### XVITH INTERNATIONAL CONGRESS

### **MACHINES.TECHNOLOGIES.MATERIALS'19**



# **PROGRAM**

### **ORGANIZER:**

## SCIENTIFIC-TECHNICAL UNION OF MECHANICAL ENGINEERING



### **PROGRAM**

### 09.09.2019 (MONDAY)

| 16:00 – 20:00 | REGISTRATION | IN FRONT OF CONFERENCE HALL №1 |
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### 10.09.2019 (TUESDAY)

| 08:00 - 17:00 | REGISTRATION | IN FRONT OF CONFERENCE HALL №1 |
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### 11.09.2019 (WEDNESDAY)

| 16:00 – 20:00 | REGISTRATION | IN FRONT OF CONFERENCE HALL №1 |
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### 12.09.2019 (THURSDAY)

| 08:00 – 10:00 | REGISTRATION            | IN FRONT OF CONFERENCE HALL №1 |
|---------------|-------------------------|--------------------------------|
|               | CONFERENCE HALL №1      |                                |
| 10:00 – 10:15 | OPENING OF THE CONGRESS |                                |
| 10:15 – 12:45 | PLENARY SESSION         |                                |

| 12:45 – 13:00 | COLLECTIVE PICTURES OF THE PARTICIPANTS | ON THE STAIRS TO THE POOL |
|---------------|---|---------------------------|
|---------------|---|---------------------------|

### 13:00 - 14:00 LUNCH BREAK (NO LUNCH PROVIDED)

|               | CONFERENCE HALL №1            |  |
|---------------|-------------------------------|--|
| 14:00 – 16:00 | SECTION "TECHNOLOGIES"        |  |
| 16:00 – 16:30 | COFFEE BREAK - CONFERENCE BAR |  |
| 16:30 – 18:30 | SECTION "MATERIALS"           |  |

| 19:30 – 24:00 | "WELCOME" COCKTAIL - CONFERENCE BAR |
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### 13.09.2019 (FRIDAY)

| 10:00 | CLOSING OF THE CONGRESS - WINE AND CHEESE PARTY | CONFERENCE BAR |
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### **SCIENTIFIC PROGRAM**

| 12.09.2019    | OPENING OF THE CONGRESS       | CONFERENCE HALL 1 |
|---------------|-------------------------------|-------------------|
| 10:00 – 10:15 | CHAIRMAN: PROF.D.Sc. G. POPOV | CONTENENCE HALL I |

|   | 10:15 – 12:45   |  |   | CONFERENCE HALL 1   |     |          |
|---|---|--|---|---|-----|----------|
|   | CHAIRMAN:   | PROF.DR. CVETKOVSKI S. (NM) CO-CH  | IAIR: PROF. DR. GALII   |   | BG) | T        |
| 1 | Professor Dr. Eng. Roumen H. Petrov <sup>2,1</sup> Department of Electrical Energy, Metals, Mechanical Constructions & Systems (EEMMeCS)—Ghent University, Belgium <sup>1</sup> Department of Materials Science and Engineering, Delft University of Technology, the Netherlands <sup>2</sup> |  | 60  | BE<br>NL  |     |          |
| 2 | ENHANCED S  | GRAINED MAGNESIUM ALLOYS WITH<br>TRENGTH AND IN-SERVICE<br>AFTER DIFFERENT DEFORMATION | Prof., Dr. Sci. Dobat<br>PhD Estrin Yu.Z. <sup>3,4</sup> , P<br>N.S. <sup>1,2</sup> ,<br>PhD Lukyanova E.A.<br><sup>1</sup> A.A. Baikov Institut<br>and Materials Scien<br>Moscow, Russia<br><sup>2</sup> National University<br>Technology "MISIS"<br>Russia<br><sup>3</sup> Department of Ma<br>Engineering, Monas<br>Clayton, Melbourne<br><sup>4</sup> Department of Me<br>Engineering, The Ur<br>Western Australia, I<br>Australia | thD Martynenko  1,2, te of Metallurgy ce of the RAS, of of Science and of Moscow, terials th University, e, Australia chanical niversity of | 44  | RU<br>AU |
| 3 |   | PERMEABLE ELEMENTS FOR<br>OF POWDER METALS FORMING                                     | Dr.Sc. Bagliuk G.A.<br>Frantsevich Institute<br>of Materials Science<br>Ukraine, Kyiv,  |   | 61  | UA       |
| 4 |   | ND DESIGN OF HYPERBOLOID GEAR<br>HODOLOGY AND ASPECTS                                  | Assoc. Prof. Abadjie<br>Prof. Sc. D. Abadjiev<br>Graduate School of<br>Science, Akita Unive<br>Institute of Mechan<br>Academy of Science  | V. PhD.2 Engineering ersity, Japan1 ics, Bulgarian es, Bulgaria 2   | 07  | JP<br>BG |
| 5 | PROCESSING<br>PLASMA  | OF BIMETALS IN THE ELECTROLYTE   | Prof. Dr. Eng. Kaput<br>Eng. Duradji V.², Ass<br>Kaputkina N.³<br>Moscow State Tech<br>of Civil Aviation ¹, N<br>University of Scienc<br>Technology "MISiS"<br>Aviation Institute (N<br>Research University<br>Russia   | s. Prof. Dr. Eng.  nical University lational e and <sup>2</sup> , Moscow lational   | 21  | RU       |

| 6 | THE EFFECT OF BALL MILLING SPEED ON THE PENETRATION OF CR AND ZR INTO CU FOR PRODUCTION OF CU1CRZR ALLOY POWDER | Prof. Dr. Kul M., Assoc. Prof. Dr.<br>Özer A., Dr. Öksüz K.E., Kurt N.<br>Sivas Cumhuriyet University, Sivas,                               | 48 | TR |
|---|---|---|----|----|
| 7 | AN APPROACH OF FRA AND ITS USE FOR UFV<br>SUPPORTED MANUFACTURING   | Assoc. Prof. Alieksieiev V. PhD.,<br>Assoc. Prof. Liubinsky B. PhD.,<br>Assoc. Prof. Hladun V. PhD.<br>Lviv Polytechnic National University | 71 | UA |

| 12:45- 13:00 | COLLECTIVE PICTURES OF PARTICIPANTS | THE STAIRS TO THE POOL |
|--------------|-------------------------------------|------------------------|
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### 13:00 - 14:00 LUNCH BREAK (NO LUNCH PROVIDED)

| 12.09.2018<br>14:00 – 16:00                   |  | SESSION "TEC  | SESSION "TECHNOLOGIES" |   | CONFERENCE HALL 1  |    |          |
|---|--|---|------------------------|---|--|----|----------|
| CHAIRMAN: PROF. DR. ROUMEN PETROV (BE) CO-CHA |  | AIRMAN: ASSOC. PRO  | F. DR. VLADISLAV AI    | LIEKSIEIE   | V (UA)   |    |          |
| 8   | ENERGY SYN                             | L-TI-C SYSTEM MASTER ALLO'<br>THESIS ON EFFICIENCY OF NI<br>INOCULATION   |                        | Prof., D.Sc. Syzonen<br>Ph.D. Lypian Ye., Ph<br>Ph.D. Zaichenko A.,<br>Institute of Pulse Pr<br>Technologies of the<br>Academy of Science<br>Mykolaiv, Ukraine  | .D. Torpakov A.,<br>Ph.D. Prystash M.<br>ocesses and<br>National   | 36 | UA       |
| 9   | INDEPENDEN<br>DEFORMATIC<br>LENGTH PRO | LUATION OF THE INFLUENCE<br>IT FACTORS ON THE FORCE<br>ON WHEN RECEIVING LONG-<br>DUCT FROM LOW-ALLOYED<br>ONZE BY THE SPD METHOD | OF                     | Lead. Res., Dr. Semo<br>Dr. Raab A.G. <sup>1</sup> , Prof<br>Assoc. Prof. Kambur<br><sup>1</sup> Ufa State Aviation<br>University, Ufa, Rus<br><sup>2</sup> Todor Kableshkov I<br>Transport, Sofia, Bu<br><sup>3</sup> Technical Universit                            | . Tontchev N.T. <sup>2</sup> ,<br>rov V.V. <sup>3</sup><br>Technical<br>sia<br>Higher School of<br>Igaria<br>y of Sofia,           | 51 | RU<br>BG |
| 10  |  | PERATING AND DESIGN VARI<br>SOUR WATER QUALITY  | ABLES                  | Eng. Mansour A <sup>1</sup> , As Ghallab A O <sup>2</sup> , Prof. I Prof. Dr. Ashour F H Faculty of Engineeri University, Giza <sup>1,2,3</sup> , Engineering, Port Sa  | Dr. Gadalla M A <sup>3</sup> ,<br><sup>4</sup><br>Ing, Cairo<br>Faculty of   | 16 | EG       |
| 11  | CHARACTERIS                            | NT AND RESEARCH OF<br>STICS OF TWO-LAYER DIAMO<br>DRILLING TOOLS  | ND                     | Assoc. Prof., Dr. Pro<br>Head of laboratory,<br>A. <sup>1</sup> , Junior Res., Kra<br>Researcher Moroko<br>Technological Instit<br>and Novel Carbon M<br>Moscow,<br>Moscow Institute of<br>Technology, Moscow<br>Emmanuel's Institut<br>Physics <sup>3</sup> , Moscow | khorov V. <sup>1,2,*</sup> , Dr. Pozdnyakov vchuk K. <sup>1</sup> , v E. <sup>3</sup> . ute for Superhard Materials, f Physics and | 04 | RU       |
| 12  |  | ON BY FLUE GAS HUMIDIFICATION USING TWO DIFFERE   |                        | M.Sc. Elnahas M. H.<br>A. O. <sup>1</sup><br>Department of Chel<br>Engineering, Faculty<br>Cairo University, Eg   | mical<br>y of Engineering –  | 22 | EG       |

| 13 | INVESTIGATION AND ANALYSIS OF<br>ELECTROCHEMICAL MACHINING OF 321-<br>STAINLESS STEEL BASED ON RESPONSE<br>SURFACE METHODOLOGY | Assist. Prof. Ali Mehrvar <sup>1</sup> , Assoc. Prof. Ali Bast <sup>2</sup> , Assoc. Prof. Ali Jamali <sup>2</sup> Department of Mechanical Engineering – University of Shahreza, Isfahan, Iran <sup>1</sup> Faculty of Mechanical Engineering – University of Guilan, Rasht, Iran <sup>2</sup>  | 39 | IR |
|----|--|--|----|----|
| 14 | SYNTHESIS OF MICROSPHERES BASED ON PURE METALS AND ALLOYS WHEN COMBINING METHODS OF PYROLYSIS AND COMBUSTION OF SOLUTIONS      | Dr. Podbolotov K.B. <sup>1</sup> , Dr. Hort A.A. <sup>2</sup> , Melnik N. Y. <sup>1</sup> , Hort N.A. <sup>1</sup> , Velichko M.V. <sup>3</sup> Physical-Technical Institute of the National Academy of Sciences of Belarus <sup>1</sup> Institute of heat and mass transfer of the National Academy of Sciences of Belarus <sup>2</sup> Belarusian State Economic University <sup>3</sup> | 47 | ВУ |
| 15 | ANALASYS OF OPPORTUNITIES FOR DEVELOPMENT OF BULGARIAN INDUSTRIAL MANUFACTURING  | M.Sc. Veleva N. <sup>1</sup> Faculty of Mechanical Engineering, Department of Industrial Management – Technical University of Varna, Bulgaria  | 13 | BG |

| 16:00 – 16:30 | COFFEE BREAK - CONFERENCE BAR |
|---------------|-------------------------------|
|               |                               |

| 12.09.2019 SESSION "MATERIALS" |   | CONFERENCE HALL 1   |   |  |    |    |
|--------------------------------|---|---|---|--|----|----|
| 16:30 – 1                      | 8:30  |   |   |  |    |    |
| CHAIRMA                        | N: PF   | ROF. DSC BAGLYUK G. (UA)  | CO-CHAIR: A   | SSOC.PROF.DR. ABADJIEVA E. (JP)  |    |    |
| 16                             |   | MATRIX FGM HAVING 5, 15 AND 2<br>NFORCED LAYERS   | .5 % B₄C <sub>P</sub>   | Prof. Dr. H. Erdem Camurlu<br>Mechanical Engineering Department<br>– Akdeniz University, Antalya | 31 | TR |
| 17                             | FEATURES OF THE FORMATION OF POLYMETALLIC STRUCTURE OF MATERIALS OBTAINED BY THE METHODS OF ADDITIVE TECHNOLOGIES |   | Alexeeva Ekaterina Vasilevna<br>National University of Science and<br>Technology "MISiS"    | 15   | RU |    |
| 18                             | FINITE ELEMENT SIMULATION ON TENSILE CREEP BEHAVIOUR OF UNDERGROUND SUPPORT LINER                                 |   | Guner D., Ozturk H. Mining Engineering Department, Middle East Technical University, Ankara | 19   | TR |    |
| 19                             | BOL   | LURE CHARACTERIZATION OF ROC<br>.TS BY THERMAL CHANGE DETECT<br>DER TENSILE STRENGTH TESTING          |   | Asst. Prof. Dr. Mustafa Erkayaoğlu,<br>Alper Kırmacı.<br>Middle East Technical University        | 20 | TR |
| 20                             |   | CROSTRUCTURE AND WEAR RESIST NO-STRUCTURED 90SICRMN6-4 ST   |   | Krzysztof Wasiak<br>Warsaw University of Technology  | 52 | PL |
| 21                             | COMPARISON OF PROPERTIES OF 100CRMNSI<br>6-4 BEARING STEEL AFTER VARIOUS HEAT<br>TREATMENTS                       |   | Krzysztof Chmielarz, PhD student<br>Warsaw University of Technology                         | 55   | PL |    |
| 22                             | PHO   | EFFECT OF GRAPHENE OXIDE ON<br>DTOCATALYTIC ACTIVITY OF FE3O<br>R DECOMPOSITION OF ORGANIC<br>LUTANTS |   | Assoc.Prof. Dr. Sedigheh Abbasi<br>Esfarayen University of Technology                            | 41 | IR |

| 19:30 – 24:00 | "WELCOME" COCKTAIL | CONFERENCE BAR |
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### **POSTER SESSION**

| THURSDAY (12.09) |  | 10:00 – 19:00                        | DOSTED SESSION "MACI                            | JIMECO   |  |    |    |
|------------------|--|--------------------------------------|---|--|--|----|----|
| FRIDAY           | (13.09)  | 09:00 – 13:00                        | POSTER SESSION "MACHINES&<br>INDUSTRIAL DESIGN" |  | CONFERENCE HALL 1  |    |    |
| 23               | CALIBR   | USING THE METH                       | HE MEASUREMENT                                  | Ph.D.Brkovskil<br>Gerasimovski<br>UNIQA North<br>Faculty of Med<br>Goce Delcev U<br>Republic of No<br>Inter-transspe<br>Faculty of Med | A. <sup>4)</sup> ; Macedonia AD <sup>1)</sup> ; chanical Engineering - Iniversity in Stip, orth Macedonia <sup>2)</sup> , RZ d AD Skopje <sup>3)</sup> ; chanical Engineering, lethodius, University | 24 | NM |
| 24               | SIMULATION TESTS OF THE BRAKING PROCESS OF AN AGRICULTURAL TRACTOR |                                      |   | Engineering  | a<br>l and Environmental<br>ersity of Technology   | 28 | PL |
| 25               |  | OPMENT AND TREM<br>ACOUSTIC PERFORM  |   | M.Sc. Teodora<br>Technical Univ  |  | 25 | BG |
| 26               |  | ATION OF A DESIGITHE POSSIBILITIES C | N PRODUCT<br>OF DIGITAL PAINTING                | PhD Student Daulova I. Technical University of Sofia   |  | 23 | BG |
| 27               | EXAMPLES OF SOFTWARE CONFIGURATION MANAGEMENT                      |                                      | -   | Milka<br>chanical Engineering<br>niversity of Sofia  | 27   | BG |    |
| 28               |  | T OF INTERNATION<br>ON WEB DESIGN    | AL TYPOGRAPHIC                                  | Dr. Iliev I.<br>Technical Uni  | versity of Varna   | 30 | BG |

| THURSDAY (12.09) |  | 10:00 – 19:00   | DOSTED SESSION "M                   | ATEDIAI S"  | CONFERENCE  | = WALL 1 |    |
|------------------|--|-----------------|-------------------------------------|---|---|----------|----|
| FRIDAY (13.09)   |  | 09:00 – 13:00   | POSTER SESSION "MATERIALS"          |   | CONFERENCE  | - HALL I |    |
| 29               | FEATURES OF WEAR OF RAILWAY WHEELS TREAD   |                 | AILWAY WHEELS                       | Prof Dr. Sci. O<br>National Meta<br>Ukraine, Dnep             | llurgical academy of  | 08       | UA |
| 30               | THE PHENOMENON OF REVERSION IN AGING MAGNESIUM ALLOYS WITH THE RARE-EARTH METALS |                 |                                     | T.V., Tarytina I<br>E.A.<br>Baikov Institut<br>Materials Scie | L.L., PhD. Dobatkina L.E., PhD. Lukyanova  The of Metallurgy and lance, Russian ciences, Moscow | 12       | RU |
| 31               | EFFECT OF AGING ON ZAMAK 3   |                 | Mechanical En                       | urlu, İsmail Aktuna<br>ıgineering<br>Akdeniz University,      | 32  | TR       |    |
| 32               |  | F-PROPAGATING H | I POWDER MIXTURE<br>IGH-TEMPERATURE | H. Erdem Cam<br>Mechanical Er<br>Department –<br>Antalya      |   | 33       | TR |

|    |  | T  |    |          |
|----|--|--|----|----------|
| 33 | MATERIAL-SCIENCE ASPECTS OF FORMATION<br>AND EVOLUTION OF FLAWS WHICH DEFINE THE<br>RESOURCE EXPLOITATION OF ALUMINUM<br>STRUCTURES OF AIRPLANES   | Prof. Dr. Chernega S., phd. Abolihina H.,phd. Grinenko K. National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute"  | 35 | UA       |
| 34 | PREPARATION AND CHARACTERIAZATION OF MANGANESE OXIDES AND BIRNESITES, APLIED AS ELEKTRODE MATIRIALS IN ION BATTERIES   | Dr. Zlatanova Z., Kireva M.<br>University of Sofia   | 40 | BG       |
| 35 | EFFECT OF STRUCTURE AND TEXTURE ON THE<br>MECHANICAL CHARACTERISTICS OF<br>MAGNESIUM ALLOYS PROCESSED BY EQUAL-<br>CHANNEL ANGULAR PRESSING  | PhD Martynenko N.S. <sup>1,2</sup> , Tokar A.A. <sup>1,2</sup> , PhD. Serebryany V.N. <sup>1</sup> , PhD. Prosvirnin D.V. <sup>1</sup> , Prof., Dr. Sci. Terentiev V.F. <sup>1</sup> , Prof., Dr. Sci. Raab G.I. <sup>3</sup> , Prof., Dr. Sci. Dobatkin S.V. <sup>1,2</sup> , Prof., PhD Estrin Yu.Z. <sup>4,5</sup> <sup>1</sup> A.A. Baikov Institute of Metallurgy and Materials Science of RAS, Moscow, <sup>2</sup> National University of Science and Technology "MISIS", Moscow, <sup>3</sup> Ufa State Aviation Technical University, Ufa, <sup>4</sup> Monash University, Clayton, <sup>5</sup> The University of Western Australia, Nedlands, Australia | 45 | RU<br>AU |
| 36 | THE STRENGTHENING AND RENWALING OF DAMAGER REINFORCED CINCRETE STRUCTURES BY HRESTRESSED FIBER REINFORCTD PLASTICS   | Prof. Dr. Aliy Bespayev, Eng. Ulan<br>Kuralov, Eng. Ulan Altigenov<br>Kazakh Research and Design<br>Institute of Construction and<br>Architecture. Almaty,   | 46 | KZ       |
| 37 | ENERGY HEAT EXCHANGE IN THE ZONE OF<br>CONTACT OF THE PROBE OF AN ATOMIC FORCE<br>MICROSCOPE WITH THE SURFACE UNDER<br>STUDY   | Andriienko O., Ralchenko S., Doctor of Science Bondarenko M., PhD Bondarenko Yu. Faculty of Electronically Technologies and Robotics Cherkassy State Technological University, Ukraine   | 49 | UA       |
| 38 | University, Ukraine  Prof. DSc E. A. Petrov <sup>1,2</sup> ; Postgraduate Student, SC Federal Research and Production Center "Altai" A. A. Kolesova <sup>2</sup> ; Director, Research and Production  Enterprise "SIDAL" A. B. Pribavkin Biysk Technological Institute of Altai State Technical University named after I.I. Polzunov, Biysk city <sup>1</sup> ; SC Federal Research and Production Center "Altai" Biysk city <sup>2</sup> ; CLL RPE "SIDAL", Kachkanar city <sup>3</sup> |  | 50 | RU       |
| 39 | PECULIARITIES OF THE INTERACTION OF A HIGHLY CARBONIZED FERROCHROME WITH IRON DURING SINTERING OF 65% FE-35% FH800 COMPOSITE   | Dr.Sc. Maslyuk V. <sup>(1)</sup> , Eng. Karaimchuk E. <sup>(1)</sup> , PhD. Gripachevsky O. <sup>(2)</sup> , Dr.Sc. Bagliuk G. <sup>(1)</sup> , R.As. Sytnyk I. <sup>(1)</sup> <sup>(1)</sup> Frantsevich Institute for Problems of Materials Science, NAS of Ukraine <sup>(2)</sup> G. V. Kurdyumov Institute for Metal Physics, NAS of Ukraine,  | 62 | UA       |

| 40 | COMPUTER MODELING OF INFLUENCE OF PREVIOUS DEFORMATION DEGREE AND STRAIN RATE ON CARBONITRIDES PRECIPITATION KINETICS IN LOW-CARBON MICRO-ALLOYED STEEL | Ph.D. Kaverynskyi V., Eng.<br>Sukhenko Z., Prof., DSc. Bagliuk G.<br>Institute for Problems of Materials<br>Science NAS of Ukraine  | 63 | UA |
|----|---|---|----|----|
| 41 | FEATURES OF STRUCTURE, PHASE COMPOSITION AND PROPERTIES OF HOT- FORGED HIGH-ENTROPY ALLOYS OF TI-CR-FE-NI- C SYSTEM                                     | M.Sc. Marych M.V., Prof., Dr.Sc. Bagliuk G.A., PhD Mamonova A.A., M.Sc. Molchanovska G.M., PhD Yevych Y.I. Frantsevich Institute for Problems of Materials Science, NAS of Ukraine, Kyiv,   | 64 | UA |
| 42 | MODELING OF THE METAL POWDER PRESSING<br>PROCESS WITH A POROGEN   | Prof., Dr. Eng., Cor. Member of NAS of Belarus Ilyushchanka A. <sup>1, 2</sup> , Head of the Lab. Charniak I. <sup>2</sup> , Res. Kusin A. <sup>2</sup> , Prof. Dr. Kapcevich V. <sup>3</sup> State Research and Production Powder Metallurgy Association <sup>1</sup> – Minsk, Republic of Belarus State Scientific Institution "O.V. Roman Powder Metallurgy Institute" <sup>2</sup> – Minsk Belarusian State Agriculture Technical University <sup>3</sup> – Minsk | 65 | ВҮ |
| 43 | ANALYSIS OF PLASTICITY OF QUENCHED TOOL<br>STEEL DURING STRESS RELAXATION AT<br>ELEVATED TEMPERATURE  | Assoc. Prof. Kandrotaitė Janutienė R. PhD¹, Lect. Mažeika D. PhD¹, Doc. Žvinys, J., PhD² Faculty of Mechanical Engineering and Design – Kaunas University of Technology¹, Lithuania; Emeritus of Kaunas University of Technology²   | 66 | LT |
| 44 | THE CONNECTION BETWEEN COEFFICIENT CLUSTERISATION WITH TEMPERATURE  | Mast. of Phys. Liaushuk I., Assoc.<br>Prof. Dr. Eng.Auchynnikau Y.,<br>Assoc. Prof. Dr. Nikitin A.,Prof. Dr.<br>Liopo V.<br>Yanka Kupala State University of<br>Grodno  | 67 | BY |
| 45 | NANOMATERIALS. AMORPHOUS AND NANOCRYSTALLINE METAL ALLOYS. SOLID-PHASE NANOSTRUCTURING  | Boyan Dochev, Angel Velikov, Ivan<br>Panov, Vanya Dyakova, Pavel<br>Kuzmanov, Valentin Manolov<br>Bulgarian Academy of Sciences,<br>Institute of Metal Science,<br>Equipment and Technologies with<br>Hydro- and Aerodynamics Centre<br>"Acad. A. Balevski"   | 74 | BG |
| 46 | "SOL GEL ZIRCONIA-TITANIA COATINGS : EFFECT<br>OF THE TREATMENT TEMPERATURE ON THE<br>PROTECTIVE PROPERTIES"  | Assoc. Prof. Dr. I.Stambolova, Chief<br>Assist. Prof. Dr. St. Yordanov,<br>Assoc. Prof. Dr. V. Blaskov, Prof. Dr.<br>L. Lakov, Assist. Prof. M. Shipochka,<br>Assoc. Prof. Dr. B. Jivov<br>Bulgarian Academy of Sciences,<br>Institute of Metal Science,<br>Equipment and Technologies with<br>Hydro- and Aerodynamics Centre<br>"Acad. A. Balevski"  | 75 | BG |

| 47 | AL-AL2O3 COMPOSITES FOR SELECTIVE LASER MELTING | Nalivaiko Anton <sup>1</sup> , Ozherelkov Dmitry <sup>1</sup> , Komissarov Alexander <sup>1</sup> , Pavlov Mikhail <sup>1</sup> , Arnautov Alexey <sup>2</sup> , Zmanovsky Sergey <sup>2</sup> , Gromov Alexander <sup>1</sup> , Li Anna <sup>1</sup> <sup>1</sup> National University of Science and Technology "MISiS, Moscow <sup>2</sup> UC RUSAL, Moscow | 77 | RU |  |
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| THURSDAY (12.09) FRIDAY (13.09) |  | 10:00 – 19:00  | DOSTED SESSION "TE                  | CHNOLOGY"   | CONFEDENCE   | = HALL 1 |          |
|---------------------------------|--|--|-------------------------------------|---|--|----------|----------|
|                                 |  | 09:00 - 13:00  | POSTER SESSION "TECHNOLOGY"         |   | CONFERENCE HALL 1  |          |          |
| 48                              | CONVE  | OMIC ANALYSIS OF<br>ENTIONAL WELDING<br>NVENTIONAL   | REPLACEMENT OF<br>G TECHNOLOGY WITH | Eng. Vukčević<br>Šibalić N.   | Koprivica A., Ph. D. Sc.<br>M., Ph. D. Sc. Eng.<br>Fast Sarajevo, Trebinje<br>Montenegro,  | 05       | BH<br>ME |
| 49                              | SYSTEM FOR PROCESSING<br>NON-CONDENSING GASE |  |                                     | St. <sup>1</sup> , Assoc. Pro<br>Prof. Dr. Eng. I<br>University of I<br>Plovdiv <sup>1</sup>  | Food Technologies,   | 09       | BG       |
| 50                              |  | FACTURING THE EN   | IVIRONMENT-<br>ASTE INCINERATORS    | Ali A.Jabour A<br>Babylon unive   | = -  | 26       | IQ       |
| 51                              | AUTON  |  | CANNING SYSTEMS                     | M.Sc. Todorov<br>Ivanov O. <sup>1</sup> , Pas<br>PhD. <sup>1</sup> , Prof. Pe<br><sup>1</sup> "Georgi Nadj<br>Solid State Phy<br>Academy of Sc<br><sup>2</sup> Escuela Polit  | r P.¹, Assoc.Prof.<br>shev K.¹, Ralev Y.<br>érez-Díaz J. L.²<br>akov" Institute of<br>ysics – Bulgarian<br>ciences,<br>écnica Superior,<br>e Alcalá, Alcalá de | 37       | BG<br>ES |
| 52                              | OUTPL  | LATION OF THE PAI<br>JT CURRENT IN FUL<br>ANT POWER CONV   | L–BRIDGE SERIAL                     | Assos. prof. Dr. Eng. Stefanov G. <sup>1</sup> , Prof. Dr. Eng. Sarac V. <sup>2</sup> , Assist. M.Sc. Kukuseva Paneva M. <sup>3</sup> , Assis. M.Sc. Citkuseva Dimitrovska B. <sup>4</sup> , Assis. M.Sc. Veta Buralieva J. <sup>5</sup> Faculty of Electrical Engineering- Radovish, University 'Goce Delcev'- Stip, North Macedonia <sup>1,2,3,4</sup> FI- Stip, University 'Goce Delcev'- Stip, North Macedonia <sup>5</sup> |  | 38       | NM       |
| 53                              | PROCE<br>WITH (                              | ERICAL SIMULATIONS OF HONING ESS OF THIN WALL CYLINDER LINERS, CONSTANT AND WITH VARIABLE NESS OF WALL OF HONED PARTS  M.Sc. Sender P.G. Faculty of Mechanical Engineering – Gdansk University of Technology |                                     | 42  | PL   |          |          |
| 54                              | TECHN<br>TREAT                               | VING THE EFFICIEN<br>OLOGICAL PROCES<br>MENT OF DETAILS I<br>EERING  | SES OF MECHANICAL                   | N.A. Tyurin<br>West Kazakhst  | . Tyurin,, engineer<br>tan Agrarian<br>versity. Zhangir Khan,  | 43       | KZ       |

| 55 | ACTIVE SECURITY INFORMATION TECHNOLOGY OF MUNICIPAL VEHICLES   | Boiko V. Faculty of Information Technologies and Systems Cherkassy State Technological University  | 60 | UA |
|----|--|--|----|----|
| 56 | ANALYSIS OF THE COROSSION CONDITION OF<br>THE STEEL PIPE SYSTEM AFTER LONG PERIOD<br>OF EXPLOATATION | Prof. Dr Cvetkovski S. PhD. <sup>1</sup> , Dr Jashari N. PhD. <sup>2</sup> . Prof. Dr Nacevski G. PhD. <sup>1</sup> , Faculty of Technology and Metallurgy – Ss. Cyril and Methodius University, Skopje Republic of North Macedonia <sup>1</sup> State University Tetova, Tetova, Republic of North Macedonia <sup>2</sup> | 73 | NM |

| THURSDAY (12.09) FRIDAY (13.09) |   | 10:00 - 19:00<br>09:00 - 13:00   | POSTER SESSION<br>SIMPOSIUM "MANAGEMENT"  |   | CONFERENCE HALL 1 |    |                |
|---------------------------------|---|----------------------------------|---|---|-------------------|----|----------------|
| 57                              | STUDY OF THE OPPORTUNITIES FOR BUILDING AND MANAGEMENT OF FLEXIBLE SMALL AND MEDIUM ENTERPRISES IN BULGARIA |                                  |   | Assoc. Prof. Eng. Dimitrova K. PhD, Assoc. Prof. Eng. Panayotova T. PhD, M.Sc. Veleva N. Technical University of Varna,   |                   |    | BG             |
| 58                              | PLANNING THE INFLOW OF PRODUCTS FOR PRODUCTION LEVELLING  |                                  |   | M.Sc. Eng. Rewers R. Faculty of Mechanical Engineering and Management – Poznan University of Technology   |                   |    | PL             |
| 59                              | SELECTION OF PRODUCTION TIME<br>FORECASTING METHOD FOR CUSTOMIZED<br>PRODUCTS                               |                                  |   | M.Sc. Osiński F. <sup>1</sup> , Department of Management and Production Engineering – Poznan University of Technology   |                   | 18 | PL             |
| 60                              |   |                                  | ICATION OF STRATEGY<br>Y OF THE ENTERPRISE  | Prof., D.Sc., Cherep O., Prof., D.Sc.,<br>Voronkova V., Ph.D., Lyshchenko<br>E., Ph.D., NikitenkoV.<br>Zaporizhzhia National University<br>Zaporizhya national texnical<br>university,<br>Zaporizhzhia National University                                  |                   | 56 | UA             |
| 61                              | INTO AC   | COUNT OF THE E                   | TIVE ACTIVITIES OF  | Ph.D., Oleynikova L., Prof., D.Sc.,<br>Nurlikhina G., Ph.D.,Gamova O.,<br>Ph.D.,Seysebayeva N.<br>Academy of Financial Management<br>University Almaty<br>Zaporizhzhia National University  |                   | 57 | UA<br>KZ       |
| 62                              | FORMATION OF PRINCIPLES OF INVESTMENT<br>STRATEGY OF INDUSTRIAL ENTERPRISES                                 |                                  | Ph.D., Lepekhyn O., Ph.D.,<br>Chernikova N, Ph.D., Azhazha M.,<br>Ph.D., Dashko I.<br>Zaporizhzhia National University<br>(Zaporizhzhia, Ukraine) |   | 58                | UA |                |
| 63                              | POSSIBI<br>OF THE<br>STRATE   | MONITORING AN<br>GY, DIAGNOSIS O | ATION OF THE CE AND CORRECTNESS ID CORRECTION OF THE F THE PROSPECTS OF DUSTRIAL ENTERPRISES  | Prof., D.Sc., Cherep A., Prof., D.Sc.,<br>Kuznetsov Yu.Prof. Dr.<br>Andriukaitienė R., Dr. Faizullina S.<br>Zaporizhzhia National University<br>National University «KPI»<br>Lithuanian Sports University<br>Kazakh National University named<br>after Abai |                   | 59 | UA<br>LT<br>KZ |

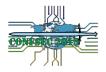
| 64 | CHOOSING A UNIVERSITY FOR BACHELOR STUDIES IN THE MATERIAL SCIENCE SPECIALTY                                 | Prof. Alieksieiev I. D.Sc., Assoc. Prof. Mazur A. PhD., Assoc. Prof. Alieksieiev V. PhD. Lviv Polytechnic National University  | 70 | UA |
|----|--|--|----|----|
| 65 | QUALITY MANAGEMENT OF NEW CERAMIC<br>MATERIALS BY USING STATISTICAL<br>EXPERIMENTAL DATA PROCESSING PROGRAMS | Sadenova M. Ph.D., M.Ec. Utegenova M., Anuarbekov T. Priority Department Centre «Veritas», D. Serikbayev East Kazakhstan State Technical University, Ust-Kamenogorsk | 72 | KZ |
| 66 | INTERACTION OF INDUSTRIAL ENTERPRISES AND UNIVERSITIES IN THE FIELD OF LAND MANAGEMENT AND GEODESY           | Assoc. Prof. Dr. Vasily Nilipovskiy<br>State University of Land Use<br>Planning, Moskow  | 76 | RU |

### NEXT CONGRESS "MACHINES. TECHNOLOGIES. MATERIALS"

WINTER SESSION 11.03 - 14.03.2020, BOROVETZ, HOTEL "ELA"

SUMMER SESSION 09.09 - 12.09.2020, VARNA, HOTEL "AQUA AZUR"

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### CONFSEC 2019

09-12.12.2019, BOROVETS, HOTEL ELA

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IV INTERNATIONAL SCIENTIFIC CONFERENCE - WINTER SESSION

### INDUSTRY 4.0

11-14.12.2019, BOROVETS, HOTEL ELA www.industry-4.eu



III INTERNATIONAL SCIENTIFIC CONFERENCE

### MATHEMATICAL MODELING

11-14.12.2019, BOROVETS, HOTEL ELA www.mathmodel.eu



V INTERNATIONAL SCIENTIFIC CONFERENCE

HIGH TECHNOLOGIES. BUSINESS. SOCIETY 2020

09-12.03.2020, BOROVETS, HOTEL ELA www.hightechsociety.eu



XIII CONFERENCE FOR YOUNG RESEARCHERS

### TECHNICAL SCIENCES. INDUSTRIAL MANAGEMENT 2020

11-14.03.2020, BOROVETS, HOTEL ELA www.youngconference.com



XVII INTERNATIONAL SCIENTIFIC CONGRESS - WINTER SESSION

### MACHINES. TECHNOLOGIES. MATERIALS 2020

11-14.03.2020, BOROVETS, HOTEL ELA www.mtmcongress.com



XXVII INTERNATIONAL SCIENTIFIC-TECHNICAL CONFERENCE

### **FOUNDRY 2020**

08-10.04.2020, PLEVEN, HOTEL ROSTOV www.metalcasting.eu



VIII INTERNATIONAL SCIENTIFIC CONFERENCE

ENGINEERING. TECHNOLOGIES. EDUCATION. SECURITY 2020
27.05-30.05.2020, VELIKO TARNOVO, HOTEL ASENEVTSI

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