



15 th edition

**National Scientific Conference  
"e-FACTORY OF SCIENCE"**

April 11, 2026

## Conference Schedule

### ON-LINE PRESENTATIONS SESSION

- 09:50 – 10:00 **Opening the Session and discussing technical matters**
- 1 10:00 – 10:10 **BOŻENA CHRAPKIEWICZ KNEBEL**  
*Medical University of Silesia*  
FUNCTIONING OF PATIENTS AFTER PEDIATRIC AND ADOLESCENT GYNECOLOGICAL PROCEDURES AND THE RISK OF SEXUAL AND MOOD DISORDERS
- 2 10:10 – 10:20 **NATALIA HETMAN**  
*Medical College, Jagiellonian University*  
DETERMINATION OF XANTHOTHUMOL BY UV-VIS SPECTROPHOTOMETRIC METHOD
- 3 10:20 – 10:30 **KACPER KOSZYK**  
*University of Life Sciences in Lublin*  
NEW TECHNOLOGIES IN MONITORING THE HEALTH AND BEHAVIOR OF HORSES
- 4 10:30 – 10:40 **ADAM KWIECIŃSKI**  
*Kazimierz Wielki University in Bydgoszcz*  
THE EFFECT OF HUMAN TRAINING PERIODIZATION ON THE RISK OF DEVELOPING APOPHYSITIS IN YOUNG SOCCER PLAYERS, BASED ON BIOLOGICAL MATURITY – A TRAINING INTERVENTION ANALYSIS
- 5 10:40 – 10:50 **EMIL OŻÓG**  
*Rzeszow University of Technology*  
MECHATRONICS IN DRONES AND SYSTEMS USED IN AQUATIC ENVIRONMENTS – A LITERATURE REVIEW
- 6 10:50 – 11:00 **SYLWIA PUCEL**  
*Medical University of Białystok*  
FAMILY FUNCTIONING IN THE CONTEXT OF A CHILD'S ILLNESS – ILLNESS PERCEPTION FROM THE PERSPECTIVE OF A PARENT OF A CHILD WITH TYPE 1 DIABETES. A RESEARCH PROJECT
- 11:00 – 11:10 **COFFEE BREAK**
- 7 11:10 – 11:20 **ADRIANNA ROMANOWICZ**  
*Medical University of Białystok; University Clinical Hospital in Białystok, Poland*  
THE C-X-C MOTIF CHEMOKINE LIGAND 13 (CXCL13) AS A POTENTIAL BIOMARKER IN COLORECTAL CANCER – NEW DIAGNOSTIC PERSPECTIVES
- 8 11:20 – 11:30 **NATALIA SWOBODA**  
*Silesian University of Technology*  
FROM INTERFACE TO SOLUTION: COMBINED GONIOMETRIC AND CONDUCTOMETRIC STUDY OF CMC IN IONIC SURFACTANT SYSTEMS
- 9 11:30 – 11:40 **ELŻBIETA WNUK**  
*University of Life Sciences in Lublin*  
CHANGES IN THE SHAPE AND CHARACTERISTICS OF TOOTH I3 IN POLISH KONIK WITH AGE
- 10 11:40 – 11:50 **ALEKSANDRA WOLNIAK**  
*Koźmiski University*  
VALUE-SENSITIVE DESIGN AS A METHODOLOGY FOR THE ETHICAL DESIGN OF AI SYSTEMS IN HEALTHCARE



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- 11 11:50 – 12:00 **JOANNA WRÓBEL**  
*University College of Enterprise and Administration in Lublin, Poland*  
COPERNICUS–GRESHAM’S LAW IN THE CONTEXT OF CONTEMPORARY PSYCHOLOGY AND FINANCE
- 12 12:00 – 12:10 **URSZULA WYDRYCKA**  
*Medical University of Białystok*  
THE IMPACT OF PHYSICAL ACTIVITY ON POST-BARIATRIC SURGERY OUTCOMES: A REVIEW AND PRELIMINARY FINDINGS FROM AN ORIGINAL STUDY

## HUMANITIES SCIENCES SESSION

### Presentations

- 1 **EWA FICEK**  
*University of Silesia in Katowice*  
THE FIGURE OF THE ENEMY IN PUBLICATIONS OF THE 1944 WARSAW UPRISING (BASED ON THE PRESS, BROCHURES AND SELECTED LEAFLETS)
- 2 **MALGORZATA JANUSZ-KONOPELKO**  
*No. 5 Kindergarten with an Inclusive Unit in Suwałki*  
PARENTS’ PERSPECTIVES ON KINDERGARTEN–PARENT COLLABORATION IN INCLUSIVE EDUCATION
- 3 **JOANNA KIELB**  
*Jan Grodek State University in Sanok*  
THE CONCEPT OF LAW AND LEGAL SYSTEMS
- 4 **MICHAŁ JAN KOŁODZIEJ**  
*Jagiellonian University*  
THE ROLE OF ARTIFICIAL INTELLIGENCE IN FINANCIAL FORECASTING – HUMAN JUDGMENT VERSUS ALGORITHMS
- 5 **PAULA KRYSZPIN**  
*No. 5 Kindergarten with an Inclusive Unit in Suwałki*  
INCLUSIVE EDUCATION IN THE OPINIONS OF PARENTS OF PRESCHOOL CHILDREN
- 6 **WERONIKA MIKSA**  
AUTOMATING INTERNAL COMMUNICATION WITHIN AN ORGANIZATION USING AI
- 7 **MAGDALENA SZMYD**  
*Jan Grodek State University in Sanok*  
THE IMPACT OF STATE REGIONAL POLICY ON REDUCING DEVELOPMENT DISPARITIES

### Posters

- 1 **KRZYSZTOF STĄCZEK**  
*Jan Grodek State University in Sanok*  
SMART CITY AND THE SAFETY OF RESIDENTS



## MEDICAL SCIENCES SESSION

### Presentations

- BARTŁOMIEJ BIAŁAS**  
*Medical University of Lodz*  
PROGNOSTIC FACTORS OF MORTALITY AND CLINICAL CHARACTERISTICS OF PATIENTS SURGICALLY TREATED FOR BLUNT LIVER TRAUMA – A SINGLE-CENTER EXPERIENCE (ENG)
- KRZYSZTOF GÓRSKI**  
*Medical University of Białystok*  
THE IMPACT OF LIFESTYLE AND HEALTH BEHAVIORS ON CARDIOVASCULAR DISEASES
- OLIWIA MICHALSKA-RADŹ**  
*Medical University of Białystok*  
THE ROLE OF NEUTROPHIL EXTRACELLULAR TRAPS (NET) IN HEMOSTATIC DISORDERS IN PATIENTS WITH ASTHMA
- MACIEJ RYBICKI**  
*Medical University of Lodz*  
SAFETY AND EFFICACY OF OCTYL 2-CYANOACRYLATE (DERMABOND) IN BREAST SURGERY (ENG)
- JANINA RZESZOT**  
*Vincent Pol University in Lublin, Poland*  
PHYSIOTHERAPY FOR PATIENTS WITH HYPERTENSION, CHALLENGE OR PREVENTION IN THE PURSUIT OF PHYSICAL FITNESS (ENG)
- EWA STASZAK**  
*University of Opole*  
CHARACTERISTICS OF CATATHRENIA
- NATALIA WACEK**  
*Jan Kochanowski University in Kielce, Collegium Medicum*  
PHYSICAL ACTIVITY AS AN ELEMENT OF HEALTH PREVENTION
- WERONIKA WITEK**  
*University of Opole*  
LEMIERRE'S SYNDROME

### Posters

- KAROLINA CZAJKOWSKA**  
*Medical University of Lodz*  
FROM STRUCTURE TO FUNCTION: THE CRITICAL ROLE OF DEACETYLATION & MOLECULAR WEIGHT IN CHITOSAN'S ANTIMICROBIAL ACTIVITY
- WERONIKA LESZCZYŃSKA**  
*NanoSanguis S.A.*  
EVALUATING MALEIC ANHYDRIDE DERIVATIVES AS LINKERS FOR PH-SENSITIVE DRUG RELEASE (ENG)
- BARTOSZ PISZCZ**  
*Medical University of Lublin*  
THE ROLE OF THE AORTIC ISTHMUS AS A KEY VESSEL IN FETAL LIFE
- OLIVIA EMMA THOMAS**  
*University of Gdańsk*  
MARINE COLLAGEN: SOURCES, EXTRACTION STRATEGIES, AND BIOMEDICAL APPLICATIONS – A LITERATURE REVIEW (ENG)
- GABRIELA ZEGAN**  
*Medical University of Warsaw*  
PROBIOTIC-MEDIATED BIOTRANSFORMATION OF HYPERICUM PERFORATUM (ENG)



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## **TECHNICAL AND NATURAL SCIENCES SESSION**

### **Presentations**

- 1 **KACPER KOSZYK**  
*University of Life Sciences in Lublin*  
ADAPTATION OF HORSES TO CHANGING CLIMATE: PHYSIOLOGY, BEHAVIOR  
AND IMPLICATIONS FOR BREEDING
- 2 **MARCELINA SARNA**  
*Rzeszów University of Technology*  
THE INFLUENCE OF CARBOCATION STABILIZATION ON THE MECHANISM AND SELECTIVITY  
OF ORGANIC REACTIONS
- 3 **MARCELINA SARNA**  
*Rzeszów University of Technology*  
APPLICATION OF CHEMICAL METHODS IN FORENSIC TRACE IDENTIFICATION
- 4 **WERONIKA SZCZĘDOR**  
*University of Life Sciences in Lublin*  
MALDI-TOF: UNIQUE PROTEIN-LIPID PROFILE AS A KEY TO BACTERIAL MODIFICATIONS

### **Posters**

- 1 **OLIWIA DEPOWSKA**  
*Cracow University of Technology*  
BIOACTIVE PLANT ADDITIVES BASED ON COPPER NANOPARTICLES OBTAINED IN DEEP EUTECTIC  
SOLVENTS (DES)
- 2 **WOJCIECH GURGUL**  
*Rzeszów University of Technology*  
IMPACT OF ENERGY-EFFICIENT LIGHT SOURCES ON POWER QUALITY IN THE GRID
- 3 **BARTŁOMIEJ MIELNICZUK**  
*Tymbark-MWS Sp. z o.o.*  
INNOVATIVE TECHNOLOGICAL SOLUTIONS IN PRODUCTION PROCESS OF PRODUCTS AIMING  
TO RECEIVE BETTER SENSORY PARAMETRES AND HIGHER LEVEL OF VITAMINS
- 4 **BARTŁOMIEJ MIELNICZUK**  
*Tymbark-MWS Sp. z o.o.*  
NEW SOLUTIONS IN PRODUCTION PROCESS OF CONCENTRATED FRUIT JUICES WITH UPGRADED  
HEALTH PROPERTIES
- 5 **KACPER SIWIAK**  
*University of Life Sciences in Lublin*  
MICROPLASTICS IN THE ENVIRONMENT – A 21ST CENTURY CHALLENGE (ENG)
- 6 **KACPER SIWIAK**  
*University of Life Sciences in Lublin*  
ARTIFICIAL INTELLIGENCE IN THE DIAGNOSIS OF ANIMAL DISEASES (ENG)
- 7 **MALGORZATA SKOREK**  
*Maspex Food Sp. z o.o., Agros Nova Branch In Lowicz*  
INTELLIGENT PICKING SYSTEMS IN FOOD MIXING PROCESSES: RESULTS OF TECHNOLOGICAL  
ANALYSES AND R&D WORKS
- 8 **MALGORZATA SKOREK**  
*Maspex Food Sp. z o.o., Agros Nova Branch In Lowicz*  
RESPONDING TO MODERN DIETARY TRENDS: REFORMULATION OF ŁOWICZ BRAND FRUIT  
JAMS TOWARDS FUNCTIONAL FOODS



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- 9 **MAŁGORZATA SKOREK**  
*Maspex Food Sp. z o.o., Agros Nova Branch In Lowicz*  
FROM VARIETY TO FACTORY: MODERN TOMATO CULTIVATION FOR INDUSTRIAL NEEDS
- 10 **ALICJA SZOT**  
*University of Life Sciences in Lublin*  
TICK-BORNE DISEASES IN DOGS (ENG)
- 11 **ALICJA SZOT**  
*University of Life Sciences in Lublin*  
INVASIVE SPECIES IN EUROPE – IMPACTS ON ECOSYSTEMS AND BIODIVERSITY (ENG)
- 12 **ADAM WESOŁOWSKI**  
*University of Life Sciences Lublin*  
EARLY MARKERS OF KIDNEY DAMAGE IN DOGS AND CATS – THE SIGNIFICANCE OF SDMA, CYSTATIN C AND URINALYSIS IN CLINICAL PRACTICE (ENG)
- 13 **ADAM WESOŁOWSKI**  
*University of Life Sciences Lublin*  
MODERN APPROACHES TO THE TREATMENT OF CHRONIC KIDNEY DISEASE IN CATS – DIET, SUPPORTIVE THERAPY AND MANAGEMENT OF COMPLICATIONS (ENG)
- 14 **KRYSTIAN WOLSKI**  
*Silesian University of Technology*  
NATURAL MICRONUTRIENT CARRIERS AS A DIRECTION FOR MODERN FERTILIZER DEVELOPMENT
- 15 **KINGA ZAGÓRSKA**  
*Cracow University of Technology*  
MICRONUTRIENT FERTILIZERS BASED ON COPPER NANOPARTICLES OBTAINED IN NATURAL, DEEP EUTECTIC SOLVENTS (NADES)