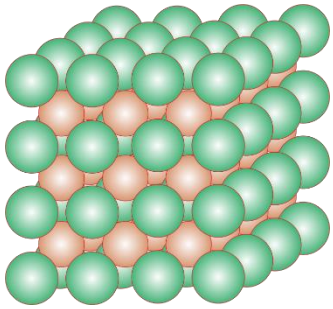
FEDERATION OF THE SCIENTIFIC ENGINEERING UNIONS (FSEU)

*XIV INTERNATIONAL SCIENTIFIC CONFERENCE*

2026

# TECHNICS. TECHNOLOGIES. EDUCATION. SAFETY

## XII INTERNATIONAL SCIENTIFIC CONFERENCE



# MATERIAL SCIENCE

## NONEQUILIBRIUM PHASE TRANSFORMATIONS

## 2026

# P R O G R A M

**ORGANIZER:**

SCIENTIFIC-TECHNICAL UNION OF MECHANICAL ENGINEERING

*31.08 – 03.09.2026*

*VARNA, BULGARIA*

# TIME SCHEDULE

## 25.09.2026 – TUESDAY

| | PUBLICATION OF ALL REPORTS | |
|---|---|---|
| 17:00 | PROCEEDING **"International Scientific Conference "Technics. Technologies. Education. Safety"**, ISSN 2535-0315 (Print), ISSN 2535-0323 (Online) | techtos.net/proceedings.html |
| 17:00 | PROCEEDING **„International Scientific Conference Material Science Nonequilibrium Phase Transformations" -** ISSN 2535-0218 (Print) ISSN 2535-0226 (Online) | material-science.eu/Proceedings.html |

## 31.08.2026 - MONDAY

| | | |
|---|---|---|
| 16:00 – 19:30 | REGISTRATION | IN THE CONGRESS CENTER |

## 01.09.2026 - TUESDAY

| | | |
|---|---|---|
| 08:00 – 10:00 | REGISTRATION | IN THE CONGRESS CENTER |
| 10:00 – 10:15 | OPENING OF THE EVENTS | CONFERENCE HALL 1 |
| 10:15 – 12:30 | PLENARY SESSION | CONFERENCE HALL 1 |
| 12:30 | COLLECTIVE PICTURES OF THE PARTICIPANTS | ON THE STAIRCASE IN FRONT OF THE HOTEL ENTRANCE |
| 12:30 - 14:00 | **LUNCH BREAK (NO LUNCH PROVIDED)** | |
| 14:00 – 15:00 | SECTION SESSIONS | CONFERENCE HALL 1 |
| 15:00 – 15:30 | COFFEE BREAK | THE TERRACE OF THE MAIN RESTAURANT |
| 15:30 – 18:00 | DISCUSSIONS | CONFERENCE HALL 1 |

| | |
|---|---|
| **19:30 – 24:00** | **"WELCOME" COCKTAIL ON THE TERRACE OF THE MAIN RESTAURANT** |

## 02.09.2026 - WEDNESDAY

| | | |
|---|---|---|
| **10:00** | **CLOSING OF THE CONFERENCE AND THE CONGRESS - WINE AND CHEESE PARTY** | **THE TERRACE OF THE MAIN RESTAURANT** |

# CORRESPONDENT PARTICIPATION

## 01.09.2026 - TUESDAY

| | | |
|---|---|---|
| 10:00 | OPENING OF THE CONFERENCES | www.techtos.net<br>www.material-science.eu |
| 10:00-16:00 | QUESTIONS TO THE AUTHORS OF ALL REPORTS | office@techtos.net<br>office@material-science.eu |
| 16:00 | PUBLICATION OF ALL QUESTIONS | www.techtos.net<br>www.material-science.eu |

## 02.09.2026 - WEDNESDAY

| | | |
|---|---|---|
| 08:00-12:00 | ANSWERS TO THE QUESTIONS | office@techtos.net<br>office@material-science.eu |
| 12:00 | PUBLICATION OF ALL ANSWERS | office@techtos.net<br>office@material-science.eu |
| 17:00 | CLOSING OF THE CONFERENCES | www.techtos.net<br>www.material-science.eu |



***time for presentation 10-12 minutes,***
***questions after each presentation***

# SCIENTIFIC PROGRAM

| | | |
|---|---|---|
| **01.09.2026**<br>**10:00 – 10:15** | **OPENING OF THE EVENTS**<br>**CHAIRMAN:**<br>**PROF. D.SC. TSANKA DIKOVA (BG)** | **CONFERENCE HALL 1** |

| | | | | |
|---|---|---|---|---|
| **01.09.2026**<br>**10:15 – 12:30** | **PLENARY SESSION** | | **CONFERENCE HALL 1** | |
| **CHAIR: PROF. D.SC. TSANKA DIKOVA (BG)** | | | | |
| **"MATERIAL SCIENCE. NON-EQUILIBRIUM PHASE TRANSFORMATIONS"** | | | | |
| **1** | EFFECTS OF NONEQUILIBRIUM ADDITIVE MANUFACTURING PROCESSING CONDITIONS ON THE STRUCTURE AND MECHANICAL PROPERTIES OF TITANIUM AND ITS ALLOYS | Prof. Leszek Dobrzanski<br>Medical and Dental Engineering Centre for Research,Design and Production ASKLEPIOS, Gliwice | 08 | PL |
| **2** | ARTIFICIAL INTELLIGENCE-ASSISTED WDM MULTIPLEXING IN MULTICORE PLASTIC OPTICAL FIBERS | Prof. Dror Malka<br>Faculty of Engineering, Holon Institute of Technology (HIT), Israel | 03 | IL |
| **3** | IN VITRO INVESTIGATION THE EFFECT OF EXPERIMENTAL BLEACHING AGENTS ON THE TOOTH SURFACE AND SHADE | Silvia Stankova, Dzhendo Dzhendov, Radostina Anastasova, Tsanka Dikova<br>Medical University Varna, Faculty of Dental Medicine | 18 | BG |
| **"TECHNICS. TECHNOLOGIES. EDUCATION. SAFETY"** | | | | |
| **4** | STAKEHOLDERS' ATTITUDES TOWARD THE ASSESSMENT OF THE QUALITY AND EFFECTIVENESS OF INCLUSIVE EDUCATION: RESULTS OF A SURVEY STUDY | Ivanka Yankova, Silviya Stancheva2, Kamelia Nusheva3<br>University of Library Studies and Information Technologies | 36 | BG |
| **5** | DIVORCE THROUGH THE PRISM OF ANTI-CRISIS MANAGEMENT | Prof. PhD Sabev S.<br>University of Agribusiness and Rural Development, Plovdiv | 20 | BG |
| **6** | CRISIS MANAGEMENT OF MICROENTERPRISES IN BULGARIA | Prof. PhD Sabev S.<br>University of Agribusiness and Rural Development, Plovdiv | 21 | BG |

| | | |
|---|---|---|
| **12:30** | **COLLECTIVE PICTURES OF THE PARTICIPANTS** | **ON THE STAIRCASE IN FRONT OF THE HOTEL ENTRANCE** |

| | |
|---|---|
| **12:30 – 14:00** | **LUNCH BREAK (NO LUNCH PROVIDED)** |

| | | | | |
|---|---|---|---|---|
| **01.09.2026**<br>**14:00 – 15:00** | **ORAL PRESENTATIONS** | | **CONFERENCE HALL 1** | |
| **CHAIR: PROF. D.SC. ARTŪRS MEDVIDS (LT)** | | **CO-CHAIR: ASSOC. PROF. VESELINA GAGAMOVA (BG)** | | |
| **"MATERIAL SCIENCE. NON-EQUILIBRIUM PHASE TRANSFORMATIONS"** | | | | |
| **7** | APPLICATION POTENTIAL OF LUBRICANTS FOR BEARINGS AND GEARS IN SPACE MECHANISMS – ANALYSIS OF PROPERTIES AND LIMITATIONS | Leszek T. Pawlicki<br>Warsaw University of Technology, Faculty of Physics | 13 | PL |



***time for presentation 10-12 minutes,***
***questions after each presentation***

| "TECHNICS. TECHNOLOGIES. EDUCATION. SAFETY" | | | | |
|---|---|---|---|---|
| 8 | BEYOND REPRODUCTIVE AUTONOMY: THREE ETHICAL ARGUMENTS FOR NORMALIZING ELECTIVE OOCYTE CRYOPRESERVATION IN AN AGE OF REPRODUCTIVE CRISIS | Aleksandra Traykova<br>Bulgarian Academy of Sciences | 45 | BG |
| 9 | DIGITAL TECHNOLOGIES AS A MEANS OF INTERACTION BETWEEN LIBRARY EDUCATION AND LIBRARY RESOURCES | Paola Lyubenova, Ivan Hadzhiev<br>University of Library Studies and Information Technologies | 37 | BG |
| 10 | PECULIARITIES OF REGIONAL DEVELOPMENT OF CRUISE TOURISM IN THE MEDITERRANEAN | PhD Yevheniia Kryzhanovska<br>Nikola Vaptsarov Naval Academy, Varna | 17 | BG |

| | | |
|---|---|---|
| **15:00 – 15:30** | **COFFEE BREAK** | **THE TERRACE OF THE MAIN RESTAURANT** |

| | | |
|---|---|---|
| **15:30 – 18:00** | **DISCUSSIONS** | **CONFERENCE HALL 1** |

| | |
|---|---|
| **19:30 – 24:00** | **"WELCOME" COCKTAIL<br>ON THE TERRACE OF THE MAIN RESTAURANT** |

# POSTER PRESENTATIONS

## "MATERIAL SCIENCE. NON-EQUILIBRIUM PHASE TRANSFORMATIONS"

| | | | | |
|---|---|---|---|---|
| **TUESDAY (01.09.)** | **10:00 – 16:00** | | | |
| **WEDNESDAY (02.09.)** | **08:00 – 12:00** | | | |
| 11 | INFLUENCE OF LASER PROCESSING ON THE DEVELOPMENT PECULIARITIES OF CRACKS ARISING IN THE STEELS NEAR NON-METALLIC INCLUSIONS | Prof.. Dr. Sci. Gubenko S.<br>Iron and Steel Institute of National Academy of Science of Ukraine;<br>Ukrainian State University of Science and Technologies, Dnepr | 03 | UA |
| 12 | DEEPENING OXIDATION OF METAL CRYSTALS BY LASER RADIATION | Arturs Medvids[1], Yuliy Bludov[2], Sergiy Lavrys[1], Iuriy Nasieka[3], Aleksands Michko[1], Volodymir Lozinskii[3]<br>[1] Riga Technical University, Riga, Latvia<br>[2] University of Minho, Braga, Portugal.<br>[3] V.Ye. Lashkaryov Institute of Semiconductor Physics of NAS of Ukraine | 14 | LT<br>PT<br>UA |
| 13 | COMPLEX-COMPOSITION CERAMICS BASED ON ZIRCONIUM OXIDE FOR CREATING THE LATEST THERMAL BARRIER COATINGS | Alina Makudera[1], Olena Dudnik[1], Serhii Lakyza[2]<br>Physical-chemistry and technology of refractory oxides department – Frantsevich Institute for Problems of Materials Science NAS of Ukraine[1]<br>ENSEMBLE3 Centre of Excellence, Warsaw, Poland[2] | 07 | UA<br>PL |
| 14 | SHAPING THE PERFORMANCE PARAMETERS OF ACTIVE PACKAGING BY ADDING GREEN BARLEY EXTRACTS PREPARED IN DIFFERENT SOLVENTS | Prof. Ewa Olewnik-Kruszkowska, Student Martyna Bełkowska, Prof. Phd Magdalena Gierszewska<br>Faculty of Chemistry, Nicolaus Copernicus University in Toruń | 09 | PL |



***time for presentation 10-12 minutes,***
***questions after each presentation***

| | | | | |
|---|---|---|---|---|
| **15** | ULTRAFAST BOND SOFTENING AND NON-THERMAL PHASE DYNAMICS IN FEMTOSECOND-EXCITED DIAMOND | Tzveta Apostolova[1,2]<br>[1]Institute for Nuclear Research and Nuclear Energy , Bulgarian Academy of Sciences, Bulgaria<br>[2]Institute for Advanced Physical Sciences, New Bulgarian University | 11 | BG |
| **16** | MODERN METHODS OF MANUFACTURING LONG TUBULAR POROUS POWDER FILTER ELEMENTS | Aliaksandr Ilyushchanka [1, 2], Iryna Charniak [2*], Aleksej Kusin [2], Anastasia Astapenka [2], Margaruta Kuntsevich [2], Ruslan Kusin [2]<br>State research and production powder metallurgy association, Minsk[1]<br>State Scientific Institution "O.V. Roman Powder Metallurgy Institute", Minsk[2] | 12 | BY |
| **17** | INFLUENCE OF MICROSTRUCTURAL MODIFICATION OF CEMENT-BASED COMPOSITES ON TRANSPORT PROCESSES AND LONG-TERM RELIABILITY | Veis Šerifi[1,*], Nazim Manić[1], Emir Maslak[1] and Vesnera Šerifi[2]<br>[1]State University of Novi Pazar, Department of Technical and Technological Sciences, Faculty of Civil Engineering, Novi Pazar, Serbia<br>[2]University of Pristina, Faculty of Technical Sciences, Architecture, Kosovska Mitrovica | 15 | RS<br>KO |
| **18** | HOT DEFORMATION PROCESSING OF Ti–Zr–Nb BIOMEDICAL ALLOYS | Denys Oryshych, Oleksandr Stasiuk, Dmytro Savvakin<br>G. V. Kurdyumov Institute for Metal Physics of the N.A.S. of Ukraine | 17 | UA |
| **19** | NANOSTRUCTURING OF BRASS SURFACE BY HELICON SOURCE PLASMA | E. Rudenko, I. Korotash, D. Polotskiy, A. Rudenko, V. Dekhtyarenko, M. Dyakin*<br>G.V. Kurdyumov Institute for Metal Physics of the N.A.S. of Ukraine | 10 | UA |
| **20** | SURFACE TREATMENT OF COPPER USING A PLASMA FROM A HELICON SOURCE | E. Rudenko, I. Korotash, A. Novytska, D. Polotskiy, M. Dyakin<br>G. V. Kurdyumov Institute for Metal Physics of the N.A.S. of Ukraine | 16 | UA |

# POSTER PRESENTATIONS

## "TECHNICS. TECHNOLOGIES. EDUCATION. SAFETY"

| | | | | |
|---|---|---|---|---|
| **TUESDAY (01.09.)** | **10:00 – 16:00** | **SESSION "TECHNICS. TECHNOLOGIES"** | | |
| **WEDNESDAY (02.09.)** | **08:00 – 12:00** | | | |
| **21** | CONCEPT OF ENGINEERING STRUCTURES HEALTH MONITORING UNDER THE REAL-TIME DURIND ITS OPERATING | Leonid Vinogradov, Maris Hauka, Juris Gutans, Yulija Soldatova, Alekseij Nassibulin, Mihail Podkoritov,<br>Riga Technical University | 45 | LT |
| **22** | TECHNOLOGY AND SELECTED PROPERTIES OF PRODUCTS MADE FROM POLYMER COMPOSITES CONTAINING RECYCLED RUBBER AND MINERAL FILLER | Assoc. Prof. PhD. Eng. Tomasz Garbacz , MSc. Eng. Karol Risinski<br>Department of Technology and Polymer Processing - Lublin University of Technology, Poland | 5 | PL |
| **23** | ECO-EFFICIENCY AND SERVICE QUALITY AS DUAL DRIVERS OF COMPETITIVENESS IN LIBERALIZED SUBURBAN RAIL TRANSPORT | Kostadin Trifonov<br>Todor Kableshkov University of Transport, Sofia | 01 | BG |



***time for presentation 10-12 minutes,***
***questions after each presentation***

| | | | | |
|---|---|---|---|---|
| **24** | TRANSMISSION OF INFORMATION FROM A BOTTOM STATION FOR UNDERWATER MONITORING TO A FLOATING RADIOBUOY VIA A HYDROACOUSTIC CHANNEL | PhD Eng. Kolarov A.P., PhD Eng. Naydenov R.V.,<br>Institute of Metal Science, Equipment and Technology with Hydroaerodynamic Center at Bulgarian Academy of Sciences | 07 | BG |
| **25** | RESEARCH INTO THE MECHANISM OF INFLUENCE OF UNDERWATER COMMUNICATION WITH HYDROACOUSTIC MODEMS ON THE OPERATION OF A HYDROPHONE DURING THE EXCHANGE OF INFORMATION FROM IT | PhD Eng. Naydenov R.V., PhD Eng. Kolarov A.P.<br>Institute of Metal Science, Equipment and Technology with Hydroaerodynamic Center at Bulgarian Academy of Sciences | 08 | BG |
| **26** | MEASUREMENT OF UNDERWATER SHIP NOISE IN DEEP WATER | Bistra Nenova<br>Institute of Metal Science, Equipment and Technology with Hydroaerodynamic Center at Bulgarian Academy of Sciences | 10 | BG |
| **27** | JAMING OF UNDERWATER ACOUSTIC COMMUNICATIONS | Ivanov I., Kolev St., Lolov M..<br>Institute of Metal Science, Equipment and Technology with Hydroaerodynamic Center at Bulgarian Academy of Sciences | 11 | BG |
| **28** | DEVELOPMENT OF A MICROPHONE ARRAY FOR MONITORING AND DETECTING SOURCES OF ACOUSTIC SIGNALS | Assoc. Prof. Nesterov K.N. PhD, Pehlivanski V.I. PhD, Liaskov N.G., Penev N.P.<br>Institute of Metal Science, Equipment and Technology with Hydroaerodynamic Center at Bulgarian Academy of Sciences | 13 | BG |
| **29** | CRYSTALLIZATION PROCESS CONTROL OF CAST EXPLOSIVE CHARGES USING X-RAY RADIOGRAPHY | Assoc. Prof. Krumov A., PhD., Assoc. Prof. Simeonova A., PhD.<br>Institute of Metal Science, Equipment and Technology with Hydroaerodynamic Center at Bulgarian Academy of Sciences | 15 | BG |
| **30** | DEVELOPMENT OF A HIGH TECH SYSTEM FOR VACUUM MELTING AND CASTING OF ORGANIC NITRO COMPOUNDS | Assoc. Prof. Krumov A., PhD., Assoc. Prof. Simeonova A., PhD<br>Institute of Metal Science, Equipment and Technology with Hydroaerodynamic Center at Bulgarian Academy of Sciences | 16 | BG |
| **31** | FREQUENCY-DEPENDENT SUBARRAY SELECTION FOR LIMITING SPATIAL ALIASING IN A COMPACT FIVE-ELEMMENT LINEAR MICROPHONE ARRAY | Vladimir Varbanov<br>Institute of Metal Science, Equipment and Technology with Hydroaerodynamic Center at Bulgarian Academy of Sciences | 19 | BG |
| **32** | MACROSIMULATION-BASED EVALUATION OF A PLANNED URBAN ARTERIAL: THE EXTENDED BRANIMIROVA STREET IN SESVETE, ZAGREB | MSc Toni Tomić, Dr. Karlo Babojelić<br>University of Zagreb, Faculty of Transport and Traffic Sciences, Zagreb, Croatia | 27 | HR |
| **33** | COMPARATIVE ANALYSIS OF SOME METHODS FOR CALCULATION OF TWO WAY REINFORCED CONCRETE SLABS | Anton Gorolomov<br>University of Structural Engineering and Architecture "Lyuben Karavelov" Sofia | 29 | BG |



***time for presentation 10-12 minutes,***
***questions after each presentation***

| | | | | |
|---|---|---|---|---|
| **34** | MULTI-PARAMETER ASSESSMENT OF THE RELATIVE ELECTROCHEMICAL CONDITION OF REINFORCED CONCRETE STRUCTURES EXPOSED TO STRAY CURRENTS AND CHLORIDE ENVIRONMENTS | Veis Šerifi[1], Nazim Manić[1], Emir Maslak[1] and Vesnera Šerifi[2]<br>[1] State University of Novi Pazar, Department of Technical and Technological Sciences, Faculty of Civil Engineering, Novi Pazar, Serbia<br>[2]University of Pristina, Faculty of Technical Sciences, Architecture, Kosovska Mitrovica | 41 | RS<br>KO |
| **35** | EXAMPLE OF A MODEL FOR EXPERIMENTAL STUDY ON CARBON DIOXIDE VARIATION IN THE PASSENGER COMPARTMENT OF A MOTOR VEHICLE | Evelina Ivanova, Stefan Krachunov<br>University of Architecture, Civil Engineering and Geodesy [1] | 33 | BG |
| **36** | QUANTITATIVE RISK ASSESSMENT IN BULGARIAN ROAD TUNNELS: TRADITIONAL ASSESSMENT MODEL VS. PROBABILISTIC MODELING-BASED MODELS | Evelina Ivanova, Stefan Krachunov<br>University of Architecture, Civil Engineering and Geodesy [1] | 44 | BG |
| **37** | MODIFIED BEARING ASSEMBLY OF AN EXPERIMENTAL PROTOTYPE FOR THREE-POINT IMPACT BENDING | Teodor Atanasov<br>Institute of Metal Science, Equipment and Technology with Hydroaerodynamic Center at Bulgarian Academy of Sciences | 18 | BG |
| **TUESDAY (01.09.)** | **10:00 – 16:00** | **SESSION**<br>**“INFORMATION TECHNOLOGIES, NATURAL AND MATHEMATICAL SCIENCES”** | | |
| **WEDNESDAY (02.09.)** | **08:00 – 12:00** | | | |
| **38** | SECURITY EVALUATION METRICS FOR AN ADAPTIVE STEGANOGRAPHIC METHOD BASED ON THE CANNY ALGORITHM | Veselka Stoyanova[1], Veselina Gagamova[2]<br>V. Levski, National Military University, Shumen, Bulgaria[1]<br>Rakovski National Defence College, Sofia, Bulgaria[2] | 32 | BG |
| **39** | ZKAP ANTI-CORRUPTION OUTPUT FILTER: A CRYPTOGRAPHICALLY VERIFIABLE COMPLIANCE PROTOCOL FOR THE DEPLOYMENT OF ARTIFICIAL INTELLIGENCE IN INVESTIGATIVE, REGULATORY, SUPERVISORY AND JUDICIAL PROCEDURES | Radoslav Y. Radoslavov *, Eng. Ivan Y. Getsov<br>Independent researchers<br>Law Office — Ruse, Bulgaria · Advanced Consulting London RR, United Kingdom | 02 | BG<br>UK |
| **40** | EXAMINE OF ELECTRICAL CONDUCTION PROCESSES IN BLOOD VESSELS BY CABLE THEORY | Natela Zirakashvili<br>I. Vekua Institute of Applied Mathematics of Iv. Javakhishvili Tbilisi State University, Georgia | 03 | GE |
| **41** | MODELING AND STUDYING THE DIFFRACTION FIELD FROM A DRONE USING FOURIER TRANSFORMATION | Ivan Garvanov[1,2], Magdalena Garvanova[1]<br>Maria Mindova [1], Deyan Daneshki [3]<br>University of Library Studies and Information Technologies, Sofia<br>[2]Institute of Mathematics and Informatics – BAS, Sofia<br>[3]Technical University, Sofia | 42 | BG |
| **42** | COMPARATIVE ANALYSIS OF ALGORITHMS FOR RESTORATION OF OUT OF FOCUS IMAGES | Magdalena Garvanova<br>University of Library Studies and Information Technologies, Sofia | 43 | BG |
| **TUESDAY (01.09.)** | **10:00 – 16:00** | **SESSION**<br>**“EDUCATION. PUBLIC SCIENCES”** | | |
| **WEDNESDAY (02.09.)** | **08:00 – 12:00** | | | |
| **43** | ARTIFICIAL INTELLIGENCE IN LEARNING AND DEVELOPMENT: TRANSOFRMING CORPORATE LEARNING | Yoana Stefanova<br>University of Sofia – Sofia, Bulgaria | 24 | BG |



***time for presentation 10-12 minutes,***
***questions after each presentation***

| | | | | |
|---|---|---|---|---|
| 44 | CONTINUING PROFESSIONAL DEVELOPMENT OF PEDAGOGICAL SPECIALISTS AND ITS EFFECT ON THE MANAGEMENT OF CHANGE IN SCHOOL | Nikolina Dimitrova Chusheva, Assoc. Prof. Dr. Miroslav Kirilov Terziyski<br>South-West University "Neofit Rilski", Bulgaria | 23 | BG |
| 45 | METHODOLOGICAL ASPECTS OF APPLYING GENERATIVE ARTIFICIAL INTELLIGENCE IN THE DEVELOPMENT OF EXAMINATION TESTS IN BUILDING CONSTRUCTION | Assoc. Prof. Dr. Arch. Ilieva Y.<br>The University of Structural Engineering and Architecture "Lyuben Karavelov" – Sofia | 30 | BG |
| 46 | MUSIC HISTORY KNOWLEDGE, SKILLS, AND COMPETENCIES IN THE PROFESSIONAL TRAINING OF PROSPECTIVE MUSIC TEACHERS | PhD Pancheva-Georgieva A.N.<br>Konstantin Preslavsky University of Shumen | 31 | BG |
| 47 | MAIN ASPECTS OF THE CONDUCTOR'S GESTURE AS A MANUAL-PLASTIC MODEL OF THE SOUND OF A MUSICAL WORK | Hristo A. Atanasov<br>Konstantin Preslavsky University of Shumen | 39 | BG |
| 48 | THE CONDUCTOR'S POSITION AS PART OF THE ACTIVE PROCESS OF RECREATING THE MUSICAL WORK | Hristo A. Atanasov<br>Konstantin Preslavsky University of Shumen | 40 | BG |
| **TUESDAY (01.09.)** | **10:00 – 16:00** | **SESSION "SECURITY. MILITARY SCIENCES"** | | |
| **WEDNESDAY (02.09.)** | **08:00 – 12:00** | | | |
| 49 | A COMPETENCY MODEL FOR TRAINING SPECIALISTS IN BIOLOGICAL SECURITY IN THE CONTEXT OF BIOCONVERGENCE | Nenovska, M. I., Ph.D, Chief Assistant Professor<br>"G. S. Rakovski" National Defence College, Sofia | 34 | BG |
| 50 | MODULAR UAV ARCHITECTURES IN THE SUPPORT OF NATIONAL WEAPON INTEGRATION | István Papp, Bertold Békési<br>Ludovika University of Public Service, Budapest, Hungary | 04 | HU |
| 51 | NUMERICAL MODELING OF SMOOTHBORE BARREL SHOT | Assoc. Prof. Dr. Eng. Nikola Nikolov*, Eng. Tsvetan Nikolov<br>Institute of Mechanics, Bulgarian Academy of Sciences, | 06 | BG |
| 52 | SOME PECULIARITIES OF THE SECURITY SYSTEM ELEMENTS DEVELOPMENT RELATED TO THE IMPLEMENTATION OF THE BUSINESS PLAN FOR SCIENTIFIC RESEARCH | Valeri Panevski, Marina Hristova<br>Institute of Metal Science Equipment and Technologies with Hydro- and Aerodynamics Centre "Acad. A Balevski" at the Bulgarian Academy of Sciences | 09 | BG |
| 53 | LEGAL AND ADMINISTRATIVE FRAMEWORK FOR THE USE OF NON-LETHAL MEANS IN LAW ENFORCEMENT | Tumbarska, A.<br>Institute of Metal Science Equipment and Technologies with Hydro- and Aerodynamics Centre "Acad. A Balevski" at the Bulgarian Academy of Sciences | 12 | BG |
| 54 | DEVELOPMENT OF A MULTI-LAYERED COUNTER-UNMANNED AIRCRAFT SYSTEM FOR ADDRESSING CONTEMPORARY SECURITY CHALLENGES | Marina Hristova<br>Institute of Metal Science Equipment and Technologies with Hydro- and Aerodynamics Centre "Acad. A Balevski" at the Bulgarian Academy of Sciences | 14 | BG |
| 55 | APPLICATION OF VIRTUAL AND AUGMENTED REALITY IN RADIATION CONTROL TRAINING FOR NUCLEAR POWER PLANT PERSONNEL | Assoc. Prof. D. Dimitrov, Ph. D[1], N. Randelova[2]<br>Institute of Metal Science Equipment and Technologies with Hydroaerodynamics Centre "Acad. A Balevski", Bulgarian Academy of Sciences, Sofia, Bulgaria[1]<br>Kozloduy Nuclear Power Plant[2] | 17 | BG |
| 56 | FEATURES IN THE DESIGN OF UNMANNED AERIAL VEHICLES AIRCRAFT TYPE | Dr. Eng. Sabi S Minev<br>Higher Air Force School „G. Benkovski" - Dolna Mitropolia | 25 | BG |



***time for presentation 10-12 minutes,***
***questions after each presentation***

| | | | | |
|---|---|---|---|---|
| 57 | CHARACTERISTICS OF THE MATERIALS USED IN THE DESIGN OF UNMANNED AIRCRAFT AIRCRAFT TYPE | Dr. Eng. Sabi S Minev<br>Higher Air Force School „G. Benkovski“ - Dolna Mitropolia | 26 | BG |
| 58 | THE FUNDAMENTAL ATTRIBUTION ERROR OF PRISON STAFF REGARDING INMATE ESCAPES | Assoc.Prof. Emil Madzharov. ,PhD<br>Academy of the Ministry of Interior, Sofia | 35 | BG |
| 59 | TACTICAL ACTIONS OF DRONE SWARMS CONTROLLED BY ARTIFICIAL INTELLIGENCE IN MODERN WARFARE: SYNERGY WITH NEW TECHNOLOGIES AND FOCUS ON BLOCKCHAIN | Prof. Nikolay Radulov, D.Sc, New Bulgarian University | 46 | BG |
| 60 | A PARADIGM FOR FUTURE SECURITY. SECURITY X.0 | Prof. Nikolay Radulov, D.Sc, New Bulgarian University | 47 | BG |
| 61 | POST-QUANTUM SECURITY OF BLOCKCHAIN | PhD Licheva T.<br>STU, Technical Security section | 48 | BG |
| 62 | GEOTECHNOLOGIES IN INTELLIGENCE MANAGEMENT | PhD Licheva T.<br>STU, Technical Security section | 49 | BG |

| | |
|---|---|
| **19:30 – 24:00** | **“WELCOME” COCKTAIL<br>ON THE TERRACE OF THE MAIN RESTAURANT** |

**02.09.2026 (WEDNESDAY)**

| | | |
|---|---|---|
| **10:00** | **CLOSING OF THE CONFERENCE AND THE CONGRESS WINE AND CHEESE PARTY** | **THE TERRACE OF THE MAIN RESTAURANT** |

## *NEXT CONFERENCE “TECHNICS. TECHNOLOGIES. EDUCATION. SAFETY 2027”*

## *NEXT CONFERENCE “MATERIAL SCIENCE. NONEQUILIBRIUM PHASE TRANSFORMATIONS 2027”*

### *30.08 - 01.09.2027, VARNA, HOTEL“ FRÉDÉRIC JOLIOT-CURIE INTERNATIONAL HOUSE OF SCIENTISTS“*

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....



***time for presentation 10-12 minutes,***
***questions after each presentation***

***time for presentation 10-12 minutes,***
***questions after each presentation***

***time for presentation 10-12 minutes,***
***questions after each presentation***

XI INTERNATIONAL SCIENTIFIC CONFERENCE

# CONSERVING SOILS AND WATER

07-10.12.2026, BOROVETS, HOTEL ELA

www.conserving-soils.eu

X INTERNATIONAL SCIENTIFIC CONFERENCE

# CONFSEC 2026

07-10.12.2026, BOROVETS, HOTEL ELA

www.confsec.eu

XI INTERNATIONAL SCIENTIFIC CONFERENCE - WINTER SESSION

# INDUSTRY 4.0

09-12.12.2026, BOROVETS, HOTEL ELA

www.industry-4.eu

X INTERNATIONAL SCIENTIFIC CONFERENCE

# MATHEMATICAL MODELING

09-12.12.2026, BOROVETS, HOTEL ELA

www.mathmodel.eu

XII INTERNATIONAL SCIENTIFIC CONFERENCE

# HIGH TECHNOLOGIES. BUSINESS. SOCIETY 2027

22-25.03.2027, BOROVETS, HOTEL ELA

www.hightechsociety.eu

II INTERNATIONAL SCIENTIFIC CONFERENCE

# ARTIFICIAL INTELLIGENCE

22-25.03.2027, BOROVETS, HOTEL ELA

www.conferenceai.eu

XXIV INTERNATIONAL SCIENTIFIC CONGRESS - WINTER SESSION

# MACHINES. TECHNOLOGIES. MATERIALS 2027

24-27.03.2027, BOROVETS, HOTEL ELA

www.mtmcongress.com

XX CONFERENCE FOR YOUNG RESEARCHERS

# TECHNICAL SCIENCES. INDUSTRIAL MANAGEMENT 2027

24-27.03.2027, BOROVETS, HOTEL ELA

www.youngconference.com

XXXII INTERNATIONAL SCIENTIFIC AND TECHNICAL CONFERENCE

# FOUNDRY 2027

21-23.04.2027, PLEVEN, HOTEL ROSTOV

www.metalcasting.eu

XXXV INTERNATIONAL SCIENTIFIC CONFERENCE

# trans & MOTAUTO'27

28.06.-01.07.2027, VARNA, FRÉDÉRIC JOLIOT-CURIE IHS

www.trans-motauto.com

XIII INTERNATIONAL SCIENTIFIC CONGRESS

# INNOVATIONS 2027

28.06.-01.07.2026, VARNA, FRÉDÉRIC JOLIOT-CURIE IHS

www.innova-eng.eu

XII INTERNATIONAL SCIENTIFIC CONFERENCE - SUMMER SESSION

# INDUSTRY 4.0

30.06.-03.07.2026, VARNA, FRÉDÉRIC JOLIOT-CURIE IHS

www.industry-4.eu

XV INTERNATIONAL SCIENTIFIC CONGRESS

# AGRICULTURAL MACHINERY 2027

30.06.-03.07.2027, VARNA, FRÉDÉRIC JOLIOT-CURIE IHS

www.agrimachinery.net