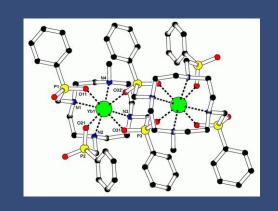
CURRENT ISSUE | SUBMIT

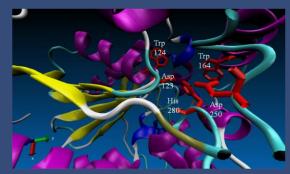
#### Modern Crystallography

Structure of matter on atomic (10<sup>-10</sup> m) ~ nanoscale range (10<sup>-6</sup> m)

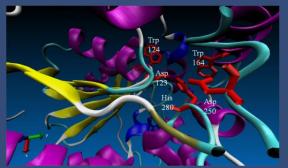
Chemistry – Biology – Physics – Materials Science











Tools: X-ray, neutron, electron diffraction, electron microscopy

Pharmaceutical industry Materials for energy storage Magnetic materials Art, archaeology Mineralogy

#### **IUCr** commissions

**Aperiodic Crystals** 

**Biological Macromolecules** 

**Quantum Crystallography** 

**Crystal Growth and Characterization of Materials** 

**Crystallographic Computing** 

**Crystallographic Teaching** 

**Crystallography in Art and Cultural Heritage** 

**Crystallography of Materials** 

**Electron Crystallography** 

**High Pressure** 

**Inorganic and Mineral Structures** 

**Magnetic Structures** 

**Mathematical and Theoretical Crystallography** 

**Neutron Scattering** 

**NMR Crystallography and Related Methods** 

**Powder Diffraction** 

**Small-angle scattering** 

**Structural Chemistry** 

**Synchrotron and XFEL Radiation** 

**XAFS** 

Data

Schools Workshops Conferences

Preparation of the IUCr congress programme

### **Main Organizer**

## Czech and Slovak Crystallographic Association



## Several attempts to get the congress to Prague since 2005





Osaka 2008





## against Hyderabad

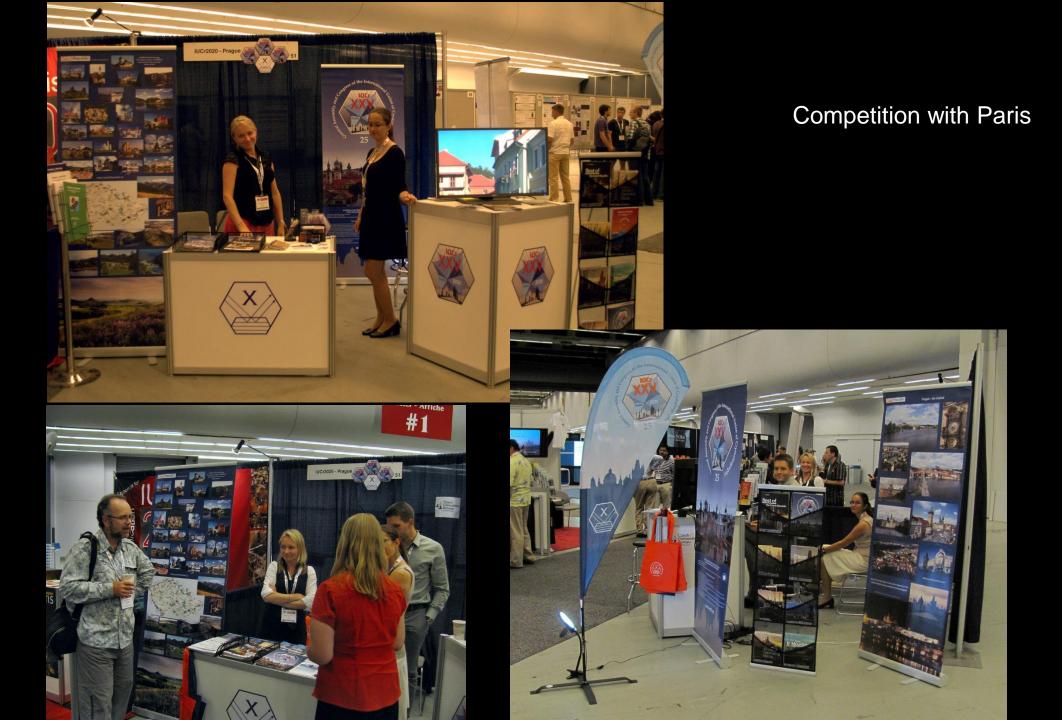


2011 Madrid





August 2020





#### **Meeting of the International Programme Committee and workshop – 2019**

About

Deadline, fees, registration

Organization

Schedule

**IUCr commissions** 

IPC of IUCr 2020

IUCr programme guidelines

Photos from CTFC

**Texts in Materials Structure** 

Confirmed registrations

Accommodation

Czech Republic

Prague





May 14, 2019



Prague Congress Centre



Hotel Olsanka



Leading With Innovation

## IPC meeting Prague, May 14, 2019











#### China







## Very efficient meeting



## Approved programme scheme, invited speakers, co-chairs

3 plenary lectures – 45 min. + 5 min. discussion

35 keynote lectures – 3 in parallel

104 microsymposia – 8 in parallel

9th parallel session – special sessions 10th parallel session – Software Fayre

#### Standard session

2 co-chairs

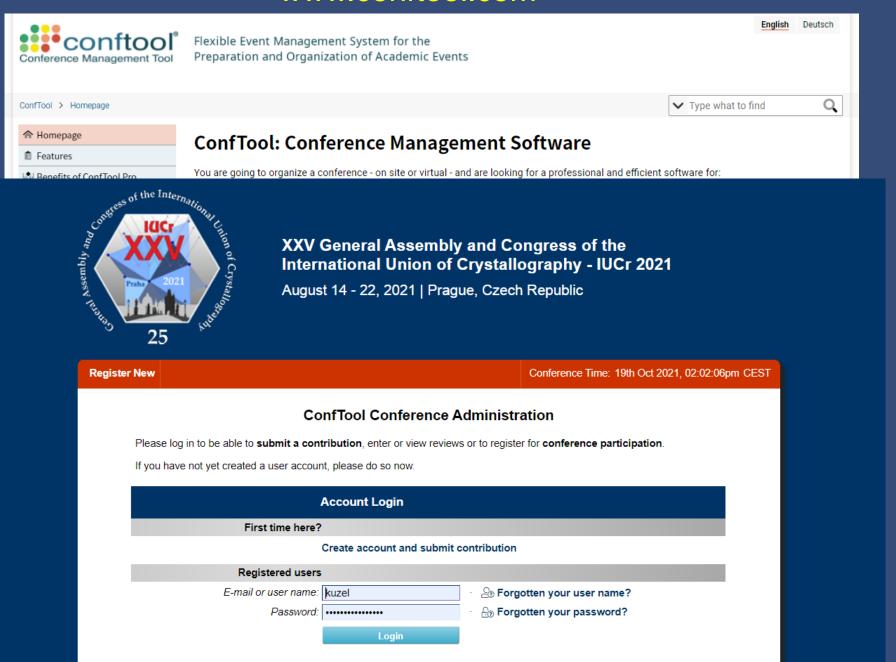
2 invited speakers – 25 min. + 5 min. discussion

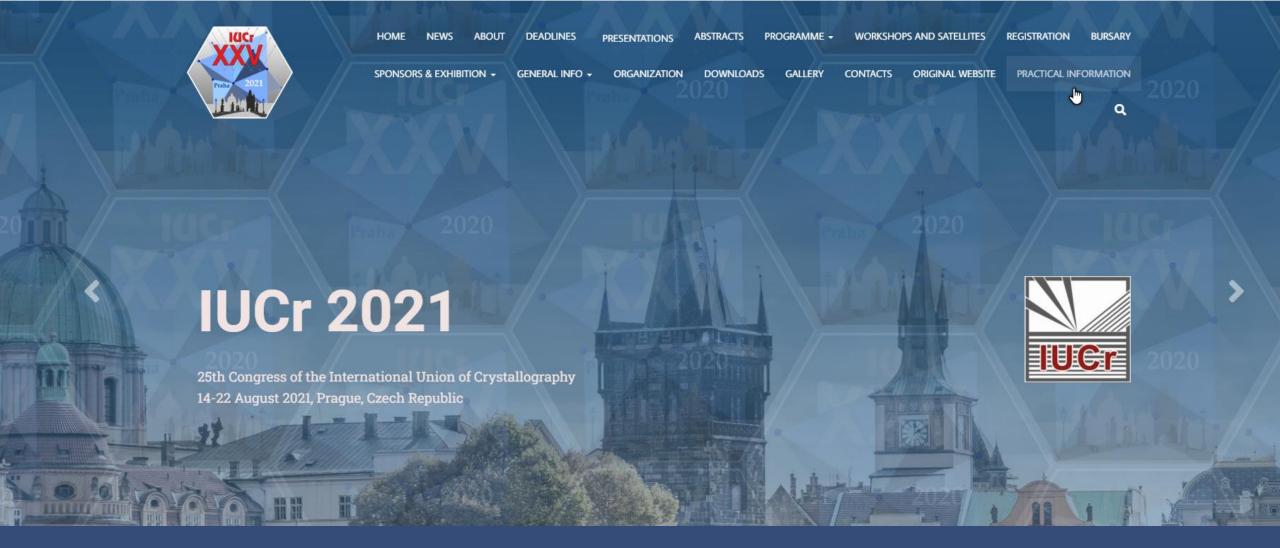
4 contributed talks – 15 min. + 5 min. discussion

246 invited speakers 208 co-chairs

### www.conftool.com

# Registration system





www.iucr25.org



HOME NEWS ABOUT DEADLINES PRESENTATIONS ABSTRACTS PROGRAMME - WORKSHOPS AND SATELLITES REGISTRATION

SPONSORS & EXHIBITION - GENERAL INFO - ORGANIZATION DOWNLOADS GALLERY CONTACTS ORIGINAL WEBSITE PRACTICAL INFORMATION

Gold

**Platinum** 



LIST OF SPONSORS AND EXHIBITORS



**Anton Paar** 

a spectris company





BURSARY

Bronze







**Sponsors** 

## February 2020

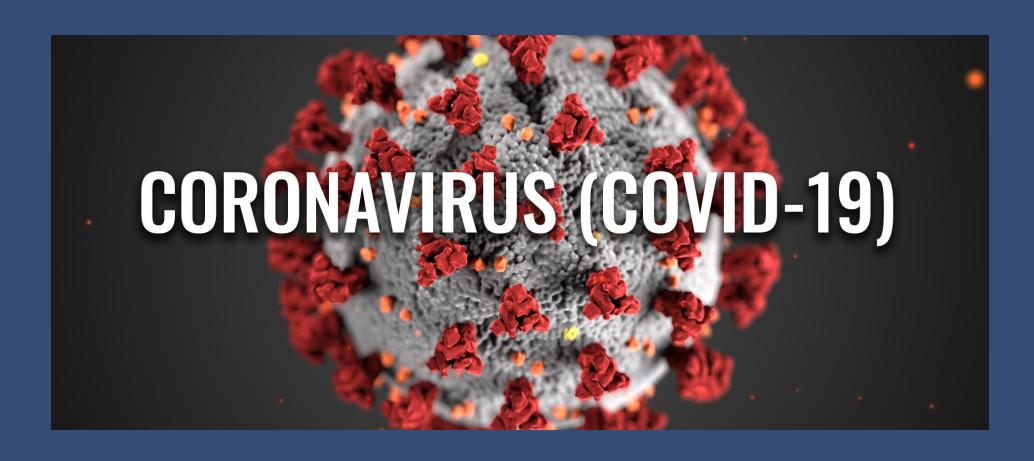
Registration open

All plenary, keynote lectures and co-chairs confirmed

Most of invited speakers in sessions

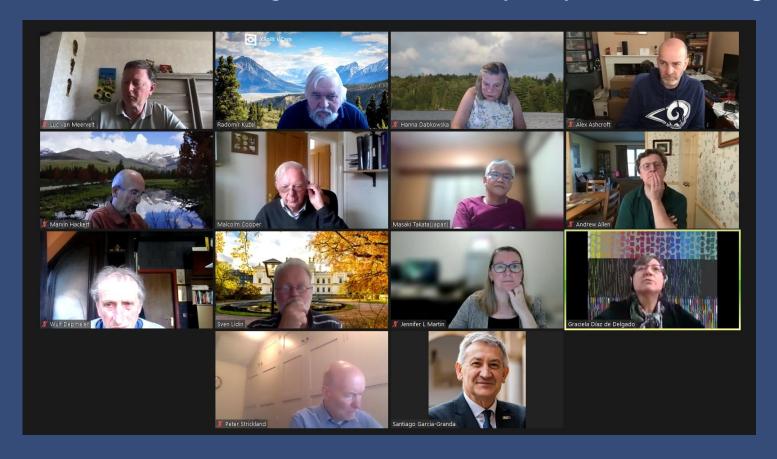
Club H	Session Chair: Alex Ashcroft  IUCr assembly 2		
Date: Tuesday, 17/Aug/2021			
9:00am - 9:50am	KN-13: Structural flexibility and disorder in functional materials  Location: Terrace 2A	•	
Terrace 2A	Session Chair: Brendan Kennedy Andrew Goodwin		
9:00am - 9:50am	KN-14: Quantum crystallography and spintronic materials Location: Terrace 2B Session Chair: Krzysztof Wozniak Piero Macchi	•	
Terrace 2B			
9:00am - 9:50am	KN-15: Time resolved macromolecular crystallography Location: Club A Session Chair: Ivana Kuta Smatanova Arwen R Pearson  Morning break 3: Exhibition, posters, coffee/tea Location: Exhibition and poster area	<b>⊕</b>	
Club A			
9:50am - 10:20am Exhibition and poster area		<b>⊕</b>	
10:20am - 12:45pm	MS-33: CryoEM for macromolecules - from single particles to microcrystals Location: Club A Session Chair: Jan Pieter Abrahams Session Chair: Jiri Novacek Invited: Nenad Ban (Switzerland), Dimple Karia (Netherlands)	<b>!</b>	
Club A			
10:20am - 12:45pm	MS-34a: Structural biology of enzymes, mechanism and regulation Location: Club B Session Chair: Mirjam Czjzek Invited: Liang Wu (UK), Orsolya Barabas (Germany)  MS-35: Polymorphism and structural transformation of organic crystals from synthesis to characterization Location: Club D Session Chair: Kenneth D. M. Harris Session Chair: Doris E. Braun Invited: David Bryce (Canada), Franziska Emmerling (Germany)  MS-36: Generalizations of crystallographic groups and their applications Location: 221-2 Session Chair: Gregory L McColm Session Chair: Eden Delight Miro Invited: Pavel Kalouguine (France), Martin Cramer Pedersen (Denmark)	<b>₽</b>	
Club B			
10:20am - 12:45pm		<b>•</b>	
Club D			
10:20am - 12:45pm		<b>•</b>	
221-2			
10:20am - 12:45pm	MS-37: Total scattering Location: Terrace 2A Session Chair: Pierre Bordet	<b>•</b>	
Terrace 2A	Session Chair: Emil Bozin Invited: Stephan Rosenkranz (USA), Bo Brummerstedt Iversen (Denmark)		
10:20am - 12:45pm	MS-38: Structural, electronic and magnetic ordering: From fundamental physics to functionality  Location: Club C Session Chair: Javier Sanchez-Benitez	<b>•</b>	

## March 2020



## March 2020

First IUCr EC Zoom meeting → Decision to postpone the congress to 2021



The programme was fixed and nothing more was done in 2020

## January 2021

Further change of the time of the congress impossible

The congress cannot be cancelled

Probably the congress will have to be organized as online only

## February 2021

Demonstration of the hybrid presentation system gCon developed by T.R.I.



www.tri.cz

Completely independent on the location of chairs, speakers

Many possibilities, virtual exhibition booths





Aleš Basík

basik@tri.cz

775 101 413

vedení projektů

marketing

3D grafika



David Veselý
vesely@tri.cz
774 066 677

programování
mobilní aplikace
technický dozor na akcích



matejka@tri.cz
777 101 613

operační systémy
počítačové sítě
grafika

Tomáš Bělina

belina@tri.cz

Pavel Matějka



programování mobilní aplikace technický dozor na akcích

777 101 370



Jakub Hlaváček

hlavacek@tri.cz

724 589 860

technický dozor na akcích
Powerpoint specialista

testování software

## February-March 2021

We could go for hybrid form but the decision cannot be made earlier than in about June

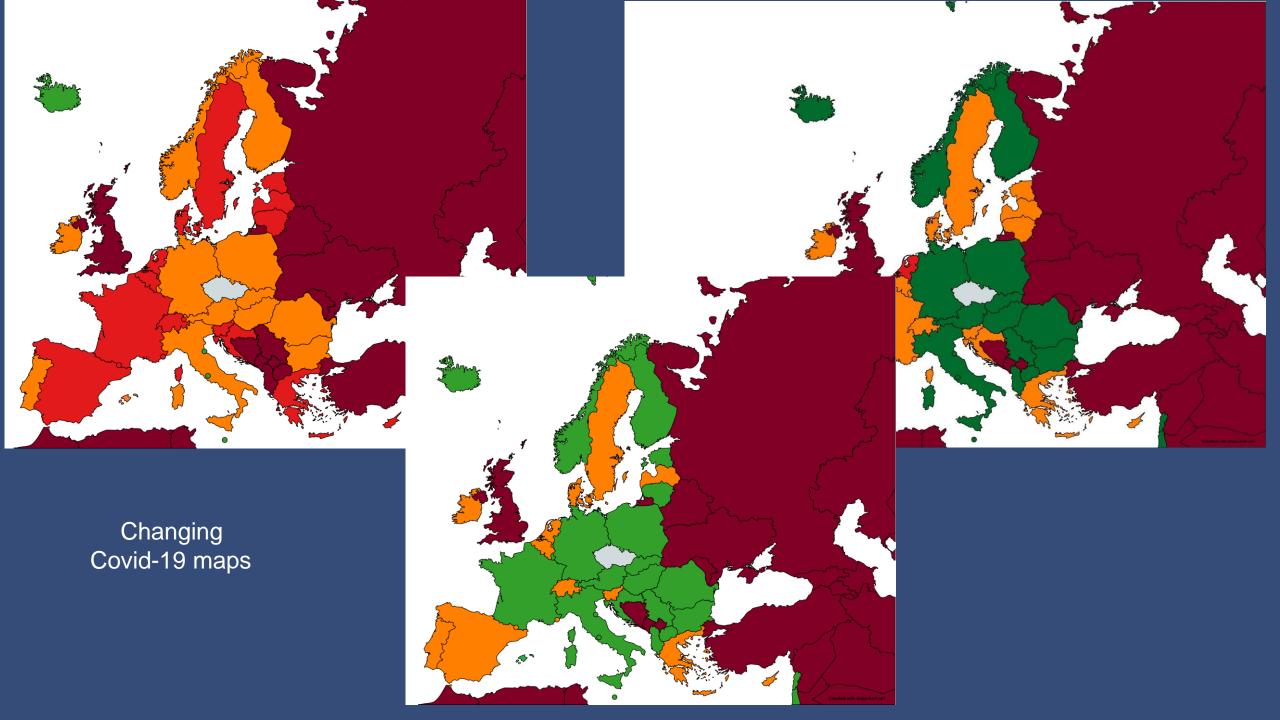
Communication with all invited speakers, co-chairs – nearly 500 people

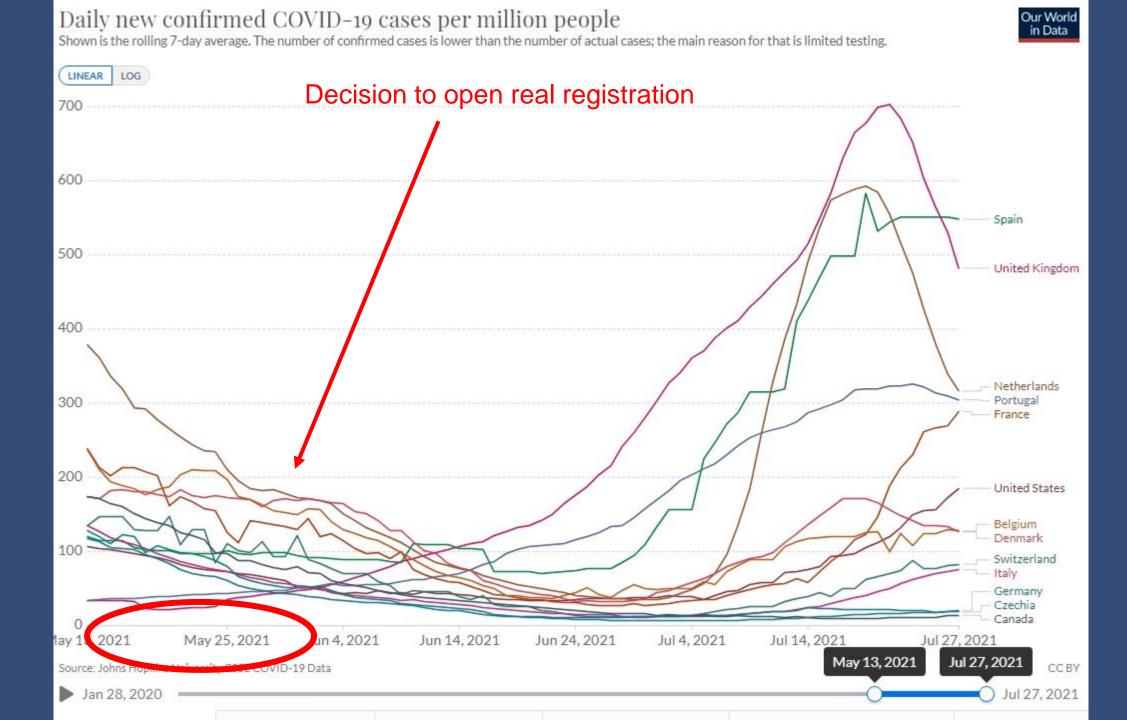
Can you confirm your participation online or real, if possible?

Obligatory options in pre-registration form (possible to change in time)

•	Real participation, if possible, if not, virtual	40 %
•	Real participation preferred but not much probable	25 %
•	Virtual participation only	20 %
•	Real participation only	5 %
•	Cancel participation, no participation	5 %

Virtual registration open with a possibility of later upgrade to real one





## May-June-July 2021

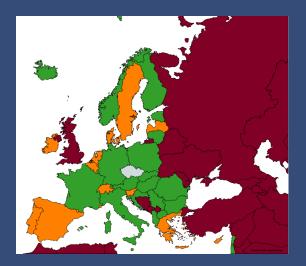
Abstract selection – programme finalization

Continuous extension of deadline for abstracts since April to end of June

Exhibition, Rooms - plan completely rebuild

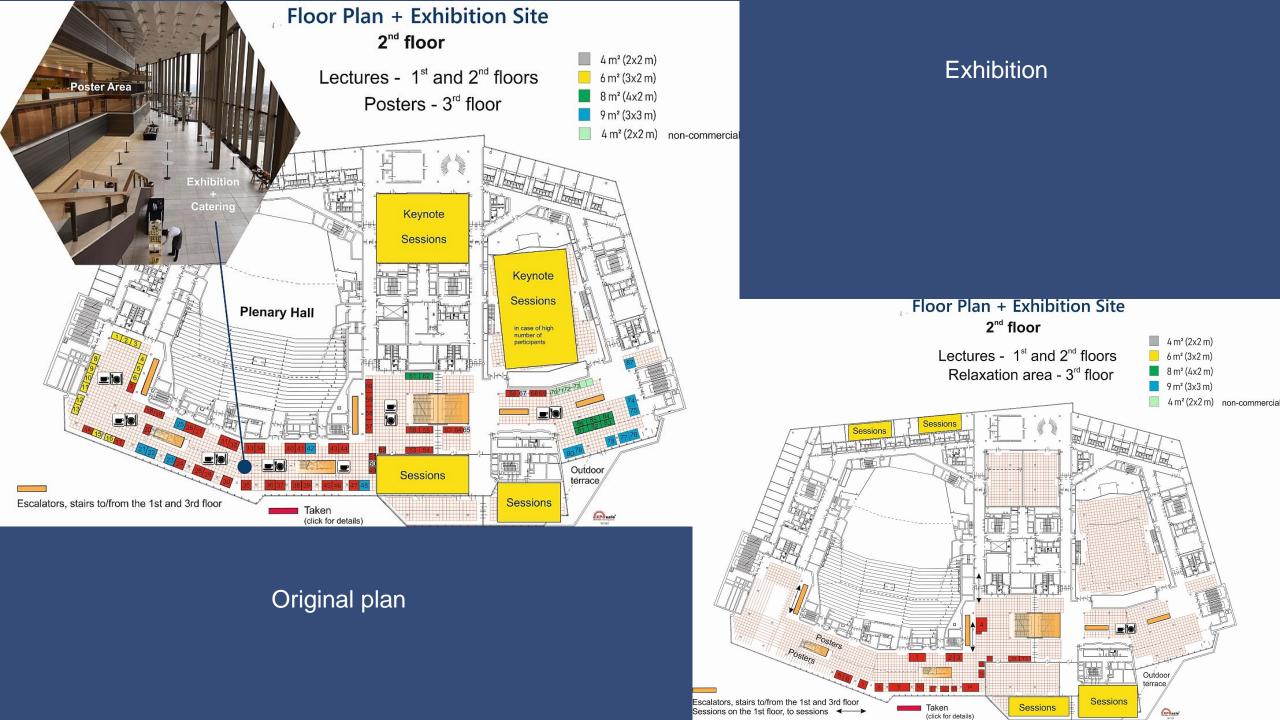
Flexibility of PCC necessary

Restrictions on travelling

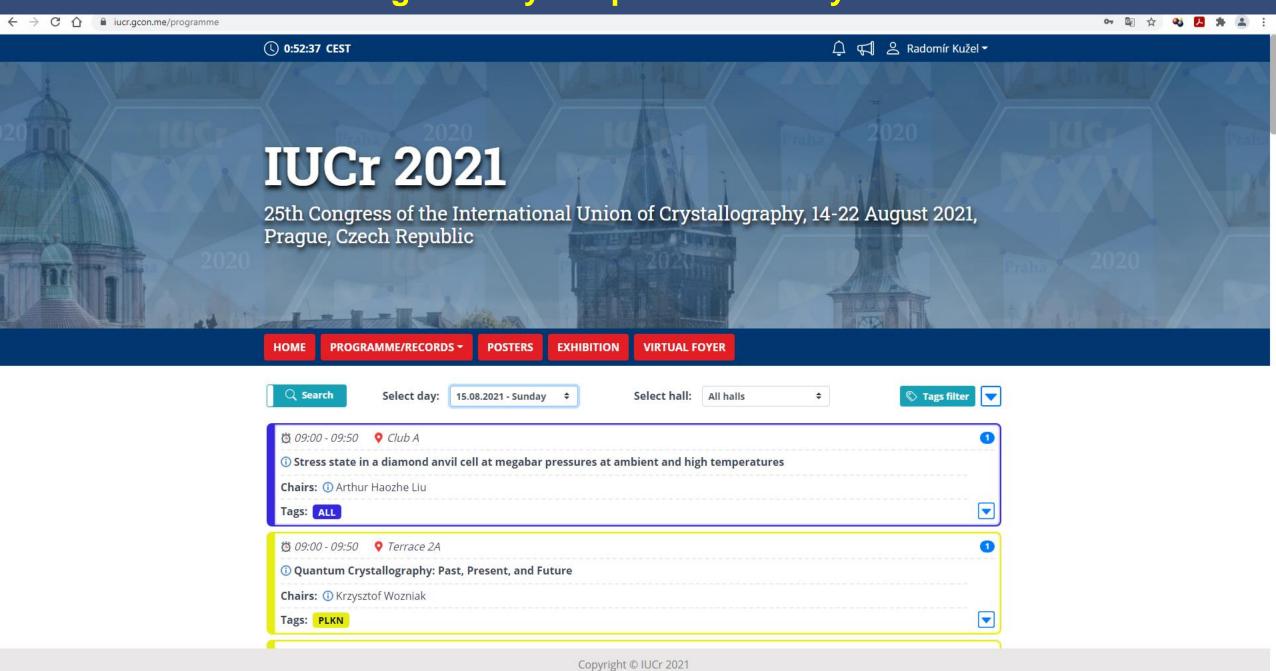


Country regulations

Institutional regulations



## gCon - Hybrid presentation system





#### Clear and intuitive instructions

Participants asked for upload of presentations in a week before the congress

Checked for technical suitability All presentations run from the local server but controlled by speakers

















#### Technical requirements for speakers and chairs

For a smooth running congress and a simple connection, we recommend implementing the following requirements.

- · internet connection: at least 10Mbps upload and 10Mbps download
- · internet browser: the latest version of browser Google Chrome, Microsoft Edge, Vivaldi or Apple Safari
- network: allowed UDP port 9000 for IP address 46.234.106.96
- sound and video: we recommend headphones with a microphone and a quality webcam
- . tip for you: make sure nothing disturbs you during your presentation
- . tip for you: check the camera position and choose a room with proper lighting.



#### Your browser is supported. Everything should work fine.

The following table lists all the session you participate in remotely. You are either the chair of the session or the speaker at the presentation. The "Enter session" button will not be active (green) until the session starts. After entering the session, you will find:

- . Chair: Your microphone will automatically turn on and you will see a picture from the hall and hear what is happening in the hall. Remember that your microphone is turned on as soon as you enter the session.
- Speaker: You will see a picture from the hall and hear what is happening in the hall. Your microphone will be muted when you enter the session. You will watch the program in the hall and wait for your presentation to take place. Your presentation will be started by a technician when prompted by the chair. The first slide of this slide show appears automatically, and your microphone turns on. Below the presentation window wi be the controls for moving the slides. When you finish your presentation, you'll still be in the session and your microphone will be muted automatically.

You can turn your microphone and webcam on and off while you're in the session. You can leave the session yourself by pressing the "Leave session" button, or you will leave the session automatically when it is finished







## 25th Congress of the International Union of Crystallography

## Lecture screen



#### Lukáš Palatinus

## Hydrogens

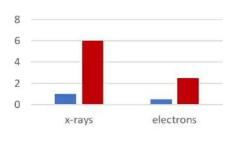
Hydrogens scatter relatively more in electrons than in x-rays.

Despite of that for a long time difficult to see.

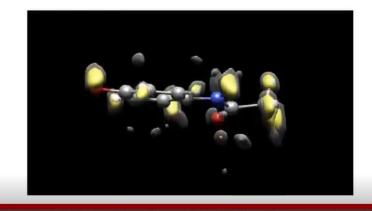
Scattered mentions in literature before 2017 (Vainshtein et al., Palatinus et al., Rodriguez et al.)

The possibility demonstrated and analyzed in detail in 2017 by Palatinus et al. (2017)

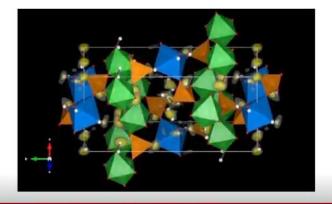
Now almost routine, although not always guaranteed.











Vainshtein et al. in Electron Diffraction Techniques, vol. 1, J. M. Cowley, Ed. (1992); Palatinus et al. (2015), Acta Cryst. B; Rodriguez et al. (2015), Nature 525; Palatinus et al. (2017), Science 355









# Remote speaker, local audience 25th Congress of the International Union of Crystallography





25th Congress of the International Union of Crystallography



### Remore speaker, local chairs

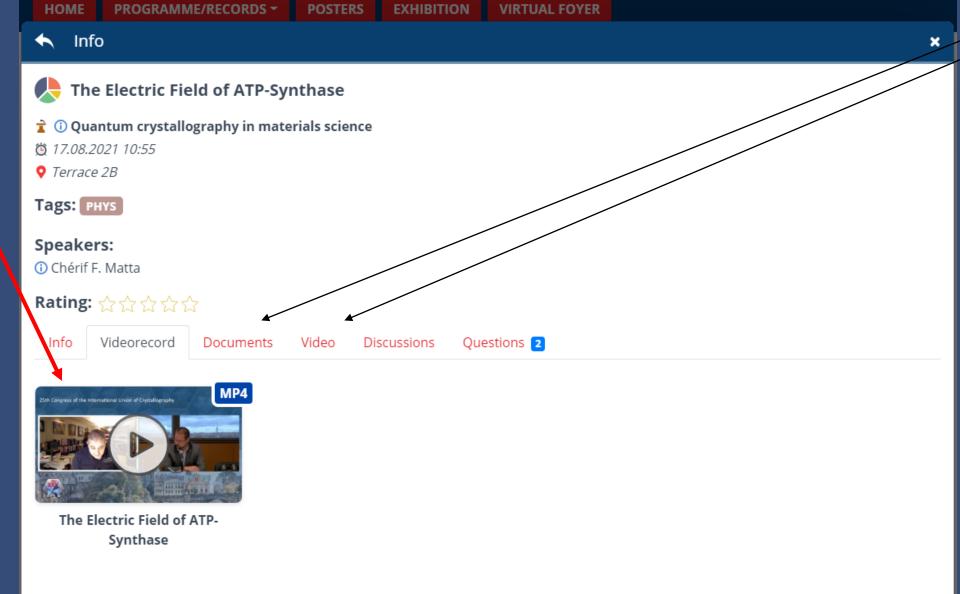


## 25th Congress of the International Union of Crystallography











#### **Poster files**

This is where you upload your poster file. You can only upload one file. The maximum file size is 200 MB. If you have multiple files, such as a video recording and a PDF file, upload the files packaged in a zip archive. We must review the uploaded file to see if it meets the technical requirements and then approve it. An already approved poster cannot be uploaded again! Once approved, the poster will be accessible on the website for other registered participants.



**△** Upload poster

#### **Documents for poster**

Here you can upload additional files for the poster. These files are not approved and once uploaded are immediately accessible on the website for other registered participants.

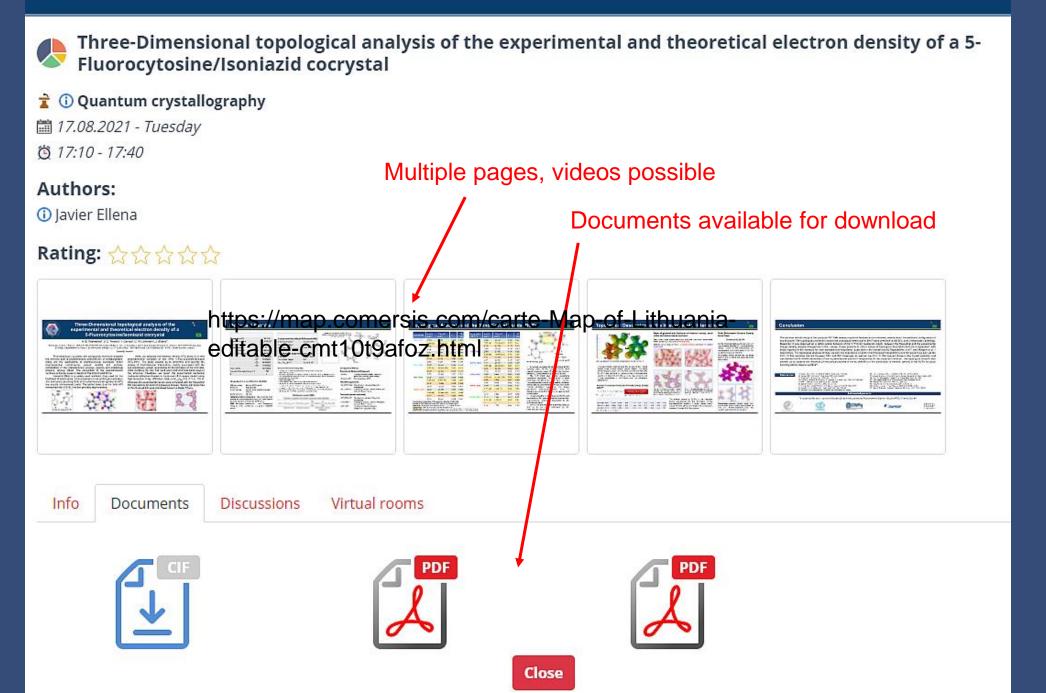
**⚠** Upload documents

PROGRAMME/RECORDS ~ **EXHIBITION VIRTUAL FOYER** HOME **POSTERS** (i) Cryo-EM ☆ 17.08.2021 - Tuesday 17:10 - 17:40 14 Poster area (i) Pharmaceutical materials 🎁 17.08.2021 - Tuesday 17:10 - 17:40 10 Poster area ▼ (i) Polymorphism 🎁 17.08.2021 - Tuesday 17:10 - 17:40 13 Poster area (i) Quantum crystallography ① Crystallographic and Computational Electron Density of dx2-y2 Orbitals of Azo-Schiff Base Metal Complexes... 🕞 IMG 🙎 ROOM Authors: ① Yuji Takiguchi ① Experimental and theoretical charge density study of two tetranuclear transition metal clusters with single... 🕞 IMG 😕 ROOM Authors: (i) Sofie Stampe Leiszner ① Charge density distribution of API in crystals and ligand-receptor complexes Authors: (i) Alexander A. Korlyukov ① Computational analysis of intermolecular interactions in a crystal with structural phase transitions 🕞 IMG 📴 DOC 🙊 ROOM Authors: (i) Daisuke Takagi ☐ IMG 
☐ ROOM ① EVIDENCE OF STRONG HYDROGEN BONDING IN CRYSTAL STRUCTURES OF TRANSITION METAL COMPLEXES Authors: (i) Danijela S. Kretić

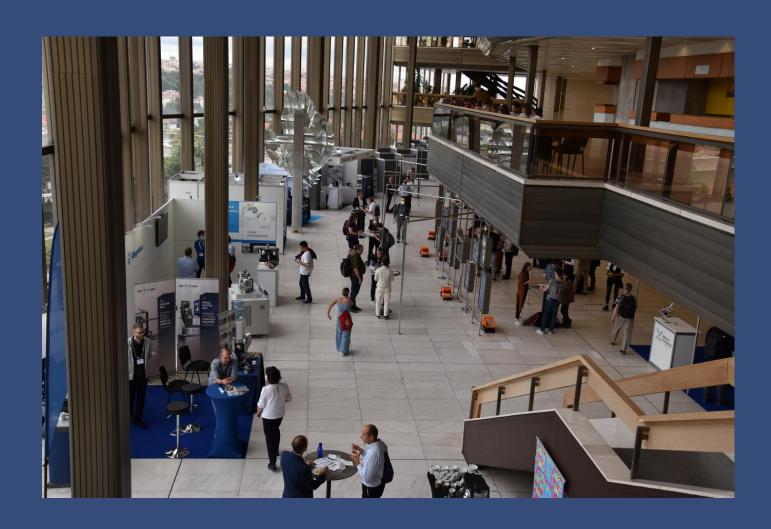
Virtual Rooms

For 25 people

# Poster page



# Exhibition



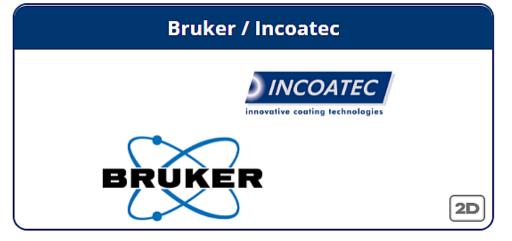
#### **Platinum**



### Virtual exhibition

#### Gold





**ELDICO Scientific** 

**Malvern Panalytical** 















Dear Radek

Well now! The organization of the Congress was fantastic and everything including the remote presentations and interactions were perfect. I congratulate you and your team in achieving the seemingly impossible. This Congress will surely go down in everyone's memory as a very special success. I am lost in admiration for what you have been able to do.

Kind regards Mike

Dear Radek, Pavlina, Ivana, and all Czech Friends,

What you have done with the 2020/21 IUCr Congress organization is beyond description. I am writing to express my highest appreciation and congratulations to you and your teams: you have overcome the impossible and organized an amazingly successful IUCr Congress. The organization was flawless but also the scientific content was magnificent. From my point of view (a very active on-line participant) everything worked perfectly; and the quality of the virtual environment was breathtaking. A quantum leap in the mastery of IUCr congress organization. With my all best wishes, Mariusz

Dear Radek, Ivana, Pavlina, and Martin,

Congratulations on successfully hosting such a wonderful congress. None could have managed the COVID situation better than you did. The content was top quality, and the opportunities to connect with colleagues were many. I spent the whole morning today working through continuing research-related email conversations started during the congress. I'll still look forward to watching recordings of some presentations that I missed. Your hybrid meeting platform will be a benchmark for future congresses. Thank you for so many years of effort to strengthen the union and to make Prague 2020 a great experience.

**Branton** 

#### Dear Radek,

I would like to thank you and all the organizers for an unforgettable congress. Every IUCr congress stays in my mind as an inspiring and engaging experience from a scientific point of view. This time I would say that, looking at you and at your team, I learned from your example how it is possible to face unpredictable events and challenge them by exploring new paths without losing your smile and kindness. As a chair of a session I would like to acknowledge your support in all the phases of the difficult task of assembling the program and the support of the technical team during the session. This IUCr congress was a remarkable event for me as a scientist and more important as a human being. I enjoyed every moment!

Grazie di cuore. Consiglia

Dear Radek,

Please allow me to hearty congratulate you and also your team for the organization of the wonderful IUCr Congress. You did an excellent job and organized a great conference. As an on-line attendee I could fully enjoy the meeting. It is a huge advantage that the lectures will be available on-line for three more months. As you said in your closing remark, it is the start of a new era. I believe that the in person meetings are very important but from now on hybrid conferences and archiving the conference events are recognized and will be followed. I both liked the lecturer and the chair functions of the gcon platform. The poster session was the best I have ever experienced.

All best wishes, Petra

## **Comprehensive statistics**

List of participants available for each individual item

https://iucr25.org/hybrid-conference-statistics/

		Count of views of e	ach session	s	
		All halls			
		15.08.202	91		
		13.00.202	- 1		
Date	Time	Session	Count	Presentation	Count
15.08.2021	10:20 - 12:45	Validation of cryoEM structures and maps	145		
				Protein hydrogen bond parameters as a new validation tool	87
				Integrative modeling to characterize structure and dynamics of biomolecules	81
				Community recommendations on validating cryo- EM models and data	65
				Cryo-EM Validation Metrics in EMDA	46
				FSC-Q: A method for quality analysis of cryoEM- derived models	39
				Outcomes from EMDataResource model challenges	44
				Quantifiying resolvability of atomic features in cryo- EM maps using Q-scores	52
15.08.2021	10:20 - 12:45	Structural bioinformatics	104		
				Introduction to the session	31
				RNA-Puzzles - the evaluation and automation of RNA 3D structure prediction	46
				A nucleic acid structural alphabet and conformational analyses at dnatco.datmos.org	40
				Applications of residue contact predictions in structural biology.	40
				Pepsi-SAXS/SANS - small-angle scattering-guided tools for integrative structural bioinformatics	41
				Refactoring the B-factor: intuitively extracting	48

Transferred data in stream	11.8 TB (most to UK)
Total size of uploaded files	33 GB
Total number of slides	18 042
Viewed hours in stream	15 318 hrs
Working hours of technicians	1 400 hrs
Total number of lecture views	12 325
Total number of poster views	35 054
Virtual exhibition stands Total number of views	5 156
Total number of chats	1 033

### Most popular keynote lectures

Title	Speaker	Views
Quantum crystallography: past, present, and future	Dylan Jayatilaka	211
Electron crystallography of molecular crystal	Lukáš Palatinus	194
Structural flexibility and disorder in functional materials	Andrew Goodwin	185
Fourth-generation Synchrotron radiation and XFEL facilities: new era in crystallography and material science	Aleksandr Blagov	167
Electron density, and its interplay with the energy and properties of molecules and solids	Julia Contreras-Garcia	166
Time-resolved macromolecular crystallography: no longer a niche pursuit?	Arwen R Pearson	159
High pressure crystallography unlimited	Leonid Dubrovinsky	150
MicroED: conception, practice and future opportunities	Tamir Gonen	147
The crystal and the rose: On the impact of crystals and crystallography on arts and mind	Juan Manuel Garcia-Ruiz	: 134
Crystal engineering of adaptive smart materials: from mechanical bending to self- healing	Malla Reddy	134

## Sessions

Title	Views
Automation in bio-crystallography: tools, perspectives and applications	193
Crystal structures of pharmaceutical and organic compounds from electron diffraction	185
Structural biology against coronavirus/covid-1	183
Machine learning in biological and structural sciences	178
Total scattering	168
Protein design and engineering	163
Recent advances in electron crystallography techniques	161
Combination of X-rays and electrons for structure characterization	157
Dynamic frameworks	152
CryoEM for macromolecules – from single particles to microcrystals	151

## **Most visited posters**

Poster session	Title	Presenting author	Views (unique)
Structural bioinformatics	The rotag library: generating protein structure-specific side-chain rotamer libraries	Algirdas Gribauskas	149
	note: This poster is the first poster of the first session  Structure determination of the motor domain of centromere		
Drug design	associated protein E	Asuka Shibuya	102
Crystal structure prediction	Predicting the packing behaviour of porous organic cages	Emma Helen Wolpert	95
Powder diffraction	Structure determination of soft crystal polymorphs by using prediction technique with powder X-ray diffraction data	Shigeaki Obata	93
Crystallographic data	Chemical annotation in the Crystallography Open Database	Andrius Merkys	91
Perovskites	Effect of Bi non-stoichiometry on the crystallographic structure of Na1/2Bi1/2TiO3	Ahmed Gadelmawla	86
Metal-organic frameworks	Kinetic and thermodynamic control in assembly of rare-earth cyamelurates	Albina Isbjakova	86
Structural bioinformatics	On the role of COCO interactions in the classification of betaturns.	Consiglia Tedesco	84
Automation in biocrystallography	Faster turnaround of macromolecular crystallography research	Julius Hallstedt	81
Drug design	Fragment Based Drug Discovery of SARS-CoV-2 Main Protease	Weixiao Song	81

### Use of exhibition stands

Company	Total View	Twitter	Facebook	LinkedIn	Webpage	Youtube	Info	Video	Document	Chat
Rigaku Corporation	649	0		0		0	181	216		119
Anton Paar GmbH	284	0	0	0	0	1	56	71	81	28
Bruker / Incoatec	606	0	0	8	0	2	121	194	146	101
ELDICO Scientific	500	0	0	0	0	0	50	101	85	50
Malvern Panalytical	191	1	1	1	0	1	41	81	79	33
ICDD	90	0	0	0	0	1	26	43	41	27
Dectris	260	0	0	1	0	0	84	69	58	66
Thermo Fisher Scientific	92	0	0	0	0	0	23	29	34	8
Amsterdam Scientific Instruments	49	0	0	1	0	0	5	18	19	12
Cambridge Crystallographic Data Centre	238	0	0	0	0	0	93	45	43	85
Cegitec Innovation	41	0	0	0	0	0	4	0	0	5
CrystalMaker Software Ltd	198	0	0	0	0	4	61	68	58	23
Douglas Instruments	77	1	0	0	0	2	25	47	40	27
European Crystallographic Association (ECA)	86	0	0	0	0	0	10	40	50	19
Excillum	82	0	0	0	0	0	19	22	20	16
Huber Diffraktionstechnik	65	0	0	0	0	0	11	0	21	21
Chromotek	23	0	0	0	0	0	0	8	9	2
International Union of Crystallography (IUCr)	243	0	0	0	0	0	52	38	104	65
Irelec	64	0	0	1	0	0	7	21	29	11
MiTeGen	318	1	0	0	0	0	13	53	54	27
MLZ	112	0	0	0	0	0	20	0	29	47
Oxford University Press	157	0	0	0	0	0	37	32	52	16
STOE	133	0	0	0	0	0	16	17	19	10
Xenocs	94	1	0	2	0	2	18	0	32	14
2023 IUCr Congress in Melbourne	176	2	0	1	0	0	36	55	45	62
2026 IUCr Congress Bid for Calgary, Canada	328	4	0	0	0	0	70	125	100	139
Total counts	5 156	10	1	15	0	13	1 079	1 393	1 406	1 033

### 25th Assembly and Congress of the International Union of Crystallography (IUCr)

#### **Hybrid congress in the time of pandemic, August 2021**

#### **Statistic information**

Real participants	Virtual participants	STREAM participants	September-
Regular 316	Regular 765	15.8. 762	October active
Students 157	Students 165	16.8. 924	participation
Exhibitors 50	Exhibitors 9	17.8. 824	
Sum 523		18.8. 801	~ 600 people
	Sum 939	19.8. 804	
		20.8. 699	
		21.8. 516	

All IUCr25 participants 1638

## Credits





IPC chair
Ivana Kutá Smatanová

Faculty of Science,
University of South Bohemia
České Budějovice



Faculty of Mathematics and Physics Charles University Praha



LOC chair
Pavlína Řezáčová

Institute of Organic Chemistry
and Biochemistry
Czech Academy of Science, Praha



Jindřich Hašek
BIOCEV, CSCA president





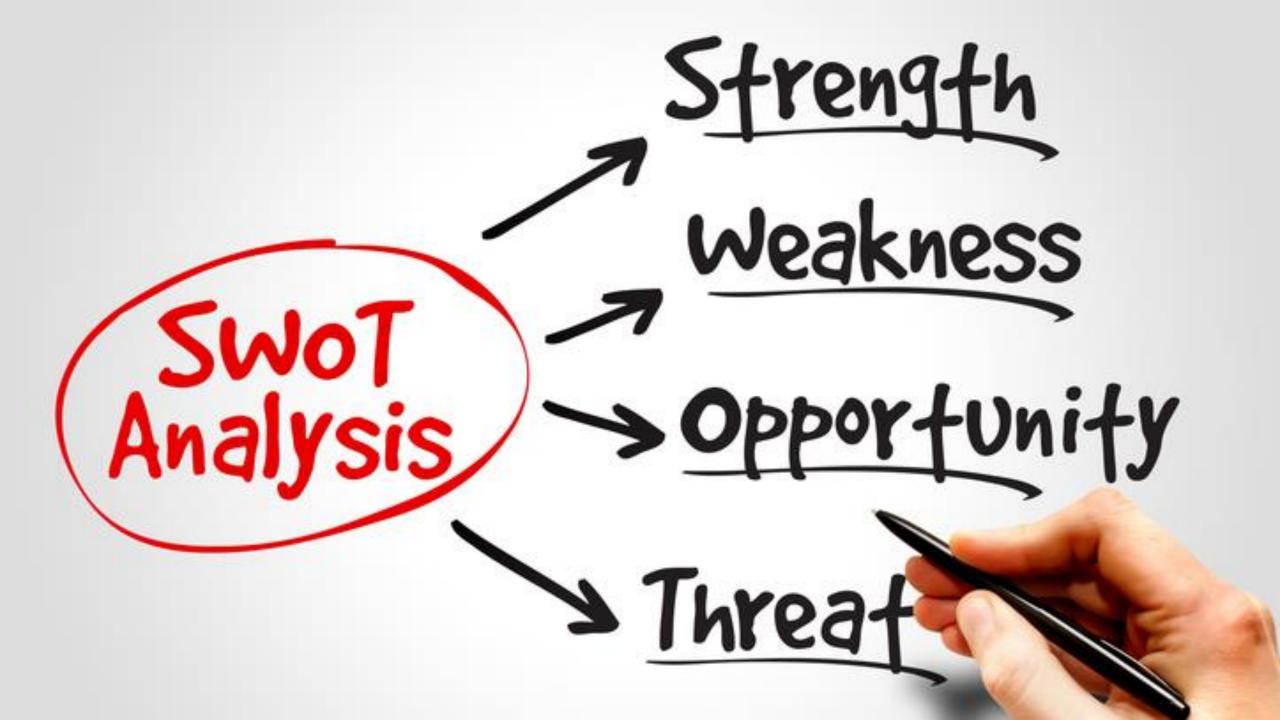


Martin Haloun
Auletris





l Z zátiší catering C



Being able to meet globally at all

more participation more people can be part of the discussion

More participants

Larger audiences

choice Flexibility

y Inclusiveness

Options

Connectivity Flexibilty

creativity choice for participants

Back-up plan

Low budget for attendees online

Technical issues Unknown

workload

Technology not there yet

Weaknesses

personal contact

Risks Costs less engagement

# Time zone issues Lack of networking

lack of experience

Too many options

Budget

DAY 1

Pax by low income countries more sustainable events

Easier content accessibility

New audiences

Wider audience

Sustainability More participants

Sustainable travel

online participation

Opportunities

Reaching those who can't travel

Losing personal connection

In need of creativity Lower participation

Not techsavy No shows Technical issues

Revenue decline

Tech fail

Unequal engagement

technologie dependecy member engagement Nee businesscase decrease of event sizes Threats



Choice for delegates

innovation

sustainabilitx Inclusivity connection

Sustainability

inclusion Flexibility

Audience reach

Your audience reach is bigger

need more human resources

Weaknesses

Not meeting everyone

Demanding technology

Audience focus timezones int'l audience

Networking

technology

Poorer development Not attractive for sponsors Costs

Connection

DAY 2

Leverage the data collected

speakers who may not normally travel

Wider Reach New sponsors

More participation possible New audiences Flexibility Wider audience

Wider exchange of information or knowledge

New revenue streams

Delegates switch to virtual participation last minute

less overnights in destination negative Influence in Tourism industry

Private life

Data security

Technology Gap Tech fail No shows

Lack of skills

Virtual participants not engaged Technology gap and exclusion

Threats

pportunities