Tentative program of INCOME 2017

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

Time	Monday, 4th September 2017
08:30 – 08:55	**Opening Remarks**
08:55 – 09:20	**I-01 Two important periods in the history of mechanochemistry** L. Takacs
09:20 – 09:45	**I-02 A quest for mechanisms of mechanically activated transformations** F. Delogu
09:45 – 10:10	**I-03 Modeling mechanochemical reaction mechanisms** W. T. Tysoe
10:10 – 10:30	**Coffee Break**
10:30 – 10:45	**O-01 Mechanochemical preparation of ultra disperse powders of Si, Ge, Cu, Ag** N. Z. Lyakhov, 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 $LiNH_2$-x$AlCl_3$ system** G. Mulas, 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 Cu_2ZnSnS_4** P. Baláž, M. Baláž, M. Hegeduš, M. Fabián, M. Achimovičová, E. Dutková, M. Kaňuchová, J. Briančin, M. Tešinský
11:15 – 11:30	**O-04 Gas-solid reactions induced by mechanochemical activation** M. Felderhoff, 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)** B. S. Mitchell, M. J. Fink
11:45 – 12:00	**O-06 Mechanocatalytic preferential CO oxidation** R. Eckert, 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** P. Heitjans
14:25 – 14:50	**I-05 How does mechanical stressing rationalize solid-state synthesis of functional complex oxide nanoparticles?** M. Senna
14:50 – 15:15	**I-06 Mechanochemical synthesis, structure and characterization of fluorine-containing alkaline earth metal compounds** G. Scholz
15:15 – 15:40	**I-07 Structure and ion dynamics in mechanosynthesized fluorides** M. Wilkening
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** A. Düvel, L. Morgan, C. V. Chandran, P. Heitjans, D. C. Sayle
16:15 – 16:30	**O-08 Mechanochemical/thermal preparation of $Li_4Ti_5O_{12}$. Structural and electrochemical properties** M. Fabián, M. Žukalová, L. Kavan, E. Tóthová, V. Šepelák, M. Senna
16:30 – 16:45	**O-09 Mechanochemical synthesis of solid solutions of $M_xPb_{1-x}F_2$ (M = Ca, Sr, Ba)** M. Heise, G. Scholz, E. Kemnitz
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** H. Schreyer, M. Felderhoff, F. Schüth
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** X. Liu, N. Fatah
17:15 – 18:15	**Poster Session I**

Time	Tuesday, 5th September 2017
08:00 – 08:25	**I-08 TBA** T. Friščić
08:25 – 08:50	**I-09 New insights in formation pathways: in situ investigations of mechanochemical reactions** F. Emmerling, 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** F. Lamaty
09:15 – 09:40	**I-11 Transformation of pharmaceuticals induced by milling** M. Descamps, J.-F. Willart, E. Dudognon
09:40 – 10:05	**I-12 Composites of drugs with inorganic and organic excipients obtained by the mechanochemical methods** T. P. Shakhtshneider
10:05 – 10:30	**Coffee Break** **Conference Photo**
10:30 – 10:45	**O-12 In situ monitoring as tools to study mechanochemical reactions** I. Halasz, K. Užarević, S. Lukin, T. Friščić
10:45 – 11:00	**O-13 Transformations of dexamethasone drug induced by mechanical milling** P. F. M. Oliveira, J.-F. Willart, J. Siepmann, F. Siepmann, M. Descamps
11:00 – 11:15	**O-14 From molecules to biohybrid nanomaterials by ball-milling** M. Lupacchini, A. Mascitti, L. Tonucci, N. d'Alessandro, C. Charnay, E. Colacino
11:15 – 11:30	**O-15 Quantitative in situ monitoring of mechanochemical selectivity in pharmaceutical cocrystal polymorphs** S. Lukin, T. Stolar, M. Tireli, M. V. Blanco, D. Babić, T. Friščić, 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** D. S. Rybin, 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** B. Baytekin, 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, G.-W. Wang
14:25 – 14:50	**I-14 Mechanochemical multicomponent transformations and mechanoenzymatic reactions by ball-milling** J. G. Hernández
14:50 – 15:15	**I-15 Mechanochemistry, an easy technique to boost the synthesis of new luminescent coordination polymers** L. Maini
15:15 – 15:40	**I-16 Mechanochemistry – from curiosity to commercialisation** S. L. James

15:40 – 16:00	**Coffee Break**
16:00 – 16:15	**O-18 Synthesis by twin screw extrusion (TSE)** D. E. Crawford, S. L. James, C. Miskimmin, A. Albadmin, G. Walker
16:15 – 16:30	**O-19 Main group mechanochemical synthesis** F. Garcia
16:30 – 16:45	**O-20 Mechanochemical synthesis of highly-ordered microporous zirconium-based metal-organic frameworks** K. Užarević, A. Fidelli, A. J. Howarth, O. K. Farha, T. Friščić
16:45 – 17:00	**O-21 Mechanosynthesis of functional metal-organic frameworks based on acylhydrazone and dicarboxylate linkers** D. Matoga, 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** N. Solin
17:15 – 17:30	**O-23 Solvation and surface effects on polymorph stabilities at the nanoscale** A. M. Belenguer, 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** A. Barranco, M. Felderhoff, F. Schüth
17:45 – 18:10	**I-17 Do we always know, what we do not know? Challenges of mechanochemistry** E. V. Boldyreva
18:10 – 19:10	**Poster Session II**
19.10 –	**Meeting of the International Advisory Committee of INCOME**

Time	Wednesday, 6th September 2017
08:30 – 08:55	**I-18 Scenarios and possible mechanisms of structural-phase transformations in alloys at intensive plastic deformation** A. Ye. Yermakov, 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** N. K. Mukhopadhyay
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** D. V. Dudina, 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** A. N. Streletskii, 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** V. F. Ruiz-Ruiz, 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** B. Bergk, 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** S. F. Tikhov, 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** G. Dercz, I. Matuła, M. Zubko, J. Maszybrocka, M. Boruszewska
11:30 – 11:45	**O-29 Mössbauer study of the kinetics of mechanical amorphization in $Fe_{70}Zr_{30}$** A. F. Manchón-Gordón, J. J. Ipus, J. S. Blázquez, C. F. Conde, A. Conde
11:45 – 12:00	**O-30 Mechanochemically-driven amorphization in overstoichiometric arsenic sulfides** O. Shpotyuk, 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** A. Calka, A. M. Aksenczuk
14:25 – 14:50	**I-23 Cryomilling, nanoparticles and ink: do they represent a new possibility** K. Chattopadhyay, C. S. Tiwari, K. Malaviya, H. Prabha
14:50 – 15:15	**I-24 Odyssey in mechanical activation of solids – SMILE and beyond** R. Kumar
15:15 – 15:40	**I-25 Mechanosynthesis of nanocrystals and nanocomposites** F. Kh. Urakaev, 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 $BiFeO_3$-based high-temperature piezoelectric materials** M. Makarovič, A. Benčan Golob, B. Malič, T. Rojac
16:15 – 16:30	**O-32 The synthesis of niobium silicides by a mechanochemical process** D. Ovalı, D. Ağaoğulları, M. L. Öveçoğlu
16:30 – 16:45	**O-33 Mechanochemical synthesis of mohite (Cu_2SnS_3)** M. Baláž, M. Rajňák, N. Daneu, E. Dutková, M. Hegedűs, M. Fabián, M. Achimovičová, M. Tešinský, 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** A. Hajalilou
17:00 – 17:15	**O-35 Mechanical activation of zeolite and its influence on the nanostructure** K. Bohács, F. Kristály, Z. Dallos, G. Mucsi
17:15 – 17:30	**O-36 Mechanochemical synthesis and silica encapsulation of iron boride nanoparticles** S. Mertdinç, D. Ağaoğulları, M. L. Öveçoğlu
19:00 – 22:00	**Conference Dinner**

Time	Thursday, 7th September 2017
09:00 – 09:25	**I-26 Synthesis of Ag_2O via mechanical decomposition of $Ag_7O_8NO_3$** P. Billik
09:25 – 09:50	**I-27 c-LLZO – towards single phase compound by mechanochemical processes** D. Oleszak, P. Billik, M. Pawlyta
09:50 – 10:15	**I-28 Mechanical activation effect in the chemistry of a typical float glass batch** A. F. Fuentes, P. Rodríguez-Salazar, O. Burciaga-Díaz
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** J. Kano, S. Ishihara, M. Yamamoto
10:45 – 11:00	**O-38 Thermal and mechanical properties of fluorinated ethylene and polyphenylene sulfide based composites obtained by high energy ball milling** V. V. Tcherdyntsev, L. K. Olifirov, S. D. Kaloshkin, M. Yu. Zadorozhnyy, V. D. Danilov
11:00 – 11:15	**O-39 Mechanical alloying and electric current assisted sintering adopt for metal matrix composite materials processing** A. Miklaszewski
11:15 – 11:30	**O-40 Magneto-abrasive mechanosynthesised composites** 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
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** V. E. Porsev, A. L. Ulyanov
11:45 – 12:00	**O-42 Mechanocomposites in the system UPTFE + silicate** I. A. Vorsina, T. F. Grigoreva, T. A. Udalova, E. T. Devyatkina, S. V. Vosmerikov, N. Z. Lyakhov
12:00 – 14:00	**Lunch Break**
14:00 – 14:15	**O-43 Acid leaching performance of mechanically activated pyrophyllite ore for Al_2O_3 extraction** M. Erdemoğlu, M. Birinci, T. Uysal, E. Porgalı, T. S. Barry
14:15 – 14:30	**O-44 Synthesis and characterization of Al–Cu–Fe quasicrystal reinforced AA 6082 Al matrix composite by mechanical milling** Y. Shadangi, K. Chattopadhyay, J. Basu, R. Manna, N. K. Mukhopadhyay
14:30 – 14:45	**O-45 A novel route to synthesize micro-laminated TiAl matrix composite sheets with high performance** X. Cui, L. Geng, G. Fan, J. Zhang, T. Zhang
14:45 – 15:00	**O-46 Structural and optical properties of nanostructured copper sulfide semiconductor synthesized in an industrial mill** M. Achimovičová, E. Dutková, E. Tóthová, Z. Bujňáková, J. Briančin

15:00 – 15:15	**O-47 Mechanochemistry immobilization of organic and inorganic pollutants into dioctahedral and trioctahedral smectites: a suitable technology for soil remediation** V. Ancona, P. Di Leo, M. D. R. Pizzigallo
15:15 – 15:30	**O-48 Mechanochemical methods in the production of high purity gases** V. L. Kozhevnikov, A. O. Ivanov, B. Verbitsky, K. Chuntonov
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** G. Dercz, I. Matuła, M. Zubko	P-II-01	**Mechanochemical synthesis of aluminium metal-organic frameworks** S. Lavery, 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** V. Shivam, N. K. Mukhopadhyay	P-II-02	**BaF-benzenedicarboxylate: mechanochemical synthesis of a new representative of coordination polymers without organofluorine linkers** S. Breitfeld, G. Scholz, F. Emmerling, E. Kemnitz
P-I-03	**Effect of Co content on phase structure and hydrogenation properties of La-Mg-Ni alloys** M. Balcerzak, M. Nowak, M. Jurczyk	P-II-03	**Inadvertent liquid-assisted grinding – possible key to organic mechanochemical co-crystallisation** I. A. Tumanov, A. A. L. Michalchuk, A. A. Politov, E. V. Boldyreva
P-I-04	**In-situ Raman spectroscopic monitoring of ball milling preparations of amidoboranes** N. Biliškov, 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** M. Tireli, S. Lukin, T. Stolar, M. di Michieli, I. Halasz, K. Užarević
P-I-05	**Characterization of phases in the V_2O_5–Yb_2O_3 system obtained by high-energy ball milling and high-temperature treatment** M. Piz, P. Dulian, E. Filipek, K. Wieczorek-Ciurowa, P. Kochmanski	P-II-05	**Mechanochemical protease-catalyzed peptide and amide bond formation** K. J. Ardila-Fierro, D. Crawford, S. L. James, C. Bolm, J. G. Hernández
P-I-06	**Dielectric behaviour of $(Ba_{1-x}Sr_x)(Ti_{1-x}Sn_x)O_3$ ceramics obtained by a mechanochemical syntheses** W. Bąk, P. Dulian, B. Garbarz-Glos, C. Kajtoch, W. Żukowski	P-II-06	**Mechanochemical synthesis of colossal dielectric permittivity electroceramics for capacitors applications** P. Dulian, 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** B. Garbarz-Glos, P. Dulian, W. Bąk, H. Noga	P-II-07	**Influence of mechanochemical treatment and sintering conditions on final dielectric properties of $(Ba,Ca)TiO_3$ ceramics** K. Feliksik, L. Kozielski, I. Szafraniak-Wiza, D. Radoszewska, M. Adamczyk-Habrajska
P-I-08	**Production of nanocomposition colloidal systems for cosmetic application** N. N. Mofa, Z. A. Mansurov, A. M. Kaliyeva, T. V. Chernoglazova, B. S. Sadykov	P-II-08	**Preparation and dielectric properties of $K_{1/2}Na_{1/2}NbO_3$ ceramics obtained from mechanically activated powders** I. Szafraniak-Wiza, D. Radoszewska, J. Dzik, D. Bochenek, M. Adamczyk-Habrajska
P-I-09	**Effect of diluting agent on the synthesis of silver iodide nanoparticles during co-milling** B. B. Tatykayev, 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** M. H. Enayati

P-I-10	**Mechanochemical synthesis of $LiFeGe_2O_6$ and $LiFeTi_2O_6$** E. Tóthová, 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** Zh. S. Shalabayev, 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** M. Mitka, A. Goral, L. Litynska-Dobrzynska	P-II-11	**Characterization of sintering process of high-energy milled Cu-TiB_2 materials** H. Dębecka, M. Hebda, J. Kazior
P-I-12	**Determination of the activation energy of Re_2C by high-energy ball milling** A. Martínez-García, M. G. Granados-Fitch, M. Avalos-Borja, B. Winkler, A. K. Navarro-Mtz., E. A. Juarez-Arellano	P-II-12	**Mechanochemical treatment of micrometric aluminium with organic modifiers for solid-propellant rockets** B. S. Sadykov, N. N. Mofa, L. Galfetti, Z. A. Mansurov
P-I-13	**High-energy ball milling pre-treatment of complex organic substrate for culture media** A. K. Navarro-Mtz., M. Urzua-Valenzuela, R. Martínez-García, M. Kakazey, E. A. Juarez-Arellano	P-II-13	**Mechanochemical synthesis of coal based magnetic carbon for As(V) and Cd(II) removal** A. Zubrik, M. Matik, M. Lovás, Z. Danková, S. Hredzák, V. Šepelák
P-I-14	**Characterization of nanostructured materials using TEM and SEM microscopy** P. Snopiński, T. Tański	P-II-14	**The influence of microwave heating on crushability and grindability of selected raw materials** I. Znamenáčková, 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, Ľ. Balážová, M. Vargová, A. Salayová, Z. Bedlovičová, Ľ. Tkáčiková	P-II-15	**Mechanical alloying of beta titanium alloys in presence of magnesium** G. Adamek
P-I-16	**Photocatalytic properties of N-doped ZnO prepared by mechanochemical synthesis** N. G. Kostova, 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** Z. Bujňáková, E. Dutková, E. Tóthová, J. Briančin, Z. Cherkezova-Zheleva, J. Kováč
P-I-17	**Physical properties of the lead-free $BaFe_{1/2}Nb_{1/2}O_3$ ceramics obtained from mechanochemically synthesized powders** D. Bochenek, P. Niemiec, M. Adamczyk-Habrajska, I. Szafraniak-Wiza	P-II-17	**Nanocrystalline matrix NiAl-B composites produced by consolidation of mechanically alloyed powders** M. Krasnowski, 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** H. Waqar Ahmad, J. H. Lee, J. Ho Hwang, D. H. Bae	P-II-18	**Mechanochemical synthesis of low-fluorine doped aluminium hydroxide fluorides** V. Scalise, G. Scholz, E. Kemnitz
P-I-19	**Structural studies on $CuCr_2S_4$ nanospinels obtained by mechanical alloying** M. Karolus, J. Panek, E. Maciążek	P-II-19	**X-ray powder diffraction usefulness in mechanical activation and alloying, looking beyond crystallinity** F. Kristály, G. Mucsi
P-I-20	**Defect structure of mechanically activated MoO_3 and the chemical activity of Al/MoO_3 nanothermite** M. V. Sivak, A. N. Streletskii, I. V. Kolbanev	P-II-20	**Influence of ball milling on the structure and catalytic properties of $SrFe_{12}O_{19}$ hexaferrite** K. V. Koleva, N. I. Velinov, I. G. Genova, T. S. Tsoncheva

P-I-21	**Synthesis of Cr_3C_2 by a combination of mechanical alloying and annealing** S. E. Aghili, M. S. Esfahani	P-II-21	**Structural, magnetic and optical properties of mechanochemically synthesized $CuFeS_2$ nanoparticles** E. Dutková, 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. Basturkcu, N. Acarkan	P-II-22	**Mechanical alloying of NbC and Si in stirred media mill** A. Al-Azzawi, P. Baumli,F. Kristály, Á. Rácz, G. Mucsi
P-I-23	**Synthesis of $CuAlO_2$ delafossite from mechanically activated CuO and polyaluminium chloride** D. Nýblová	P-II-23	**Soft magnetic Fe based alloys produced by mechanical alloying** A. Carrillo, L. Escoda, J. Saurina, J. J. Suñol
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. Tański
P-I-25	**Structural, microstructural and thermal characterization of Fe-doped ZnO powder nanostructures prepared by mechanical alloying** O. Salah, 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** K. Yazovskikh, A. A. Shakov, S. F. Lomayeva, G. N. Konygin, O. M. Nemtsova, A. O. Shiryaev, D. A. Petrov, K. N. Rozanov
P-I-26	**Mechanically alloyed aluminium powder consolidated by ERS** E. S. Caballero, 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, A. V. Syugaev, A. N. Maratkanova, K. Yazovskikh
P-I-27	**Production of compacts from Fe-Si powders amorphized by MA and consolidation by ERS-MF** F. Ternero, 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** Ya. Shpotyuk, 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** T. Şimşek, A. Ceylan, G. Ş. Aşkın, Ş. Özcan	P-II-28	**A tentative description of the first stages of mechanical alloying** G. Pia, 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** M. B. Kaynar, Ş. Özcan	P-II-29	**Fabrication of Cu-graphite metal matrix composites** B. Lasio, R. Orrù, G. Cao, M. Cabibbo, F. Delogu
P-I-30	**Mechanosynthesis of multisubstituted hydroxyapatite nanopowders** B. Nasiri-Tabrizi, R. Ebrahimi-Kahrizsangi, A. Fakharzadeh, W. J. Basirun	P-II-30	**In situ measurement of luminescence emitted by coumarin 1 in ball drop experiments** C. Ricci, R. Corpino, A. Porcheddu, G. Ligios, F. Delogu
P-I-31	**Cation exchange capacity of mechanically activated glauconite – fundamental aspects and relevance** R. Singla, T. C. Alex, R. Kumar	P-II-31	**Propagation modes of self-sustaining reactions activated by mechanical processing** A. Cincotti, G. Pia, L. Takacs, F. Delogu
P-I-32	**Mechanochemical preparation of titanium and hafnium carbides** T. F. Grigoreva, 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** F. Torre, F. Delogu, S. Enzo, V. Farina, G. Mulas, C. Pistidda, S. Garroni

P-I-33	**Effect of samarium on Fe_2O_3 on magnetization using high energy milling** P. Vera-Serna, F. N. Tenorio-González, M. Kusý, 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** The ICARUS consortium
P-I-34	**Macro-segregation Mechanism and Control for the Low Pressure Die Casting of ZL205A Aluminum Alloy** S. Wu	P-II-34	**Recycling of critical metals: An innovative application of mechanochemistry** V. Loy, K. Binnemans, T. Van Gerven
P-I-35	**Microstructure and mechanical properties of the SiC/Zr4 joints brazed using the TiZrNiCu filler alloy** J. Zhang, Q. Qi	P-II-35	**Mechanical properties of hydrogels and automated system "KERN-DP"** A. P. Onanko, 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 Cr_3C_2 powder alloying using high power diode laser** M. Wiśniowski, 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** D. O. Obada, 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** M. Kanuchova, L. Kozakova, T. Bakalar, J. Skvarla	P-II-37	**Low-cost catalytic control of indoor PM emissions from solid fuel combustion** M. Peter, 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** M. Staszuk, D. Pakuła, G. Chladek	P-II-38	**Development of asbestos free lining material from mahogany and doum palm** J. Makama, 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, P. Balaz, M. Balaz, M. Tesinsky, M. Hegedus	P-II-39	**Analyses of plastic flow localization in bimetal electrolytically saturated with hydrogen** S. A. Barannikova, Yu. V. Li, L. B. Zuev
P-I-40	**Investigation of mechanical properties in dissimilar welding of shape memory alloys** M. H. Sadati, F. Haftani		

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