



**Wednesday 21 May**

11:00	Registration, Tea and Coffee	
12:00	Lunch	
12.45	<b>Welcome and Introductions</b> Tomislav Friščić	
12.55	<b>Discussion Format Presentation</b> Faraday Publishing Staff	
13.00	<b>Introductory Lecture</b> William Jones* <i>University of Cambridge, UK</i>	<b>Paper 1</b>
	<b>Mechanochemistry of organic molecules, soft materials and pharmaceuticals</b> Session Chair: Stuart James; Tomislav Friščić	
14:00	<b>Liquid-assisted vortex grinding supports the single-step solid-state construction of a [2.2] paracyclophane</b> Jelena Stojaković; Brian Farris; Leonard MacGillivray* <i>University of Iowa, USA</i>	<b>Paper 15</b>
14:05	<b>Is the equilibrium composition of mechanochemical reactions predictable using computational chemistry?</b> Peter Bygrave; David Case; Graeme Day* <i>University of Southampton, UK</i>	<b>Paper 16</b>
14:10	<b>Two-step mechanochemical synthesis of porphyrins</b> Hannah Shy; Paula Mackin; Andrea Orvieto; Deepa Gharbharan; Geneva Peterson; Nick Bampos; Tamara Hamilton* <i>Barry University, USA</i>	<b>Paper 19</b>
14:15	Discussion	
15.30	Afternoon tea	
16.00	Lightning Session	
16:30	Poster Session and Wine Reception	
18:30	Free Evening	

Thursday 22 May

	<b>Mechanochemistry of inorganic compounds and coordination-based materials</b> Session Chair: Elena Boldyreva; Leonard MacGillivray	
9:00	<b>Mechanochemical synthesis of an organometallic compound: a high volume manufacturing method</b> David Peters*; Richard Blair <i>ATMI, USA</i>	<b>Paper 12</b>
9:05	<b>Mechanochemical preparation of copper iodide clusters of interest for luminescent devices</b> Lucia Maini*; Paolo P. Mazzeo; Francesco Farinella; Valeria Fattori; Dario Braga <i>University of Bologna, Italy</i>	<b>Paper 9</b>
9:10	<b>Mechanochemical synthesis and characterization of cocrystals and metal organic compounds</b> Lisa Tröbs*; Franziska Emmerling <i>BAM Federal Institute for Materials Research and Testing, Germany</i>	<b>Paper 10</b>
9:15	Discussion	
10:30	Morning Tea	
11:00	<b>The mechanically induced structural disorder in barium hexaferrite, BaFe<sub>12</sub>O<sub>19</sub>, and its impact on magnetism</b> V. Šepélak*; M. Myndyk; R. Witte; J. Röder; D. Menzel; R. H. Schuster; H. Hahn; P. Heitjans; K.-D. Becker <i>Karlsruhe Institute of Technology, Germany</i>	<b>Paper 11</b>
11:05	<b>Dry mechanochemical synthesis of alane from LiH and AlCl<sub>3</sub></b> Ihor Hlova; Shalabh Gupta; Jennifer Goldston; Takeshi Kobayashi; Marek Pruski; Vitalij Pecharsky* <i>The Ames Laboratory, USA</i>	<b>Paper 13</b>
11:10	<b>Solvent-free mechanochemical synthesis of gold nanoparticles stabilized with amines or biomass matrix</b> Monika Rak; Tomislav Friščić; Audrey Moores* <i>McGill University, Canada</i>	<b>Paper 14</b>
11:15	<b>The dual role of sulfur-containing amino acid in the synthesis of IV–VI semiconductor nanocrystals: a mechanochemical approach</b> Peter Baláž*; Matej Baláž; Mária Čaplovičová; Anna Zorkovská; Lubomír Čaplovič and Miroslav Pšotka <i>Slovak Academy of Sciences, Slovakia</i>	<b>Paper 8</b>
11:20	Discussion	
13:00	Lunch	
	<b>Mechanistic understanding, catalysis and scaling up of mechanochemistry</b> Session Chair: Carsten Bolm; Peter Baláž	

14:00	<b>Quantitative <i>in situ</i> and real-time monitoring of mechanochemical reactions</b> Ivan Halasz*; Tomislav Friščić; Simon Kimber; Krunoslav Užarević; Andreas Puškarić; Cristina Mottillo; Patrick Julien; Vjekoslav Štrukil; Veijo Honkimäki; Robert Dinnebier <i>Rudjer Boskovic Institute, Croatia</i>	Paper 2
14:05	<b>The scalability in the mechanochemical syntheses of edge functionalized graphene materials and biomass-derived chemicals</b> Richard Blair*; Katerina Chagoya; Scott Biltek; Steven Jackon; Ashlyn Sinclair; Alexandra Taraboletti; David T. Restrepo <i>University of Central Florida, USA</i>	Paper 3
14:10	<b>Application of twin screw extrusion to the manufacture of cocrystals: scale-up of AMG 517–sorbic acid cocrystal production</b> Dominick Daurio; Karthik Nagapudi*; Lan Li; Peter Quan; Fernando Alvarez-Núñez <i>Amgen Inc, USA</i>	Paper 4
14:15	Discussion	
15:30	Afternoon Tea	
16:00	<b>Self-sustaining reactions as a tool to study mechanochemical activation</b> Laszlo Takacs <i>University of Maryland, USA</i>	Paper 5
16:05	<b>Scale-up of organic reactions in ball mills: process intensification with regard to energy efficiency and economy of scale</b> Achim Stolle*; Robert Schmidt; Katharina Jacob <i>Friedrich-Schiller University Jena, Germany</i>	Paper 6
For discussion via the forum	<b>Advances in elucidating mechanochemical complexities <i>via</i> implementation of a simple organic system</b> Adam Michalchuk*; Ivan Tumanov; Valeri Drebuschak; Elena Boldyreva <i>Novosibirsk State University, Russia; University of Edinburgh, UK; Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>	Paper 7
16:10	Discussion	
17:00	Close of sessions	
19:00	Pre-dinner Drinks	
19:30	Conference Dinner	

## Friday 23 May

	<b>Sonication and macromolecular mechanochemistry</b> Session Chair: James Mack; Richard Blair	
09:00	<b>Enhancing covalent mechanochemistry in bulk polymers using electrospun ABA triblock copolymers</b> A. L. Black Ramirez; A. K. Schmitt; M. K. Mahanthappa; S. L. Craig* <i>Duke University, USA</i>	<b>Paper 20</b>
09:05	<b>Mechanically induced silyl ester cleavage under acidic conditions investigated by AFM-based single-molecule force spectroscopy in the force-ramp mode</b> Sebastian Schmidt; Michael Pill; Alfred Kersch; Hauke Clausen-Schaumann; Martin Beyer* <i>Christian-Albrechts-Universität zu Kiel, Germany</i>	<b>Paper 22</b>
For discussion via the forum	<b>Increasing the energy yield of mechanochemical transformations: selected case studies</b> Anatoly Politov*; Olga Golyazimova <i>Novosibirsk State University, Russia; Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>	<b>Paper 21</b>
09:10	Discussion	
10:00	Morning Tea	
10:30	<b>Triboelectricity in insulators: evidence for a mechanochemical mechanism</b> Lia Beraldo da Silveira Balestrin; Douglas Del Duque; Douglas Soares da Silva; Fernando Galembeck* <i>Brazilian National Nanotechnology Laboratory, Brazil</i>	<b>Paper 24</b>
10:35	<b>Mechanochemical production of phenyl cations through heterolytic bond scission</b> Tomohiro Shiraki; Charles Diesendruck; Jeffrey Moore <i>University of Illinois at Urbana-Champaign</i>	<b>Paper 25</b>
10:40	Discussion	
11:30	<b>Concluding remarks</b> Kenneth Suslick* <i>University of Illinois at Urbana-Champaign</i>	<b>Paper 26</b>
12:15	<b>Acknowledgements</b>	
12:45	<b>Close of meeting and lunch</b>	