

Day 1: Monday 05/09	Day 2: Tuesday 06/09	Day 3: Wednesday 07/09	Day 4: Thursday 08/09	Day 5: Friday 09/09
	<p>8:30 Registration</p> <p>08:50-09:00 Welcome speech</p> <p>Session I: 2D materials and nano</p> <p>09:00-09:50 Keynote 1: Johanna Rosén. New 3D and 2D Metal Borides from Materials Synthesis Guided by High-Throughput Simulations</p> <p>09:50-10:10 O1. Fernando Igoa. Advances towards 2D iron boride: a molten-salt approach</p> <p>10:10-10:30 O2. Amandine Séné. Boron phosphide nanocrystals synthesized in molten salts</p> <p>10:30-11:00 Coffee</p> <p>Session I (continued): 2D materials and nano</p> <p>11:00-11:30 Invited 1: Takahiro Kondo. Rhombohedral boron monosulfide and 2D boron monosulfide sheets</p> <p>11:30-11:50 O3. Nevill Gonzales Sawacki. Crystal structure prediction of thin 2D boron structures using evolutionary computations</p> <p>11:50-12:10 O4. Kazuho Goto. Highly dispersed MgH₂ nanoparticle-hydrogen boride sheet nanocomposites for superior hydrogen storage materials</p> <p>12:10-12:30 O5. Linghui Li. r-B5 as a promising high performance with strong durability metal-free electrocatalyst for oxygen evolution reaction (OER)</p> <p>12:30-14:00 Lunch</p> <p>Session I (continued): 2D materials and nano</p> <p>14:00-14:50 Keynote 2: Lay Sheng Wang. Clusters of Boron and Metal Borides: Planar Structures, Borophenes and Metal-Boron Bonding</p> <p>14:50-15:10 O6. Natsumi Noguchi. Reduction reaction of Ni ions on hydrogen boride sheets</p> <p>15:10-15:30 O7. Hikari Yoshioka. Synthesis of three-dimensional boron network compounds composed of B, Co and H through proton-exchange reactions</p> <p>Session II: Medical applications</p> <p>15:30-16:00 Invited 2: Pierluigi Mauri. Protomimic approach to investigate the role of boron-containing compounds in medicine</p> <p>16:00-16:20 O8. Levan Chkhartishvili. Nanopowder's $\text{B}_2\text{H}_2\text{Fe}_2\text{O}_4$ as ¹⁰B delivery agent in BNCT</p> <p>16:20-16:30 O9. Kaoru Kimura. In memoriam: Prof. Ryosel Uno (1925-2022, April 29th)</p> <p>16:30-18:30 Coffee break and poster session</p> <p>18:00 Aperitive cocktail</p> <p>Posters Session I P1. Joseph Oliva-Enrich. From 2D Borophane to 2D Borane Molecules: The Long and Winding Road</p> <p>P2. Norinobu Watanabe. To explore the synthesis condition of h-BP</p> <p>Posters Session IV P3. Aybike Paksoy. Synthesis and supercapacitor device performance of nanostructured ZrB₂ and ZrB₂-based nanocomposite materials</p> <p>Posters Session V P4. Levan Chkhartishvili. Semiclassical B-B interatomic pair potential</p> <p>Posters Session VII P5. Preparation of sandwich-like B₂C/W neutron shield materials</p> <p>P6. Lightening of WC-Co composite matrix hardness by introducing B₂C-(Ti,Zr)B₂ eutectic additives</p> <p>P7. Mechanical properties of boron carbide-zirconium diboride (B₄C)_{1-x}/(ZrB₂)_x composites at x < 0.05</p> <p>Posters Session IV P8. Aybike Paksoy. Production scale-up of boride carbide micro/nanocomposites using elemental boron as precursor</p> <p>P9. Jelena Sjakste. New boron carbide structures predicted by DFT</p> <p>P10. Nathalie Vast. Inserting silicon atoms in the atomic structure of boron carbide: a theoretical viewpoint</p> <p>P11. Cennet Yildirim. Investigating Mechanical Properties of B4C Films Produced by Magnetron Sputtering PVD</p> <p>P16. Yeonsoo Cho. The role of carbon in the formation of a boron during boron carbide synthesis</p> <p>Posters Session VI P12. Raja Sen. Ab initio calculations of the thermoelectric phonon drag effect in semiconductor nanostructures</p> <p>Posters Session IX Natalya Shitsevalova. P13. Surface conductivity in SmB₆</p> <p>P14. Dynamic charge stripes and inhomogeneous superconductivity in Lu₂Zr₂B₂ dodecaborides</p> <p>P15. Anisotropy of charge carriers scattering in HoB₁₂, ErB₁₂ and TmB₁₂ antiferromagnets</p>	<p>8:30 Registration</p> <p>Session III: Elemental boron</p> <p>08:40-09:30 Keynote 3: Kaoru Kimura. Search for semiconducting quasicrystals</p> <p>09:30-09:50 O10. Tadashi Ogitsu. Temperature/light induced structural transformation of β-rhombohedral boron</p> <p>09:50-10:10 O11. Takanobu Hiroto. Does photo-induced structural change of β-rhombohedral boron occur at room temperature?</p> <p>10:10-10:30 O12. Yeonsoo Cho. The role of carbon in the formation of a boron during boron carbide synthesis</p> <p>10:30-11:00 Coffee and posters</p> <p>Session IV: Syntheses, new materials and processes</p> <p>11:00-11:30 Invited 3: Julia Zaikina. New borides in Li-Ni-B system: unconventional synthesis, complex structures and metastability</p> <p>11:30-11:50 O13. Iryna Antonyshyn. Nickel borides in oxygen evolution reaction</p> <p>11:50-12:10 O14. Edouard de Roland Dalon. Liquid state synthesis of nickel boride nanoparticles</p> <p>12:10-12:30 O15 (remote). Sergey Devyatkin. Electrochemical Synthesis of Ti-B Compounds from Ion-Organic Melt</p> <p>12:30-14:00 Lunch</p> <p>Session IV (continued): Syntheses, new materials and processes</p> <p>14:00-14:30 Invited 4: Samuel Bernard. The pivotal role of boron in Polymer-Derived Ceramics (PDCs)</p> <p>14:30-14:50 O16. Peter Rogl. Binary phase diagrams revisited: platinum metal (Ru to Pt)-boron</p> <p>14:50-15:10 O17. Onuralp Yücel. The effect of charge composition on product content and energy consumption in the production of MeB alloys by carbothermic process</p> <p>15:10-15:30 O18. Felix Reinauer. Synthesis and crystal structures of mixed trivalent borophosphates</p> <p>15:30-15:40 O19. Levan Chkhartishvili. In memoriam: Prof. Giorgi Tavadze (1945, January 1st-2021, January 7th)</p> <p>Session V: Borides and light elements with ab initio calculations</p> <p>15:40-16:10 Invited 5: Christel Gervais. Probing local boron environments in borides with solid-state NMR combined with ab-initio calculations</p> <p>16:10-16:30 O20. Guido Roma. A first principles study of lithium impurities in boron carbide</p> <p>16:30-17:00 Coffee break and posters</p> <p>Session V (continued): Borides and light elements with ab initio calculations</p> <p>16:30-17:00 Invited 6: Guillaume Fertat. Predictions of B₂O₃ polymorphs from ab initio: An explanation for the crystallization anomaly and for the glass properties</p> <p>17:00-18:00 Round table</p> <p>20:00 SCIENTIFIC COMMITTEE MEETING</p>	<p>8:30 Registration</p> <p>Session VI: Catalytic and thermal properties</p> <p>08:40-09:10 Invited 7: Özge Balci-Çağran. Low-cost and reusable iron- and nickel-based metal boride nanoparticles for sodium borohydride hydrolysis</p> <p>09:10-09:40 Invited 8: Takao Mori. Synthesis and thermoelectric & magnetic properties of higher borides</p> <p>09:40-10:00 O21 (remote). Anatoly Taran. Relationships between phase transitions in REM borides and their thermionic and emissivity properties</p> <p>10:00-10:20 O22. Daniel Haas. Catalytic and thermal properties of ternary tungsten and molybdenum borides</p> <p>10:20-10:40 O23. Aybike Paksoy. Synthesis and supercapacitor device performance of nanostructured ZrB₂ and ZrB₂-based nanocomposite materials</p> <p>10:40-11:10 Coffee and posters</p> <p>Session VI (continued): Catalytic and thermal properties</p> <p>11:10-11:30 O24. Fatma Aras. Oxidative behaviour of Mo_2NB_2 intermetallic compound upon oxygen evolution reaction (OER)</p> <p>11:30-11:50 O25. Daniel Janiak. Transition metal silicoboride and their electrocatalytic properties</p> <p>Session VII: Borides at high pressure</p> <p>11:50-12:30 Keynote 4: Yann Le Godec. Boron-based light materials under high pressure</p> <p>12:30-14:00 Lunch</p> <p>Session VII (continued): Borides at high pressure</p> <p>14:00-14:30 Invited 9: Takashi Taniguchi. Impurity and isotope control of boron nitride crystals and their properties</p> <p>Session VIII: Boron carbides</p> <p>14:30-14:50 O26. Helmut Werheit. Electrical conductivity of boron carbide from 5 to 2100 K in the whole homogeneity range</p> <p>14:50-15:20 Invited 10: Antoine Jay. Raman Spectra of Boron Carbide B_{1-x}C_x from first principles</p> <p>15:20-15:40 O27. Amrita Chakraborti. Superhard boron carbide: New insights into anomalous dynamic failure and how to reinforce it</p> <p>15:40-16:00 O28. Muhammet Arik. Improving the Oxidation Resistance of Carbon Fibers via B4C/BN Coating</p> <p>16:00-16:20 O29. Kamil Khas. Production scale-up of boride-carbide micro/nanocomposites using elemental boron as precursor</p> <p>16:20-16:40 O30. Cennet Yildirim. Investigating Mechanical Properties of B4C Films Produced by Magnetron Sputtering PVD</p> <p>17:00 Excursion & Banquet</p>	<p>8:30 Registration</p> <p>Session IX: Electronic correlations, magnetic properties, superconductivity</p> <p>09:00-09:50 Keynote 5: Timothy Strobel Carbon-Boron Clathrates</p> <p>9:50-10:20 Invited 11: Kunio Yubata. Origin of spin glass behavior for flux-grown HoAlB₄ single crystal</p> <p>10:20-10:40 O31. Karol Flachbart. Impact of hydrostatic and uniaxial pressure on the anisotropic quantum magnet TmB₄ with a frustrated Shastry-Sutherland lattice</p> <p>10:40-11:10 Coffee</p> <p>Session IX (continued): Electronic correlations, magnetic properties, superconductivity</p> <p>11:10-11:30 O32. Slavomir Gabáni. Penetration of magnetic field and the pinning strength in superconducting YB₆</p> <p>11:30-11:50 O33. Ernst Bauer. Complex transport and magnetism of novel ternary boride YbPt₂B₂</p> <p>11:50-12:10 O34. Jean-François Halet. Boron induced phase transformation of ternary cerium disilicide borides</p> <p>12:10-12:30 Announcement of the next ISBB conference. Conclusions & closing remarks</p> <p>12:30 Lunch boxes</p>
15:00 Registration				
18:00-19:45 Welcome reception				