







# **EUROPEAN** CONFERENCE ON

# BORON CHEMISTRY

Campus de la UAB, Barcelona, Spain July 3-7, 2022

**Detailed Conference Program** 

Rosario Núñez, chairwoman José Giner, chairman

**Sponsors and Partners** 







































### Sunday (3rd July)

## Auditorium, Faculty of Philosophy and Arts/Facultat de Filosofia I lletres, UAB

16:30-19:30	Documentation	
19:30-21:30	Welcome cocktail	

Boron containing materials, polymers, ceramics, borides, boron nitride, boron oxides

Organoboron compounds and their metal complexes

Boron compounds in medicine
Other aspects of boron chemistry, including characterization and modelling

Cluster boron chemistry

Asymmetric synthesis via organoboron compounds, enantios elective reductions, chiral boron compounds

	Monday (4  Auditor	* -
08:00	R	egistration
08:40	Ope	n Ceremony
Session 1	Chair: Philippe Miele	
09:00	KN1 Todd Marder	
09:45	3-Coordinate Organoboron Compounds Light The W INV1 Emmanuel Lacôte	ay: Synthesis, Optical Properties and Cell Imaging
07.43	Photopolymerization with Boron Radicals	
Room	Auditorium	501 (parallel room)
10:20	Chair: Philippe Miele O1A Holger Helten	Chair: Todd Marder O1B Juan Z Davalos
10.20	Macromolecular Organoborane Chemistry:	Experiment vs. theory in paramagnetic [FeIII(1,2-
	Developing Sustainable Approaches	$C_2B_9H_{11})_2[C_5^*: M\"{o}ssbauer spectroscopy and electronic}$
	TI TI	structure computations
10:40	O2A Sabine Müller	O2B Taiki Morita
	Assembly of Functional Nucleic Acid Enzymes and	Asymmetric Synthesis of Oxazaborolidines via Palladium-
	Aptamers from Short Borono-Modified	Catalyzed N-H/B-H Double Functionalization of 1,2-
	Oligonucleotides	1 - ab anim aa
44.00	Ougonacieotaes	Azaborines
11:00		• • • • • • • • • • • • • • • • • • • •
11:00		offee Break
Session 2	Co Chair: William Harman	offee Break  Chair: Todd Marder
	Contain: William Harman  O3A Pavel Matejicek	offee Break  Chair: Todd Marder  O3B Andrea Olmos
Session 2	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and	offee Break  Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the
<b>Session 2</b> 11:30	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and polymer chemistry	Offee Break  Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family
Session 2	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan	Offee Break  Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg
<b>Session 2</b> 11:30	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan  A Highly Water-Stable meta-Carborane-Based	Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg  Transition metal boryl complexes: New answers to old
<b>Session 2</b> 11:30	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan  A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient	Offee Break  Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg
<b>Session 2</b> 11:30	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan  A Highly Water-Stable meta-Carborane-Based	offee Break  Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg  Transition metal boryl complexes: New answers to old questions?
Session 2 11:30	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan  A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation	Offee Break  Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg  Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf
Session 2 11:30	Chair: William Harman O3A Pavel Matejicek Anionic boron clusters in supramolecular and polymer chemistry O4A Lei Gan A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation SC1A Ainee Ibrahim	Offee Break  Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg  Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf
Session 2 11:30	Chair: William Harman O3A Pavel Matejicek Anionic boron clusters in supramolecular and polymer chemistry O4A Lei Gan A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation SC1A Ainee Ibrahim Solid-state green hydrogen export utilising the	Offee Break  Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg  Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf  Tricyanoboraneimidazoline-2-ylidenate Anions – Ditopic N-
Session 2 11:30 11:50 12:10	Chair: William Harman  O3A Pavel Matejicek Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation  SC1A Ainee Ibrahim Solid-state green hydrogen export utilising the regeneration of BH <sub>4</sub> from B(OH) <sub>4</sub> and B(OCH <sub>3</sub> ) <sub>4</sub> SC2A Louis Le Moigne Catalyst free transfer hydrogenation from amine-	Offee Break  Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg  Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf  Tricyanoboraneimidazoline-2-ylidenate Anions — Ditopic N-Heterocyclic Carbene Ligands  SC2B Masato Tsuda  Synthesis of Isoxazoloazaborines via Gold(I)-Catalyzed
Session 2 11:30 11:50 12:10	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan  A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation  SC1A Ainee Ibrahim  Solid-state green hydrogen export utilising the regeneration of BH <sub>4</sub> from B(OH) <sub>4</sub> and B(OCH <sub>3</sub> ) <sub>4</sub> SC2A Louis Le Moigne	Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg  Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf  Tricyanoboraneimidazoline-2-ylidenate Anions — Ditopic N-Heterocyclic Carbene Ligands  SC2B Masato Tsuda  Synthesis of Isoxazoloazaborines via Gold(1)-Catalyzed Propargyl Aza-Claisen Rearrangement/Borylative
Session 2 11:30 11:50 12:10 12:25	Chair: William Harman  O3A Pavel Matejicek Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation SC1A Ainee Ibrahim Solid-state green hydrogen export utilising the regeneration of BH <sub>4</sub> from B(OH) <sub>4</sub> and B(OCH <sub>3</sub> ) <sub>4</sub> SC2A Louis Le Moigne Catalyst free transfer hydrogenation from amine-borane dimers and oligomers to different substrates	Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg  Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf  Tricyanoboraneimidazoline-2-ylidenate Anions — Ditopic N-Heterocyclic Carbene Ligands  SC2B Masato Tsuda  Synthesis of Isoxazoloazaborines via Gold(1)-Catalyzed Propargyl Aza-Claisen Rearrangement/Borylative Cyclization Cascade
Session 2 11:30 11:50 12:10	Chair: William Harman  O3A Pavel Matejicek Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation  SC1A Ainee Ibrahim Solid-state green hydrogen export utilising the regeneration of BH <sub>4</sub> from B(OH) <sub>4</sub> and B(OCH <sub>3</sub> ) <sub>4</sub> SC2A Louis Le Moigne Catalyst free transfer hydrogenation from amine-borane dimers and oligomers to different substrates  SC3A Romane Bellec	Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg  Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf  Tricyanoboraneimidazoline-2-ylidenate Anions — Ditopic N-Heterocyclic Carbene Ligands  SC2B Masato Tsuda  Synthesis of Isoxazoloazaborines via Gold(1)-Catalyzed Propargyl Aza-Claisen Rearrangement/Borylative Cyclization Cascade  SC3B Michele Tomasini
Session 2 11:30 11:50 12:10 12:25	Chair: William Harman  O3A Pavel Matejicek Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation  SC1A Ainee Ibrahim Solid-state green hydrogen export utilising the regeneration of BH4 from B(OH)4 and B(OCH3)4  SC2A Louis Le Moigne Catalyst free transfer hydrogenation from amine- borane dimers and oligomers to different substrates  SC3A Romane Bellec New energetics polynitrogen-boron compounds for	Chair: Todd Marder  O3B Andrea Olmos  Mild synthesis of polypyrazolylborates: completing the family  O4B Christian Kleeberg  Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf  Tricyanoboraneimidazoline-2-ylidenate Anions — Ditopic N-Heterocyclic Carbene Ligands  SC2B Masato Tsuda  Synthesis of Isoxazoloazaborines via Gold(1)-Catalyzed Propargyl Aza-Claisen Rearrangement/Borylative Cyclization Cascade
Session 2 11:30 11:50 12:10 12:25	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan  A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation  SC1A Ainee Ibrahim  Solid-state green hydrogen export utilising the regeneration of BH <sub>4</sub> from B(OH) <sub>4</sub> and B(OCH <sub>3</sub> ) <sub>4</sub> SC2A Louis Le Moigne Catalyst free transfer hydrogenation from amine- borane dimers and oligomers to different substrates  SC3A Romane Bellec New energetics polynitrogen-boron compounds for space propulsion	Chair: Todd Marder O3B Andrea Olmos Mild synthesis of polypyrazolylborates: completing the family O4B Christian Kleeberg Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf Tricyanoboraneimidazoline-2-ylidenate Anions — Ditopic N-Heterocyclic Carbene Ligands SC2B Masato Tsuda Synthesis of Isoxazoloazaborines via Gold(1)-Catalyzed Propargyl Aza-Claisen Rearrangement/Borylative Cyclization Cascade SC3B Michele Tomasini Arylic C-H Bond Activation and Borylation
Session 2 11:30 11:50 12:10 12:25	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan  A Highly Water-Stable meta-Carborane-Based  Copper Metal-Organic Framework for Efficient  High-Temperature Butanol Separation  SC1A Ainee Ibrahim  Solid-state green hydrogen export utilising the regeneration of BH4 from B(OH)4 and B(OCH3)4 SC2A Louis Le Moigne  Catalyst free transfer hydrogenation from amineborane dimers and oligomers to different substrates  SC3A Romane Bellec  New energetics polynitrogen-boron compounds for space propulsion  SC4A Jonas Bachmann	Chair: Todd Marder O3B Andrea Olmos Mild synthesis of polypyrazolylborates: completing the family O4B Christian Kleeberg Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf Tricyanoboraneimidazoline-2-ylidenate Anions — Ditopic N-Heterocyclic Carbene Ligands SC2B Masato Tsuda Synthesis of Isoxazoloazaborines via Gold(I)-Catalyzed Propargyl Aza-Claisen Rearrangement/Borylative Cyclization Cascade SC3B Michele Tomasini Arylic C-H Bond Activation and Borylation SC4B Marion Boyet
Session 2 11:30 11:50 12:10 12:25	Chair: William Harman  O3A Pavel Matejicek  Anionic boron clusters in supramolecular and polymer chemistry  O4A Lei Gan  A Highly Water-Stable meta-Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation  SC1A Ainee Ibrahim  Solid-state green hydrogen export utilising the regeneration of BH <sub>4</sub> from B(OH) <sub>4</sub> and B(OCH <sub>3</sub> ) <sub>4</sub> SC2A Louis Le Moigne Catalyst free transfer hydrogenation from amine- borane dimers and oligomers to different substrates  SC3A Romane Bellec New energetics polynitrogen-boron compounds for space propulsion	Chair: Todd Marder O3B Andrea Olmos Mild synthesis of polypyrazolylborates: completing the family O4B Christian Kleeberg Transition metal boryl complexes: New answers to old questions?  SC1B Ludwig Zapf Tricyanoboraneimidazoline-2-ylidenate Anions — Ditopic N-Heterocyclic Carbene Ligands SC2B Masato Tsuda Synthesis of Isoxazoloazaborines via Gold(I)-Catalyzed Propargyl Aza-Claisen Rearrangement/Borylative Cyclization Cascade SC3B Michele Tomasini Arylic C-H Bond Activation and Borylation

### Auditorium

Session 3	Chair: Francesc Teixidor	
14:30	INV2 Alan Welch Bridges, Vertices and How to Distinguish Them	
Room	Auditorium	501 (parallel room)
	Chair: Francesc Teixidor	Chair: Eliseo Ruiz
15:05	O5A Jonas Warneke Reactivity of $[B_{12}X_{11}]^*$ fragment anions (X=halogen, CN) in the gas phase and in surface layers.	O5B
15:25	O6A Ramón Macías Ten-vertex Rhodathiaborane Reactivity: Cluster Modular Tuning and Catalysis	<b>O6B Jordi Poater</b> Aromaticity in Boron Clusters Survives Radical Structural Changes
15:45	O7A Zsolt Kelemen The "chemical tug-of-war" in boron clusters, beyond the elongation of the C-C bonds of o- carboranes – a combined theoretical and experimental study	<b>O7B Ricardo José Maza Quiroga</b> Mapping the Electronic Structure and the Reactivity Trends for Stabilized α-Boryl Carbanions
16:05	SC5A Sohini Sinha  Diverse and unique photophysics of new o- carborane cluster based luminescent materials	SC5B Daniel Vogler Highly selective dipolar cycloaddition reactions of a diazido-diborane
16:20	SC6A Zhen Li Rational design and synthesis of carborane-based Luminescence lanthanide metal organic frameworks and their application for anticounterfeiting	SC6B Julia Ruhl Bidentate Lewis Acid Catalyzed IEDDA/PIRO Reaction as Synthetic Tool for Medium-Sized Carbocycles
16:35	SC7A Liridona Useini Carboranyl analogues of the non-steroidal anti- inflammatory drug mefenamic acid	SC7B Arnaud Osi 9-Boratriptycenes: A Lewis Superacids Story
16:50	SC8A Neville Murphy Metallacarboranes as triple-negative breast cancer therapeutics and diagnostics	SC8B Damien Mahaut Metal-free hydrogenation of unactivated olefins by weakly basic 9-phosphatriptycene derivatives and tris(pentafluorophenyl)borane
17:05	Coffee Break and P	Poster Session A (P1A-P26A)
19:00	Free Time to	Discover Barcelona

## Tuesday (5th July)

### Auditorium

es as triplet
gen
on Centers
nger-type
azides
,

12:10	SC9A Miguel Nuez-Martínez	SC9B Jana Sendra Viscarro
	Fingerprint of the Small Anionic Molecule	Catalytic Stereoselective Borylative Transannular
	Cobaltabis(dicarbollide) Uptake in Glioma Stem	reaction
	Cells using Synchrotron-Based Fourier-Transform	
	Infrared Micro-Spectroscopy (SR- FTIRM)	
12:25	SC10A Jakub Cebula	SC10B Oriol Salvadó Ruiz
	In vitro evaluation of biological activity of cobalta	Olefination reaction between aldehydes and
	bis(dicarbollide) derivatives on eukaryotic cell lines	diborylsilylmethide lithium salts
	and bacteria	alooi yisii yimeinide iiiniiin saiis
12:40	SC11A Amanda Muñoz-Juan	SC11B Kieran Nicholson
12.40	In vivo insights of carboranes using C. elegans	Transborylation as a General Turnover Strategy for
	The vivo misignis of curboranes using c. cregans	Main-group Catalysis.
		mun group cutuysis.
12:55	Lunch (Int. C	Committee Meeting)
	Auditoriu	
Session 6	Chair: Evamarie Hey-Hawkins	
14:30	INV4 Zbigniew Leśnikowski	
	Composites of DNA and boron clusters and their assem	ably into functional nanoparticles
	Auditorium	501 (parallel room)
		Chair: Hiroyuki Nakamura
15:05	O12A Agnieszka Adamczyk-Woźniak	O12B Antonio Sousa-Pedrares
	Studies of the molecular mechanism of action of	Modulation of the coordinating ability of an
	Tavaborole and its analogues as anti C. albicans	iminophosphorane group using a carborane moiety.
	agents	
15:25	O13A Krzysztof Fink	O13B Andrea Barba-bon
	Metallacarborane-ultrashort cationic peptide	Boron clusters as broadband membrane carriers
	conjugates with antimicrobial activity	
15:45	SC12A Sebastiano M. S. Micocci	SC12B Diego Holanda Pereira de Souza
	Novel Boronated Monocarbonyl Analogues of	Hydrated Metal Boranes for Solid-State Batteries
	Curcumin (BMAC): A new approach to fighting	
	Alzheimer disease (AD)	
16:00	SC13A Alberto Lanfranco	SC13B Amanda Berger
	Synthesis of Bifunctional Agents for the Treatment of	Divalent closo-monocarbadodecaborane salts as solid-
	Mesothelioma by Coupling BNCT with Inhibition of	state electrolytes.
	CAIX	
16:15	SC14A Nils Schopper	SC14B Thomas Hales
	Alkyl-, alkenyl- and alkynylcyanoborates: Syntheses	Heavy metal substituted closo-dodecaborane salts for
	and properties of low-viscosity ionic liquids	future battery applications
16:30	SC15A Martin Orságh	SC15B Ioanna Chazapi
	Novel LMW gelator based on phenylboronic acid and	Specific interactions of nano-ions with proteins
	its stimuli-responsivity	
16:45	SC16A Andrei Bita	
	Diester chlorogenoborate complex: synthesis method	
	and uses thereof	
17:00		on B (P1B-P27B)
		ee Break
19:00	Free Time to 1	Discover Barcelona

## Wednesday (6 July)

### **A**uditorium

Session 7	Chair: Alan Welch	
09:00	KN3 Francesc Teixidor	
	Metallacarboranes as Seen Through my Eyes	
09:45	INV5 Evamarie Hey-Hawkins	
	Carboranes and Metallacarboranes as Building Blocks for the Design of Novel Anti-Tumour Agents	
Room	<b>A</b> uditorium	501 (parallel room)
	Chair: Alan Welch	Chair: Jordi Poater
10:20	O14A Isabel Romero Garcia	O14B Jedrzej Walkowiak
	Ruthenium-Cobaltabis(dicarbollide) as Efficient	Green catalysis in organoboron and related compounds
	Photoredox Catalyst through Proton Coupled	synthesis
	Electron Transfer processes (PCET)	
10:40	O15A Maria José Mostazo-López	O15B Terry Humphries
	Synthesis and electrochemical performance of	Regeneration of sodium borohydride by reactive ball
	fluorine-functionalized cobaltabisdicarbollide	milling with Mg <sub>2</sub> Si
11:00	(	Coffee Break

Session 8	Chair: Deflet Gabel	Chair: Jordi Poater
11:30	O16A Aleš Růžička	O16B
	Opening Cationic Heteroboranes Era	
11:50	O17A Fabrizio Murgia	O17B Eliseo Ruiz
	Metastable NaCB11H12 polymorph prepared by	Theoretical Approach to Carborane-based Systems: From
	mechanical milling as new superionic conductor	Magnetism to Photochemistry
	for post-Li solid-state batteries	
12:10	O18A Isabel Guerrero Troyano	O18B Laura Caggiu
	Metallabis(dicarbollide) a green and efficient	Novel closo-hydridoborates of K, Mg and Ca as potential
	photoredox catalyst for epoxidation reactions	solid electrolytes for post-lithium solid-state batteries
12:30	SC17A Jewel A M Xavier	SC17B Philipp Grewelinger
	Tapping the potential of Metallacarboranes as	Facile access to non-classical 1,2-diboriranes
	Standard Internal Reference	
12:45	SC18A Tarek Marei	SC18B Dominic Willcox
	Host-guest interaction of substituted dodecaborate	Borane-Catalysed C(sp3)–F Bond Arylation and
	anions with hydrophobic hosts	Esterification Enabled by Transborylation
13:00		Lunch

# Auditorium

Session 9	Chair: Clara Viñas		
14:30	INV6 Bohumír Grüner		
	Boron Cluster Inhibitors of Cancer Associated CA-IX Enzyme- an Overview		
15:05	O19A Agnieszka Olejniczak		
	Compounds containing boron clusters with antibacterial and anticancer activity.		
15:25	O20A Marcos Couto		
	Carbaboranyl-based tyrosine Kinases inhibitors as bimodal therapeutic agents against Glioblastoma, the worst		
	Prognosis Brain Cancer		
15:45	O21A Christoph Selg		
	Borinostats: Solid-Phase Synthesis of Carborane-Capped Histone Deacetylase Inhibitors with a Tailormade		
	Selectivity Profile		
16:05	Excursion + Dinner		

# Thursday (7th July) Auditorium

#### Chair: Emmanuel Lacôte Session 10 **KN4 Philippe Miele** 09:15 Boron nitride based nanostructured materials for energy, health and environmental applications. 10:00 INV7 Detlef Gabel The functionalization of dodecaborate - an ongoing challenge 10:35 **O22A Mahmoud Al-Joumhawy** Insight into synthesis and properties of functionalized dodecaborates 10:55 Coffee Break Session 11 Chair: Pavel Matejicek O23A Michael Beckett 11:30 Hydroxidooxidohexaborate chemistry: 1-D coordination polymers with Zn(II) and Cu(II) amine complexes. O24A Bérangère Toury Excellent Boron Nitride Nanosheets from a new source of large hBN 11:50 single crystals 12:10 **O25A Eric Rivard** Polyacetylenes with Redox Active Boryl Groups and the Quest to Prepare BN at Low Temperature 12:30 Prizes + Closing Ceremony 13:00 Lunch + Departure

Poster Session A (Monday 4th July 17:05-19:00)

	Foster Session A (Monday 4 July 17:05-19:00)	
Syrine Affes	Graphene, Polyaromatic Hydrocarbons and Cosane	P1A
Virinder Bhagat	Reactivity studies of a Donor Stabilized Borylnitrene	P2A
Charlotte Bodin	Borates based interface for calcium metal batteries	P3A
Fabian Burzlaff	Synthesis and reactions of fluorinated closo-dodecaborates	P4A
Deniz Cam	N-Functionalization of the closo-Dodecaborate Anion [B12H12]2- via Arylation of [B12H11NH3]-	P5A
Vicente Compañ	Metallacarborane salts as doping agents in polybenzimidazole-based membranes with enhanced proton conductivity for high temperature proton exchange membranes	P6A
AnnaMaria Deagostino	Synthesis of a new Theranostic Agent Containing Boron and Biotin for BNCT/MRI Applications	P7A
Paula Dominguez Molano	Transborylation between diboron reagents and alkenylboranes	P8A
Ferdinand Ehlers	Synthesis and spectroscopic properties of the cyanated closo-Dodecaborates $[B12(CN)11X]2$ - anions $(X = F, Cl, Br, I, NH2)$	P9A
Sarah Fellinger	A New Synthesis to C-substituted 1-Carba-closo-dodecaborates	P10A
Roman Franz	Phosphanyl-Boranes embedded into a [3]ferrocenophane scaffold	P11A
Gerard Bru	Mechanistic insights into the transborylation between diboron reagents and alkenylboranes: A DFT study	P12A
Sara González Morán	1,2-Dicarbofunctionalization of 1,1-arylborylalkenes	P13A
Divanshu Gupta	Computational Studies of Reactivity and Nature of B≡N bond Containing Cyclic Rings	P14A
Tobias Heitkemper	Reactivity of novel 2,5-silyl substituted Boroles	P15A
Belhssen Hleli	Associative behavior of dodecaborate conjugates with alkyl tails	P16A
Drahomir Hnyk	Reactions of icosahedral, bicapped-square antprismatic and octahedral heteroboranes with n-heterocyclic carbenes: computational studies of origination of the corresponding heteroborane cations	P17A
Josef Holub	The Establishment of the Class of Non-Covalent Organic Framework Materials by Phenyl-Substituted Thiaboranes – linked 2D and 3D Aromatics	P18A
Evelyn Hümpfner	Aromatic conjugation between the 2D and 3D systems	P19A
Paweł Huninik	Transition-metal catalyzed Markovnikov and anti-Markovnikov selective hydroboration of mono- and disubstituted alkenes	P20A
Litwin Jacob	Ionic materials based on [closo-B10H10]2- anion for modern technological applications	P21A
Rafal Jakubowski	Photophysical and thermal properties of self-organizing derivatives of 10- and 12-vertex p-carboranes	P22A
Mari Janse van Rensburg	Synthesis and Electrochemical Investigation of Boron Verdazyl Radicals	P23A
Damian Kaniowski	Highly boron-loaded antisense oligonucleotides conjugated with target-directed ligands for dual anticancer therapy: anti-EGFR and BNCT	P24A
Denis Kargin	Examples of chalcogen transfer and reactivity of boron based compounds	P25A
Dems margin	Zitaling res of charces gent transfer and reactivity of cerent cased competitions	

# Poster Session B (Tuesday 5<sup>th</sup> July 17:00-19:00)

	Synthesis and Structural Verification of the First Small Polyhedral Telluraborane closo-	I
Willi Keller	TeB5Cl5: How Far can Molecular Octahedral Distortion go?	P1B
Barbara Krupa	Catalytic hydroboration of carbonyl compounds in traditional and green reaction media	P2B
Min Hyung Lee	TADF Emitters Based on Boron-Carbonyl Hybrid Acceptors: Achieving Fast Spin-Flip and High-Efficiency OLEDs	РЗВ
Xiaobao li	Towards the Generation of Hierarchical Porosity in Carborane-Based Metal-Organic Frameworks	P4B
Falk Lissner	SYNTHESIS AND STRUCTURE OF A LONG PREDICTED SMALL POLYHEDRAL THIABORANE: closo-SB5Cl5	P5B
Matthias Maier	Poly(iminoborane)s: An Elusive Class of Main Group Polymers?	P6B
Jelena Matovic	Glycoconjugates for boron neutron capture therapy	P7B
Soňa Mesíková	Nanomaterials based on electrostatic interaction of triblock copolymers with closo- dodecaborate	P8B
Max Milewski	Carboranylphosphines meet dendrimers - New scaffolds for ligand design	P9B
Moheera Noor	Halogenation of substituted dodecaborate clusters	P10B
Lucia Pazderova	Derivatives of conformationally restrained cobalt bis(dicarbollide) ion as a new chiral platform and a tool for electrolabeling of biomolecules	P11B
Mireia Pujol Marti	Copper Catalyzed Stereoselective cross coupling of gem-diborylalkenes	P12B
Carmen Ramirez de Arellano	Free scorpionate ligands ready for metal complexation	P13B
Gabriela Ramos	Binding of substituted dodecaborate clusters to cyclodextrins	P14B
Daria Różycka	Isoniazid containing boron clusters – synthesis and activity	P15B
Sebastian Rykowski	3- and 4-Substituted naphthalimide DNA intercalators bearing carborane cluster – synthesis, physicochemical and biological properties	P16B
Julijan Sarcevic	Neutral half-sandwiches of silicon, germanium and tin	P17B
Marvin Sindlinger	Structural characterization and reactivity of a kinetically stabilized benzoborirene	P18B
Krzysztof Śmiałkowski	Oligofunctionalization of cobalt-bis(1,2-dicarbollide)ate (COSAN) as a building block for nanoconstructions	P19B
Tomasz Sokolnicki	Ru-catalyzed Coupling of Vinylsilanes with Vinyl Boronates in PEGs and scCO2 – A Green Approach Towards 1-Boryl-1-silylethenes.	P20B
Philipp Stockmann	Reversion of drug resistance – a carboranic approach	P21B
Lukas Swoboda	Furan Based Diboraporphyrins – Broadband UV-vis to NIR Absorbers	P22B
Jakub Szyling	TM-catalyzed diboration and hydroboration of 1,3-diynes – efficient access to boryl- functionalized enynes	P23B
Ece Zeynep Tüzün	Boron Clusters in Design of Fluorescent Probes and Kinase Inhibitors	P24B
Lea Ueberham	Synthesis of carborane-based ligands for theranostic approaches	P25B
Ziyan Warneke	Gas phase reactivity of functionalized halogenated closo-dodecaborate anions	P26B
Ryotaro Yamanashi	A base-stabilized neutral B=O species supported by a bis(oxazolinyl)methanide ligand	P27B

# **Sponsors and Partners**





