

Tentative program of INCOME 2017

Time	Sunday, 3 rd September 2017
16:00 – 21:00	Registration
19:00 – 21:00	Welcome Drink

Time	Monday, 4 th September 2017
08:30 – 08:55	Opening Remarks
08:55 – 09:20	I-01 Two important periods in the history of mechanochemistry <u>L. Takacs</u>
09:20 – 09:45	I-02 A quest for mechanisms of mechanically activated transformations <u>F. Delogu</u>
09:45 – 10:10	I-03 Modeling mechanochemical reaction mechanisms <u>W. T. Tysoe</u>
10:10 – 10:30	Coffee Break
10:30 – 10:45	O-01 Mechanochemical preparation of ultra disperse powders of Si, Ge, Cu, Ag <u>N. Z. Lyakhov</u> , T. F. Grigoreva, E. N. Gorina, T. A. Udalova, S. V. Vosmerikov, E. T. Devyatkina, I. A. Vorsina, E. A. Pavlov
10:45 – 11:00	O-02 Mechanically induced self-sustaining reactions (MSR) in the $\text{LiNH}_2\text{-xAlCl}_3$ system <u>G. Mulas</u> , L. Pisano, S. Enzo, L. Fernández Albanesi, F. C. Gennari, S. Garroni
11:00 – 11:15	O-03 Chalcogenide quaternary nanocrystals for solar cells: mechanochemical synthesis and properties of kesterite $\text{Cu}_2\text{ZnSnS}_4$ <u>P. Baláž</u> , M. Baláž, M. Hegeduš, M. Fabián, M. Achimovičová, E. Dutková, M. Kaňuchová, J. Briančin, M. Tešínský
11:15 – 11:30	O-04 Gas-solid reactions induced by mechanochemical activation <u>M. Felderhoff</u> , F. Schüth, S. Immohr, R. Eckert, H. Schreyer
11:30 – 11:45	O-05 Advances in surface functionalization of silicon nanoparticles formed by reactive high energy ball milling (RHEBM) <u>B. S. Mitchell</u> , M. J. Fink
11:45 – 12:00	O-06 Mechanocatalytic preferential CO oxidation <u>R. Eckert</u> , M. Felderhoff, F. Schüth

12:00 – 14:00	Lunch Break
14:00 – 14:25	I-04 Nanocrystalline and nanoglassy ceramics by mechanical treatment – Effect on ion dynamics <u>P. Heitjans</u>
14:25 – 14:50	I-05 How does mechanical stressing rationalize solid-state synthesis of functional complex oxide nanoparticles? <u>M. Senna</u>
14:50 – 15:15	I-06 Mechanochemical synthesis, structure and characterization of fluorine-containing alkaline earth metal compounds <u>G. Scholz</u>
15:15 – 15:40	I-07 Structure and ion dynamics in mechanosynthesized fluorides <u>M. Wilkening</u>
15:40 – 16:00	Coffee Break
16:00 – 16:15	O-07 IF at first you don't succeed: fabricating low-defect materials by high-energy ball milling <u>A. Düvel, L. Morgan, C. V. Chandran, P. Heitjans, D. C. Sayle</u>
16:15 – 16:30	O-08 Mechanochemical/thermal preparation of $\text{Li}_4\text{Ti}_5\text{O}_{12}$. Structural and electrochemical properties <u>M. Fabián, M. Žukalová, L. Kavan, E. Tóthová, V. Šepelák, M. Senna</u>
16:30 – 16:45	O-09 Mechanochemical synthesis of solid solutions of $\text{M}_x\text{Pb}_{1-x}\text{F}_2$ (M = Ca, Sr, Ba) <u>M. Heise, G. Scholz, E. Kemnitz</u>
16:45 – 17:00	O-10 Au supported catalysts for CO-oxidation by in-situ ball milling: Influences of synthesis conditions on support and catalytic activity <u>H. Schreyer, M. Felderhoff, F. Schüth</u>
17:00 – 17:15	O-11 New approach using a dry coating process for solid-supported catalyst synthesis: effects of support properties and operation conditions <u>X. Liu, N. Fatah</u>
17:15 – 18:15	Poster Session I

Time	Tuesday, 5 th September 2017
08:00 – 08:25	I-08 TBA <u>T. Frišćić</u>
08:25 – 08:50	I-09 New insights in formation pathways: in situ investigations of mechanochemical reactions <u>F. Emmerling</u> , H. Kulla, S. Haferkamp, F. Fischer, M. Wilke
08:50 – 09:15	I-10 May the mechanical force be with you: The case of peptides and organometallics <u>F. Lamaty</u>
09:15 – 09:40	I-11 Transformation of pharmaceuticals induced by milling <u>M. Descamps</u> , J.-F. Willart, E. Dudognon
09:40 – 10:05	I-12 Composites of drugs with inorganic and organic excipients obtained by the mechanochemical methods <u>T. P. Shakhmurov</u>
10:05 – 10:30	Coffee Break Conference Photo
10:30 – 10:45	O-12 In situ monitoring as tools to study mechanochemical reactions <u>I. Halasz</u> , K. Užarević, S. Lukin, T. Frišćić
10:45 – 11:00	O-13 Transformations of dexamethasone drug induced by mechanical milling <u>P. F. M. Oliveira</u> , J.-F. Willart, J. Siepmann, F. Siepmann, M. Descamps
11:00 – 11:15	O-14 From molecules to biohybrid nanomaterials by ball-milling <u>M. Lupacchini</u> , A. Mascitti, L. Tonucci, N. d'Alessandro, C. Charnay, <u>E. Colacino</u>
11:15 – 11:30	O-15 Quantitative in situ monitoring of mechanochemical selectivity in pharmaceutical cocrystal polymorphs <u>S. Lukin</u> , T. Stolar, M. Tireli, M. V. Blanco, D. Babić, T. Frišćić, K. Užarević, I. Halasz
11:30 – 11:45	O-16 2D correlation spectroscopy in step-by-step study of deformation-induced conversions and transformations of molecular crystals <u>D. S. Rybin</u> , G. N. Konygin, V. E. Porsev, D. R. Sharafutdinova, I. P. Arsentyeva, V. V. Boldyrev
11:45 – 12:00	O-17 Mechanoradicals, anions and cations as precursors in chemical reactions and production of composite materials <u>B. Baytekin</u> , Ö. Bayrak, T. Bedük
12:00 – 14:00	Lunch Break
14:00 – 14:25	I-13 Recent progress in mechanochemical organic reactions L. Li, H.-G. Li, H. Xu, <u>G.-W. Wang</u>
14:25 – 14:50	I-14 Mechanochemical multicomponent transformations and mechanoenzymatic reactions by ball-milling <u>J. G. Hernández</u>
14:50 – 15:15	I-15 Mechanochemistry, an easy technique to boost the synthesis of new luminescent coordination polymers <u>L. Maini</u>
15:15 – 15:40	I-16 Mechanochemistry – from curiosity to commercialisation <u>S. L. James</u>

15:40 – 16:00	Coffee Break
16:00 – 16:15	O-18 Synthesis by twin screw extrusion (TSE) <u>D. E. Crawford</u> , S. L. James, C. Miskimmin, A. Albadmin, G. Walker
16:15 – 16:30	O-19 Main group mechanochemical synthesis <u>F. Garcia</u>
16:30 – 16:45	O-20 Mechanochemical synthesis of highly-ordered microporous zirconium-based metal-organic frameworks <u>K. Užarević</u> , A. Fidelli, A. J. Howarth, O. K. Farha, T. Friščić
16:45 – 17:00	O-21 Mechanochemical synthesis of functional metal-organic frameworks based on acylhydrazone and dicarboxylate linkers <u>D. Matoga</u> , K. Roztocki, M. Szufla, D. Jędrzejowski, M. Lupa, M. Hodorowicz, I. Senkovska, S. Kaskel
17:00 – 17:15	O-22 Mechanochemistry and protein self-assembly - a promising combination <u>N. Solin</u>
17:15 – 17:30	O-23 Solvation and surface effects on polymorph stabilities at the nanoscale <u>A. M. Belenguer</u> , G. I. Lampronti, A. J. Cruz-Cabeza, C. A. Hunter, J. K. M. Sanders
17:30 – 17:45	O-24 Effective and selective reduction of α, β-unsaturated carbonyl compounds to the corresponding alcohol under milling conditions <u>A. Barranco</u> , M. Felderhoff, F. Schüth
17:45 – 18:10	I-17 Do we always know, what we do not know? Challenges of mechanochemistry <u>E. V. Boldyreva</u>
18:10 – 19:10	Poster Session II
19.10 –	Meeting of the International Advisory Committee of INCOME

Time	Wednesday, 6 th September 2017
08:30 – 08:55	I-18 Scenarios and possible mechanisms of structural-phase transformations in alloys at intensive plastic deformation <u>A. Ye. Yermakov</u> , Yu. N. Gornostyrev, I. K. Razumov
08:55 – 09:20	I-19 Stability and grain size softening in mechanically milled nanostructured Al-base complex intermetallics <u>N. K. Mukhopadhyay</u>
09:20 – 09:45	I-20 Spark plasma sintering of mechanically milled powders: gaining advantages from a combination of two non-equilibrium powder processing techniques <u>D. V. Dudina</u> , M. A. Korchagin, B. B. Bokhonov, V. I. Mali, A. G. Anisimov
09:45 – 10:10	I-21 “Week bonding” oxygen atoms in transition metal oxides formed by mechanical activation <u>A. N. Streletskii</u> , O. S. Morozova, M. V. Sivak
10:10 – 10:30	Coffee Break
10:30 – 10:45	O-25 Mechanochemical redox reactions as non-conventional pathway in the synthesis of nanostructured alloys <u>V. F. Ruiz-Ruiz</u> , I. Zumeta-Dubé, R. González-Olvera, I. Betancourt, R. Díaz-Pardo, D. Díaz, N. Farfán, J. Arellano-Jiménez, M. José-Yacamán
10:45 – 11:00	O-26 Nanocrystalline alloy of molybdenum with sodium produced by mechanical alloying <u>B. Bergk</u> , U. Mühle, I. Povstugar, N. Koutná, D. Holec, H. Clemens, B. Kieback
11:00 – 11:15	O-27 Early stages of mechanical alloying of Al-Cu and Al-Cu-Fe powder mixtures in a high-energy ball mill <u>S. F. Tikhov</u> , D. V. Dudina, O. I. Lomovsky, V. A. Sadykov
11:15 – 11:30	O-28 Microstructure, porosity and wear resistance of new Ti-10Ta-8Mo (wt.%) biomedical alloy prepared by high-energy ball milling and annealed processes <u>G. Dercz</u> , <u>I. Matuła</u> , M. Zubko, J. Maszybrocka, M. Boruszewska
11:30 – 11:45	O-29 Mössbauer study of the kinetics of mechanical amorphization in Fe₇₀Zr₃₀ <u>A. F. Manchón-Gordón</u> , J. J. Ipus, <u>J. S. Blázquez</u> , C. F. Conde, A. Conde
11:45 – 12:00	O-30 Mechanochemically-driven amorphization in overstoichiometric arsenic sulfides <u>O. Shpotyuk</u> , Z. Bujňáková, P. Baláž, P. Demchenko, Ya. Shpotyuk, J. Cebulski
12:00 – 14:00	Lunch Break
14:00 – 14:25	I-22 Plasma assisted absorption and reversible desorption of hydrogen gas in Zr, Ti, V powders using electric discharge assisted mechanical milling method <u>A. Calka</u> , A. M. Aksenczuk
14:25 – 14:50	I-23 Cryomilling, nanoparticles and ink: do they represent a new possibility <u>K. Chattopadhyay</u> , C. S. Tiwari, K. Malaviya, H. Prabha
14:50 – 15:15	I-24 Odyssey in mechanical activation of solids – SMILE and beyond <u>R. Kumar</u>
15:15 – 15:40	I-25 Mechanosynthesis of nanocrystals and nanocomposites <u>F. Kh. Urakaev</u> , M. M. Burkitbayev, B. M. Uralbekov, I. A. Massalimov

15:40 – 16:00	Coffee Break
16:00 – 16:15	O-31 Mechanochemistry – an effective method for producing complex BiFeO₃-based high-temperature piezoelectric materials <u>M. Makarovič</u> , A. Benčan Golob, B. Malič, T. Rojac
16:15 – 16:30	O-32 The synthesis of niobium silicides by a mechanochemical process <u>D. Ovalı</u> , D. Ağaoğulları, M. L. Öveçoğlu
16:30 – 16:45	O-33 Mechanochemical synthesis of mohite (Cu₂SnS₃) <u>M. Baláž</u> , M. Rajňák, N. Daneu, E. Dutková, M. Hegedűs, M. Fabián, M. Achimovičová, M. Tešínský, P. Baláž
16:45 – 17:00	O-34 Mechanochemical synthesize of nanocrystalline soft magnetic ferrite in order to investigate structural, magnetic, dielectric and electrical characteristics <u>A. Hajalilou</u>
17:00 – 17:15	O-35 Mechanical activation of zeolite and its influence on the nanostructure <u>K. Bohács</u> , F. Kristály, Z. Dallos, G. Mucsi
17:15 – 17:30	O-36 Mechanochemical synthesis and silica encapsulation of iron boride nanoparticles <u>S. Mertdinç</u> , D. Ağaoğulları, M. L. Öveçoğlu
19:00 – 22:00	Conference Dinner

Time	Thursday, 7 th September 2017
09:00 – 09:25	I-26 Synthesis of Ag₂O via mechanical decomposition of Ag₇O₈NO₃ <u>P. Billik</u>
09:25 – 09:50	I-27 c-LLZO – towards single phase compound by mechanochemical processes <u>D. Oleszak, P. Billik, M. Pawlyta</u>
09:50 – 10:15	I-28 Mechanical activation effect in the chemistry of a typical float glass batch <u>A. F. Fuentes, P. Rodríguez-Salazar, O. Burciaga-Díaz</u>
10:15 – 10:30	Coffee Break
10:30 – 10:45	O-37 Effect of particle density on powder mixing in a rotating drum for hydrogen generation <u>J. Kano, S. Ishihara, M. Yamamoto</u>
10:45 – 11:00	O-38 Thermal and mechanical properties of fluorinated ethylene and polyphenylene sulfide based composites obtained by high energy ball milling <u>V. V. Tcherdyntsev, L. K. Olifirov, S. D. Kaloshkin, M. Yu. Zadorozhnyy, V. D. Danilov</u>
11:00 – 11:15	O-39 Mechanical alloying and electric current assisted sintering adopt for metal matrix composite materials processing <u>A. Miklaszewski</u>
11:15 – 11:30	O-40 Magneto-abrasive mechanosynthesised composites <u>T. F. Grigoreva, S. A. Kovaleva, V. I. Zhornik, N. S. Khomich, T. Yu. Kiseleva, E. T. Devyatkina, S. V. Vosmerikov, S. A. Petrova, P. A. Vityaz, N. Z. Lyakhov</u>
11:30 – 11:45	O-41 X-ray and Mössbauer study of solid-state reactions in heat treated nanocrystalline Fe-Cr alloys, obtained by mechanical alloying <u>V. E. Porsev, A. L. Ulyanov</u>
11:45 – 12:00	O-42 Mechanocomposites in the system UPTFE + silicate <u>I. A. Vorsina, T. F. Grigoreva, T. A. Udalova, E. T. Devyatkina, S. V. Vosmerikov, N. Z. Lyakhov</u>
12:00 – 14:00	Lunch Break
14:00 – 14:15	O-43 Acid leaching performance of mechanically activated pyrophyllite ore for Al₂O₃ extraction <u>M. Erdemoğlu, M. Birinci, T. Uysal, E. Porgali, T. S. Barry</u>
14:15 – 14:30	O-44 Synthesis and characterization of Al–Cu–Fe quasicrystal reinforced AA 6082 Al matrix composite by mechanical milling <u>Y. Shadangi, K. Chattopadhyay, J. Basu, R. Manna, N. K. Mukhopadhyay</u>
14:30 – 14:45	O-45 A novel route to synthesize micro-laminated TiAl matrix composite sheets with high performance <u>X. Cui, L. Geng, G. Fan, J. Zhang, T. Zhang</u>
14:45 – 15:00	O-46 Structural and optical properties of nanostructured copper sulfide semiconductor synthesized in an industrial mill <u>M. Achimovičová, E. Dutková, E. Tóthová, Z. Bujňáková, J. Briančin</u>

15:00 – 15:15	O-47 Mechanochemistry immobilization of organic and inorganic pollutants into dioctahedral and trioctahedral smectites: a suitable technology for soil remediation <u>V. Ancona, P. Di Leo, M. D. R. Pizzigallo</u>
15:15 – 15:30	O-48 Mechanochemical methods in the production of high purity gases V. L. Kozhevnikov, A. O. Ivanov, B. Verbitsky, <u>K. Chuntonov</u>
15:30 – 16:00	Discussion / Concluding Remarks

Poster Sessions

Poster Session I 17:15 – 18:15; Monday, 4th September 2017		Poster Session II 18:10 – 19:10; Tuesday, 5th September 2017	
P-I-01	The effect of Sn as the process control agent on the fabrication and structural properties of new Ti-Ta-Mo-Sn biomedical alloy synthesized by high energy ball milling <u>G. Dercz</u> , I. Matuła, M. Zubko	P-II-01	Mechanochemical synthesis of aluminium metal-organic frameworks <u>S. Lavery</u> , J. Casaban, S. James
P-I-02	Alloying behavior and mechanical properties of AlCoCrFeNiMn high entropy alloy (HEA) processed by mechanical alloying and microwave sintering <u>V. Shivam</u> , N. K. Mukhopadhyay	P-II-02	BaF-benzenedicarboxylate: mechanochemical synthesis of a new representative of coordination polymers without organofluorine linkers <u>S. Breinfeld</u> , G. Scholz, F. Emmerling, E. Kemnitz
P-I-03	Effect of Co content on phase structure and hydrogenation properties of La-Mg-Ni alloys <u>M. Balcerzak</u> , M. Nowak, M. Jurczyk	P-II-03	Inadvertent liquid-assisted grinding – possible key to organic mechanochemical co-crystallisation <u>I. A. Tumanov</u> , A. A. L. Michalchuk, A. A. Politov, E. V. Boldyreva
P-I-04	In-situ Raman spectroscopic monitoring of ball milling preparations of amidoboranes <u>N. Biliškov</u> , I. Halasz, K. Užarević, J. Grbović Novaković, I. Milanović, S. Lukin, S. Milošević, A. Borgschulte, E. Callini	P-II-04	In situ monitoring and mechanism of the mechanochemical Knoevenagel reaction <u>M. Tireli</u> , S. Lukin, T. Stolar, M. di Michieli, I. Halasz, K. Užarević
P-I-05	Characterization of phases in the V₂O₅–Yb₂O₃ system obtained by high-energy ball milling and high-temperature treatment <u>M. Piz</u> , P. Dulian, E. Filipek, K. Wiecek-Ciurowa, P. Kochmanski	P-II-05	Mechanochemical protease-catalyzed peptide and amide bond formation <u>K. J. Ardila-Fierro</u> , D. Crawford, S. L. James, C. Bolm, J. G. Hernández
P-I-06	Dielectric behaviour of (Ba_{1-x}Sr_x)(Ti_{1-x}Sn_x)O₃ ceramics obtained by a mechanochemical syntheses <u>W. Bąk</u> , P. Dulian, B. Garbarz-Glos, C. Kajtoch, W. Żukowski	P-II-06	Mechanochemical synthesis of colossal dielectric permittivity electroceramics for capacitors applications <u>P. Dulian</u> , W. Bąk, B. Grabarz-Glos, M. Piz, W. Żukowski
P-I-07	The mechanochemical synthesis for the preparation of advanced ceramics based on barium titanate <u>B. Garbarz-Glos</u> , P. Dulian, W. Bąk, H. Noga	P-II-07	Influence of mechanochemical treatment and sintering conditions on final dielectric properties of (Ba,Ca)TiO₃ ceramics <u>K. Feliksik</u> , L. Kozielski, I. Szafraniak-Wiza, D. Radoszewska, M. Adamczyk-Habrajka
P-I-08	Production of nanocomposition colloidal systems for cosmetic application N. N. Mofa, Z. A. Mansurov, <u>A. M. Kaliyeva</u> , T. V. Chernoglazova, B. S. Sadykov	P-II-08	Preparation and dielectric properties of K_{1/2}Na_{1/2}NbO₃ ceramics obtained from mechanically activated powders I. Szafraniak-Wiza, <u>D. Radoszewska</u> , J. Dzik, D. Bochenek, M. Adamczyk-Habrajka
P-I-09	Effect of diluting agent on the synthesis of silver iodide nanoparticles during co-milling <u>B. B. Tatykayev</u> , Zh. S. Shalabayev, S. B. Tugelbay, B. M. Uralbekov, M. M. Burkitbayev, F. Kh. Urakaev	P-II-09	Synthesis of intermetallic based nanocomposites via mechanochemical route <u>M. H. Enayati</u>

P-I-10	Mechanochemical synthesis of $\text{LiFeGe}_2\text{O}_6$ and $\text{LiFeTi}_2\text{O}_6$ <u>E. Tóthová</u> , R. Witte, K. L. Da Silva, A. Zorkovská, M. Senna, H. Hahn, P. Heitjans, V. Šepelák	P-II-10	Mechanochemical synthesis of sulfur nanoparticles via reaction of sodium thiosulfate with crystalline acids <u>Zh. S. Shalabayev</u> , B. B. Tatykaev, B. M. Uralbekov, M. M. Burkitbayev, F. Kh. Urakaev
P-I-11	Influence of transition metals on quasicrystalline phase formation in Al-Cu-Fe mechanically alloyed powder <u>M. Mitka</u> , A. Goral, L. Litynska-Dobrzynska	P-II-11	Characterization of sintering process of high-energy milled Cu-TiB₂ materials <u>H. Dębecka</u> , M. Hebda, J. Kazior
P-I-12	Determination of the activation energy of Re_2C by high-energy ball milling <u>A. Martínez-García</u> , M. G. Granados-Fitch, M. Avalos-Borja, B. Winkler, A. K. Navarro-Mtz., E. A. Juárez-Arellano	P-II-12	Mechanochemical treatment of micrometric aluminium with organic modifiers for solid-propellant rockets <u>B. S. Sadykov</u> , N. N. Mofa, L. Galfetti, Z. A. Mansurov
P-I-13	High-energy ball milling pre-treatment of complex organic substrate for culture media <u>A. K. Navarro-Mtz.</u> , M. Urzua-Valenzuela, R. Martínez-García, M. Kakazey, E. A. Juárez-Arellano	P-II-13	Mechanochemical synthesis of coal based magnetic carbon for As(V) and Cd(II) removal <u>A. Zubrik</u> , M. Matik, M. Lovás, Z. Danková, S. Hredzák, V. Šepelák
P-I-14	Characterization of nanostructured materials using TEM and SEM microscopy <u>P. Snopiński</u> , T. Tański	P-II-14	The influence of microwave heating on crushability and grindability of selected raw materials <u>I. Znamenáčková</u> , M. Lovás, S. Hredzák, S. Dolinská
P-I-15	Mechanochemical plant-mediated synthesis of silver nanoparticles and their biological activity M. Baláž, Z. Bujňáková, N. Daneu, E. Dutková, <u>E. Balážová</u> , M. Vargová, A. Salayová, Z. Bedlovičová, E. Tkáčiková	P-II-15	Mechanical alloying of beta titanium alloys in presence of magnesium <u>G. Adamek</u>
P-I-16	Photocatalytic properties of N-doped ZnO prepared by mechanochemical synthesis <u>N. G. Kostova</u> , M. Fabian, E. Dutkova, Y. Karakirova, A. Eliyas	P-II-16	Stability of magnetite based nanoparticles dispersed in different types of polymers using ultra-fine milling approach <u>Z. Bujňáková</u> , E. Dutková, E. Tóthová, J. Briančin, Z. Cherkezova-Zheleva, J. Kováč
P-I-17	Physical properties of the lead-free $\text{BaFe}_{1/2}\text{Nb}_{1/2}\text{O}_3$ ceramics obtained from mechanochemically synthesized powders <u>D. Bochenek</u> , P. Niemiec, M. Adamczyk-Habrajska, I. Szafraniak-Wiza	P-II-17	Nanocrystalline matrix NiAl-B composites produced by consolidation of mechanically alloyed powders <u>M. Krasnowski</u> , S. Gierlotka, T. Kulik
P-I-18	Residual stress analysis and assessment of mechanical properties of dissimilar material welded joint between Alloy 617 and 12Cr steel <u>H. Waqar Ahmad</u> , J. H. Lee, J. Ho Hwang, D. H. Bae	P-II-18	Mechanochemical synthesis of low-fluorine doped aluminium hydroxide fluorides <u>V. Scalise</u> , G. Scholz, E. Kemnitz
P-I-19	Structural studies on CuCr_2S_4 nanospinels obtained by mechanical alloying <u>M. Karolus</u> , J. Panek, E. Maciążek	P-II-19	X-ray powder diffraction usefulness in mechanical activation and alloying, looking beyond crystallinity <u>F. Kristály</u> , G. Mucsi
P-I-20	Defect structure of mechanically activated MoO_3 and the chemical activity of Al/MoO_3 nanothermite <u>M. V. Sivak</u> , A. N. Streletskii, I. V. Kolbanev	P-II-20	Influence of ball milling on the structure and catalytic properties of $\text{SrFe}_{12}\text{O}_{19}$ hexaferrite <u>K. V. Koleva</u> , N. I. Velinov, I. G. Genova, T. S. Tsoncheva

P-I-21	Synthesis of Cr₃C₂ by a combination of mechanical alloying and annealing <u>S. E. Aghili</u> , M. S. Esfahani	P-II-21	Structural, magnetic and optical properties of mechanochemically synthesized CuFeS₂ nanoparticles <u>E. Dutková</u> , Z. Bujňáková, I. Škorvánek, M. J. Sayagués, A. Zorkovská, J. Kováč, J. Kováč, Jr., P. Baláž
P-I-22	Mineralogical transformations after mechanical activation of a lateritic nickel ore H. Basturkcü, N. Acarkan	P-II-22	Mechanical alloying of NbC and Si in stirred media mill <u>A. Al-Azzawi</u> , P. Baumli, F. Kristály, Á. Rácz, G. Mucsi
P-I-23	Synthesis of CuAlO₂ delafossite from mechanically activated CuO and polyaluminium chloride <u>D. Nýblová</u>	P-II-23	Soft magnetic Fe based alloys produced by mechanical alloying A. Carrillo, L. Escoda, J. Saurina, <u>J. J. Suñol</u>
P-I-24	Thermal plasma spheroidization of high-nitrogen austenitic stainless steel powder alloys synthesized by mechanical alloying N. G. Razumov, A. A. Popovich	P-II-24	Microstructure and mechanical properties of AZ61 magnesium alloy after EX-ECAP O. Hilšer, S. Rusz, L. Krejčí, F. Špalek, J. Džugan, T. Taňski
P-I-25	Structural, microstructural and thermal characterization of Fe-doped ZnO powder nanostructures prepared by mechanical alloying <u>O. Salah</u> , B. Rachid, A. Safia, J. J. Suñol, M. Ibrir, M. Bououdina	P-II-25	Structural characterization, microwave properties and corrosion behavior of Fe-Si alloy prepared by wet ball milling <u>K. Yazovskikh</u> , A. A. Shakov, S. F. Lomayeva, G. N. Konygin, O. M. Nemtsova, A. O. Shiryayev, D. A. Petrov, K. N. Rozanov
P-I-26	Mechanically alloyed aluminium powder consolidated by ERS <u>E. S. Caballero</u> , F. Ternero, R. Astacio, F. G. Cuevas, J. M. Montes, J. Cintas	P-II-26	Synthesis and electrochemical properties of composites based on conductive polymers with mechanically activated graphite particles N. V. Lyalina, <u>A. V. Syugaev</u> , A. N. Maratkanova, K. Yazovskikh
P-I-27	Production of compacts from Fe-Si powders amorphized by MA and consolidation by ERS-MF <u>F. Ternero</u> , E. S. Caballero, R. Astacio, F. G. Cuevas, J. Cintas, J. M. Montes	P-II-27	Effect of mechanochemical milling on the FSDP-related XRD correlations in overstoichiometric As-Se glassy alloys <u>Ya. Shpotyuk</u> , J. Cebulski, P. Demchenko, Z. Bujňáková, P. Baláž, O. Shpotyuk
P-I-28	Effect of particle size on the optical properties of ZnO nanopowders fabricated by wet milling <u>T. Şimşek</u> , A. Ceylan, G. Ş. Aşkın, Ş. Özcan	P-II-28	A tentative description of the first stages of mechanical alloying <u>G. Pia</u> , A. Cincotti, F. Delogu
P-I-29	Tuning the magnetic properties of cobalt-ferrite nanostructures by changing the inversion parameter and crystallite size with milling <u>M. B. Kaynar</u> , Ş. Özcan	P-II-29	Fabrication of Cu-graphite metal matrix composites <u>B. Lasio</u> , R. Orrù, G. Cao, M. Cabibbo, F. Delogu
P-I-30	Mechanosynthesis of multisubstituted hydroxyapatite nanopowders <u>B. Nasiri-Tabrizi</u> , R. Ebrahimi-Kahrizsangi, A. Fakharzadeh, W. J. Basirun	P-II-30	In situ measurement of luminescence emitted by coumarin 1 in ball drop experiments <u>C. Ricci</u> , R. Corpino, A. Porcheddu, G. Ligios, F. Delogu
P-I-31	Cation exchange capacity of mechanically activated glauconite – fundamental aspects and relevance <u>R. Singla</u> , T. C. Alex, R. Kumar	P-II-31	Propagation modes of self-sustaining reactions activated by mechanical processing <u>A. Cincotti</u> , G. Pia, L. Takacs, F. Delogu
P-I-32	Mechanochemical preparation of titanium and hafnium carbides <u>T. F. Grigoreva</u> , B. P. Tolochko, A. I. Ancharov, S. V. Vosmerikov, E. T. Devyatkina, T. A. Udalova, E. A. Pavlov, N. Z. Lyakhov	P-II-32	Water-rocks interaction during mechanical activation of olivine <u>F. Torre</u> , F. Delogu, S. Enzo, V. Farina, G. Mulas, C. Pistidda, S. Garroni

P-I-33	Effect of samarium on Fe₂O₃ on magnetization using high energy milling P. Vera-Serna, F. N. Tenorio-González, <u>M. Kusý</u> , J. A. Juanico- Loran, F. Sánchez-de-Jesús, M. Silva-Fragoso	P-II-33	Thermodynamically stable nanostructured metal alloys by mechanical alloying: The ICARUS project <u>The ICARUS consortium</u>
P-I-34	Macro-segregation Mechanism and Control for the Low Pressure Die Casting of ZL205A Aluminum Alloy <u>S. Wu</u>	P-II-34	Recycling of critical metals: An innovative application of mechanochemistry <u>V. Loy</u> , K. Binnemans, T. Van Gerven
P-I-35	Microstructure and mechanical properties of the SiC/Zr4 joints brazed using the TiZrNiCu filler alloy <u>J. Zhang</u> , Q. Qi	P-II-35	Mechanical properties of hydrogels and automated system “KERN-DP” <u>A. P. Onanko</u> , S. A. Vyzhva, Y. A. Onanko, N. P. Kulish, V. V. Kuryluk, A. V. Shabatura, R. V. Homenko, A. N. Onischenko
P-I-36	GRADE 1 titanium microstructure and properties investigation after Cr₃C₂ powder alloying using high power diode laser <u>M. Wiśniowski</u> , T. Tański, D. Janicki	P-II-36	Soot combustion efficiency using Fe, Cu, and Co impregnated on kaolin based ZSM-5 for diesel soot oxidation <u>D. O. Obada</u> , M. Dauda, F. O. Anafi, A. S. Ahmed, O. A. Ajayi, D. Dodoo-Arhin, A. Y. Atta
P-I-37	Surface analysis of PET bottles by XPS method <u>M. Kanuchova</u> , L. Kozakova, T. Bakalar, J. Skvarla	P-II-37	Low-cost catalytic control of indoor PM emissions from solid fuel combustion <u>M. Peter</u> , D. M Kulla, N. O. Ominsanya, A. Y. Atta, D. O. Obada, S. Umaru
P-I-38	Wear resistant ALD/PVD hybrid coatings deposited on sintered tool substrate <u>M. Staszuk</u> , D. Pakuła, G. Chladek	P-II-38	Development of asbestos free lining material from mahogany and doum palm <u>J. Makama</u> , D. S. Yawas, A. I. Obi, M. U. Obot, D. O. Obada
P-I-39	Photovoltaic response of bulk heterojunctions based on nanopowders of kesterite and n-type semiconductors O. P. Dimitriev, D. O. Grynko, A. M. Fedoryak, T. P. Doroshenko, M. Kratzer, C. Teichert, Yu. V. Noskov, N. A. Ogurtsov, A. A. Pud, <u>P. Balaz</u> , M. Balaz, M. Tesinsky, M. Hegedus	P-II-39	Analyses of plastic flow localization in bimetal electrolytically saturated with hydrogen S. A. Barannikova, <u>Yu. V. Li</u> , L. B. Zuev

- **I** Invited lecture
- **O** Oral presentation
- **P** Poster presentation