



Conference Schedule

ON-LINE PRESENTATIONS SESSION

- 09:50 – 10:00 **Opening the Session and discussing technical matters**
- 1 10:00 – 10:10 **KLAUDIA BANASIEWICZ**
Lodz University of Technology
BIKE-SHARING DEMAND PREDICTION USING WEATHER, TIME SERIES,
AND SPATIAL DATA
- 2 10:10 – 10:20 **MAREK BRYJA**
University of Ss. Cyril and Methodius in Trnava
THE ROLE OF SPOLOK SLOVÁKOV V POĽSKU (ASSOCIATION OF SLOVAKS IN POLAND)
AND ŽIVOT (LIFE), THE ONLY SLOVAK MAGAZINE IN POLAND, IN PRESERVING
SLOVAK HERITAGE (ENG)
- 3 10:20 – 10:30 **ALINA CZYŻ**
University of Szczecin
ANTIBIOTICS – WHAT DO WE REALLY KNOW ABOUT THEM? A STUDY AMONG SOCIAL
SCIENCES STUDENTS
- 4 10:30 – 10:40 **PATRYK OSKAR FRANKIEWICZ**
Cardinal Stefan Wyszyński University in Warsaw
DIGITAL PRISON AS A VARIANT OF SERVING A PRISON SENTENCE. MODERN
TECHNOLOGIES IN THE SERVICE OF LAW: THE DEVELOPMENT OF ELECTRONIC
MONITORING
- 5 10:40 – 10:50 **ILONA NĘDZI**
Maria Curie-Skłodowska University in Lublin
REGIONAL DEVELOPMENT – CASE STUDY: POLAND AND THE LUBLIN PROVINCE
- 6 10:50 – 11:00 **SYLWIA PUCEL**
Medical University of Białystok
THE FUNCTIONING OF THE FAMILY OF A CHILD WITH TYPE 1 DIABETES –
THE IMPORTANCE OF DIABETES EDUCATION IN EVERYDAY LIFE
- 7 11:00 – 11:10 **MACIEJ RZECZKOWSKI**
Poznan University of Technology
COMPREHENSIVE RAMAN AND HIGH-RESOLUTION LUMINESCENCE SPECTROSCOPIC
INVESTIGATION OF A $\text{Lu}_{1.5}\text{Y}_{1.5}\text{Al}_4\text{ScO}_{12}:\text{Pr}^{3+}$ GARNET
- 8 11:10 – 11:20 **LEON TABOR**
University of the National Education Commission in Krakow
ABSTRACT ART
- 9 11:20 – 11:30 **OKTAWIA WOJTASZEK, JULIA PACHOCKA**
University of Life Sciences in Lublin
BREED PREDISPOSITION TO DISEASES IN DOGS – BREEDING GENETICS



HUMANITIES SCIENCES SESSION

Presentations

- 1 **KLAUDIA HOJKA**
Poznan University of Technology
THE IMPORTANCE OF BRANDING IN FAMILY BUSINESSES AS A SOURCE OF COMPETITIVE ADVANTAGE
- 2 **IWONA IZDEBSKA**
Jan Grodek State University in Sanok
VAT DEDUCTION RULES IN THE LEASING OF PASSENGER CARS AND COMMERCIAL VEHICLES
- 3 **DOMINIKA JASKÓLSKA-SZELAĞOWSKA**
Jan Kochanowski University in Kielce
CONDITIONS AND IMPACT OF SENSORY INTEGRATION DISORDERS ON THE STUDENT'S EDUCATIONAL OPPORTUNITIES
- 4 **MAJA KUBIK**
Catholic University of Lublin
MOTIVATION AND MODERN APPROACHES IN FOREIGN LANGUAGE LEARNING
- 5 **ARTHUR S. LASKOWSKI**
Zespół Szkół im. Bolesława Podedwornego in Nieckowo
A SOCIO-EDUCATIONAL LITERATURE REVIEW OF THE DORMITORY LIVING OF THE RURAL SECONDARY SCHOOL STUDENTS IN RURAL AGRICULTURAL POLAND (ENG)
- 6 **AGNIESZKA LAWENDA**
Agnieszka Lawenda Psychological and Psychotherapy Practice
FAMILY SYSTEM AND MENTALIZATION IN THE CONTEXT OF YOUNG ADULTS' MENTAL HEALTH: A RESEARCH PROJECT
- 7 **TOMASZ SAMBURSKI**
Radom Academy of Economics
THE SIGNIFICANCE OF KNOWLEDGE AND INFORMATION IN THE STATE'S INTERNAL SECURITY SYSTEM
- 8 **KAROLINA ŚASIĄDEK**
Jan Grodek State University in Sanok
ECONOMIC GROWTH AND INFLATION
- 9 **MAGDALENA SZMYD**
Jan Grodek State University in Sanok
UNEMPLOYMENT IN POLAND- CAUSES,EFFECTS AND LABOUR MARKET POLICIES
- 10 **JOANNA ZACHARSKA**
Jan Grodek State University in Sanok
SELECTED ISSUES FROM SOCIAL PATHOLOGY AND PREVENTION - AGGRESSIVE BEHAVIOUR
- 11 **MONIKA ŻAKOWICZ**
Cosinus
EDUCATION LAW IN RELATION TO VOCATIONAL AND CONTINUING EDUCATION

Posters

- 1 **WIKTORIA KRAKOWIAK**
Maria Curie-Skłodowska University in Lublin
BRIDGES, NOT WALLS: SOCIAL SKILLS IN SCIENCE AND WORK (ENG)
- 2 **BARTOSZ KRAKOWIAK**
Jagiellonian University in Kraków
SAFETY EDUCATION AS THE FOUNDATION OF A RESPONSIBLE SOCIETY (ENG)
3. **WERONIKA KURNYTA**
Jan Grodek State University in Sanok
DISINFORMATION AND FAKE NEWS AS A THREAT TO STATE SECURITY



MEDICAL SCIENCES SESSION

Presentations

- 1 **BARTŁOMIEJ BIAŁAS**
Medical University of Lodz
THE ROLE OF MODERN RADIOLOGICAL PROCEDURES IN DIAGNOSING BLUNT LIVER INJURIES MANIFESTED BY UPPER GASTROINTESTINAL BLEEDING (ENG)
- 2 **KINGA BRZUSZKIEWICZ-ŁOZOWSKA**
Medical University of Lublin
COMPLICATIONS FOLLOWING TRANSCATHETER AORTIC VALVE IMPLANTATION PERFORMED UNDER ANALGOSEDATION
- 3 **MIA OCEAN DUNAJEWSKA**
University of Bordeaux, France
EVENING PRIMROSE OIL (EPO) SUPPLEMENTATION ON SKIN PARAMETERS (ENG)
- 4 **JOANNA KUBIK**
Medical University of Lublin
EPITHELIAL–MESENCHYMAL TRANSITION AS A CENTRAL MECHANISM REGULATING TUMOR PROGRESSION AND MICROENVIRONMENTAL INTERACTIONS
- 5 **NATALIA WACEK**
Jan Kochanowski University in Kielce, Collegium Medicum
AWARENESS OF HEALTH RISKS ASSOCIATED WITH PHYSICAL ACTIVITY

Posters

- 1 **ŻANETA BINERT-KUSZTAL**
Jagiellonian University Medical College
THE EFFECTIVENESS OF THE EXTERNAL ACTION OF THE ANTIBIOTIC – CEFIDEROKOL IN COMBINATION WITH POLYGUTAMIC ACID AND NANO SILVER PARTICLES ON GRAM-NEGATIVE BACTERIA E. COLI AND P. AERUGINOSA (ENG)
- 2 **ŻANETA BINERT-KUSZTAL**
Jagiellonian University Medical College
APPLICATION OF VOLTAMMETRY IN THE ANALYSIS OF IRON SORPTION IN THE PRESENCE OF CEFIDEROKOL (ENG)
- 3 **MICHAŁ CHALABALA**
University of Health and Sport Sciences in Wrocław
DIFFERENTIATION OF PEAK POWER GENERATION IN THE CONTEXT OF SELECTED ANTHROPOMETRIC INDICATORS
- 4 **KAROLINA CZAJKOWSKA**
Medical University of Lodz
NATURE VS. PATHOGENS: THE POTENTIAL OF CHITOSAN IN BIOMATERIALS ENGINEERING
- 5 **SABINA GALINIAK**
University of Rzeszów
SERUM REDOX STATUS REFLECTS STONE LOCATION IN UROLITHIASIS: A COMPARATIVE ANALYSIS OF NEPHROLITHIASIS AND URETEROLITHIASIS (ENG)
- 6 **KAROL KŁOSIŃSKI**
Medical University of Lodz
MICRO- AND NANOPLASTICS AS EMERGING ENVIRONMENTAL RISK FACTORS IN CARCINOGENESIS (ENG)
- 7 **NATALIA KUBRYŃ**
Collegium Medicum im. Ludwika Rydygiera in Bydgoszcz University Nicolaus Copernicus in Torun
SAFETY CHARACTERIZATION OF SELECTED PROTEOLYTIC TARGETS IN CHRONIC MYELOID LEUKEMIA USING IN SILICO APPROACHES



- 8 **MACIEJ RYBICKI**
Medical University of Lodz
INNOVATIVE APPLICATIONS OF HYDROGELS IN CONTEMPORARY MEDICINE
- 9 **JANINA RZESZOT**
Vincenty Pol University in Lublin
MOTIVATION FOR PHYSIOTHERAPY AND ITS EFFECTIVENESS (ENG)
- 10 **KINGA STEMPIŃSKA**
Jan Dlugosz University in Czestochowa
HOW TO PREPARE 'HERBAL TEA'? MODIFICATION OF INFUSING TIME AND THE CONTENT OF REDUCING COMPOUNDS IN HERBAL INFUSIONS (ENG)
- 11 **JOANNA ZONTEK-WILKOWSKA**
Jagiellonian University Medical College
THE ANTIBACTERIAL ACTIVITY OF TREMELLA FUCIFORMIS CHITIN-GLUCAN COMPLEX (CGC-TFM) – LITERATURE REVIEW (ENG)
- 12 **JOANNA ZONTEK-WILKOWSKA**
Jagiellonian University Medical College
PORIA COCOS (WOLFIPORIA EXTENSA) THE UNIQUE MUSHROOM WITH HEALTH-PROMOTING PROPERTIES – LITERATURE REVIEW (ENG)
- 13 **MATEUSZ JOPEK**
Wroclaw University of Health and Sport Sciences
THE INFLUENCE OF FUNCTIONAL KINEMATIC ASYMMETRY ON MAXIMUM SPEED PERFORMANCE IN REPEATED SPRINTS (ENG)

TECHNICAL AND NATURAL SCIENCES SESSION

Presentations

- 1 **TOMASZ BROM**
Tymbark-MWS Sp. z o.o.
APPLICATION OF INTELLIGENT ALGORITHMS IN THE AUTOMATION OF LOGISTICS PROCESSES IN WMS SYSTEMS
- 2 **TOMASZ BROM**
Grupa Maspex Sp. z o.o.
INTEGRATION OF THE INTERNET OF THINGS AND DATA ANALYTICS IN SALES PREDICTION
- 3 **TOMASZ BROM**
Grupa Maspex Sp. z o.o.
AN INTELLIGENT RECOMMENDATION SYSTEM TO SUPPORT THE SELECTION OF CULINARY RECIPES
- 4 **TOMASZ BROM**
Grupa Maspex Sp. z o.o.
OPTIMIZATION OF RETAIL STORE DISPLAYS USING MACHINE LEARNING METHODS
- 5 **BARTŁOMIEJ BRUSZEWSKI**
Bialystok University of Technology
THE FOURIER TRANSFORM: ANATOMY OF A SIGNAL
- 6 **BARTŁOMIEJ BRUSZEWSKI**
Bialystok University of Technology
MATHEMATICAL DECONSTRUCTION OF ASYMMETRIC SECURITY: A CASE STUDY OF WEAK KEYS IN THE RSA ALGORITHM
- 7 **WERONIKA DĄBROWSKA**
Bialystok University of Technology
THE COIN ROTATION PARADOX



- 8 **WERONIKA DĄBROWSKA**
Białystok University of Technology
BENFORD'S LAW: MATHEMATICAL ANOMALIES IN FRAUD DETECTION
- 9 **PIOTR KOSIEWICZ**
WISS Special Vehicles Ltd.
A TRANSPORT SYSTEM FOR A CONFIGURABLE ASSEMBLY LINE OF SPECIAL VEHICLES
- 10 **DOMINIKA KRAKOWIAK**
University of Life Sciences in Lublin
ENVIRONMENTAL AND GENETIC DRIVERS OF FEATHER KERATIN COMPOSITION AND STRUCTURE IN LAYING HENS (ENG)
- 11 **TOMASZ KUŹMICKI**
Białystok University of Technology
PROJECTILE MOTION IN A GRAVITATIONAL FIELD
- 12 **TOMASZ KUŹMICKI**
Białystok University of Technology
ELECTROMAGNETIC INDUCTION
- 13 **BARTŁOMIEJ MIELNICZUK**
Tymbark-MWS Sp. z o.o.
NEW SOLUTIONS IN PRODUCTION PROCESS OF CONCENTRATED FRUIT JUICES WITH UPGRADED HEALTH PROPERTIES
- 14 **BARTŁOMIEJ MIELNICZUK**
Tymbark-MWS Sp. z o.o.
INNOVATIVE TECHNOLOGICAL SOLUTIONS IN PRODUCTION PROCESS OF PRODUCTS AIMING TO RECEIVE BETTER SENSORY PARAMETERS AND HIGHER LEVEL OF VITAMINS
- 15 **DAWID MILEWSKI**
Białystok University of Technology
IS THERE A FORMULA FOR PRIME NUMBERS? ANALYSIS OF C.P. WILLANS' SOLUTION
- 16 **DAWID MILEWSKI**
Białystok University of Technology
THE PAGERANK ALGORITHM: APPLICATION OF LINEAR ALGEBRA AND GRAPH THEORY IN SEARCH ENGINES
- 17 **EWA ROPELEWSKA**
Universitat Politècnica de Catalunya-BarcelonaTech (UPC)
EFFICIENT MONITORING OF THE POTATO PURÉE ENRICHED WITH MICRO- AND MACROALGAE, AGAR, AND PECTIN USING ARTIFICIAL INTELLIGENCE FOR INNOVATIVE FOOD PRODUCT DEVELOPMENT (ENG)
- 18 **MARCELINA SARNA**
Rzeszów University of Technology
ELECTROCHEMICAL REDUCTION OF CO₂ – IS IT POSSIBLE TO PRODUCE FUEL FROM CARBON DIOXIDE?
- 19 **MARCELINA SARNA**
Rzeszów University of Technology
CHEMICAL TRANSFORMATIONS OF E-CIGARETTE LIQUID COMPONENTS DURING HEATING AND THEIR IMPACT ON THE HUMAN RESPIRATORY SYSTEM
- 20 **MARTA WOŁOSZYN**
Jan Kochanowski University of Kielce
OPTIMIZATION OF OYSTER MUSHROOM (PLEUROTUS OSTREATUS) CULTIVATION IN A BIOREACTOR



Posters

- 1 **ANNA FENYK**
University of Lodz
A COMPARATIVE REVIEW OF THE PROPERTIES AND LATEST APPLICATIONS OF SELECTED MAGNETORHEOLOGICAL MATERIALS
- 2 **AGELIKA KALUŻNA**
Poznan University of Technology
GREEN EMULGELS: FROM SUSTAINABLE EXTRACTION TO ADVANCED TOPICAL DELIVERY
- 3 **ŁUKASZ KOŁODZIEJ**
University of Lodz
SEMA4D AND SEMA5A UNDEREXPRESSION IN DEPRESSION – A PRELIMINARY STUDY
- 4 **DAWID LIBEREK**
Silesian University of Technology
RESEARCH ON STRUCTURAL MODIFICATIONS OF NATURAL (2E,6Z,8E)-N-ISOBUTYL-2,6,8-DECATRIENAMIDE ISOLATED FROM ACMELLA OLERACEA
- 5 **HUBERT NADLEWSKI**
Białystok University of Technology
A COMPARATIVE STUDY OF PRESENCE SIMULATION TECHNIQUES IN MODERN SMART HOME ENVIRONMENTS
- 6 **JAKUB STUGLIK**
Tymbark-MWS Sp. z o.o.
CONDUCTING RESEARCH AND DEVELOPMENT WORK: OPTIMIZATION OF BIOLOGICAL TREATMENT OF MUNICIPAL AND INDUSTRIAL WASTEWATER FOR THE PURPOSE OF REUSING TREATED WATER IN A CLOSED CYCLE AT TYMBARK-MWS SP. Z O.O. SP. K.
- 7 **NATALIA SWOBODA**
Silesian University of Technology
DIFFERENCES IN THE DETERMINATION OF THE CRITICAL MICELLE CONCENTRATION OF IONIC SURFACTANTS USING SELECTED MEASUREMENT TECHNIQUES