THE NINTH WORKSHOP OF VIETNAMESE RESEARCHERS IN POLAND (WVRP2024)

HYBRID EVENT

15 - 16 November 2024

PROGRAMME

15th NOVEMBER 2024 (FRIDAY)

AGH University of Krakow

AGH Center of Energy (Centrum Energetyki AGH)

ul. Czarnowiejska 36, 30-059 Kraków

Building C-6, 3rd floor, rooms 307-308

8:30 – 9:00 **Registration**

9:00 – 9:20	**OPENING** Phong Ba Dao – Workshop Chairman Andrzej Klepka – Vice Dean of the Faculty of Mechanical Engineering and Robotics Łukasz Pieczonka – Head of the Department of Robotics and Mechatronics Mai Suan Li – President of the Vietnam Association of Science and Technology in Poland (VASTP) Nguyen Duc Quang – Counsellor, Embassy of Vietnam in Poland
9:20 – 9:35	Presentation "**THE POSSIBILITIES OF INTERNATIONAL COOPERATION WITHIN THE ERASMUS+ KA171 PROGRAMME**" (*onsite*) Aleksandra Perkins-Oleszkowicz, Centre of International Affairs, AGH University of Krakow, Poland
9:35 – 9:50	PRESENTATION OF THE INSTITUTE OF BIOTECHNOLOGY AND FOOD TECHNOLOGY, INDUSTRIAL UNIVERSITY OF HO CHI MINH CITY, VIETNAM (*online*)
9:50 – 10:10	**Excellence Young Research Award Lecture** "**BRIDGE HEALTH MONITORING USING AUTOMATED FE MODEL UPDATING, SIGNAL PROCESSING, AND MACHINE LEARNING**" (*online*) Duc Cong Nguyen[1,2] [1] Mien Trung University of Civil Engineering, Vietnam

	[2] Silesian University of Technology, Poland *(Chairman: Mai Suan Li)*
ENGINEERING – Chairman: Phong Ba Dao	
10:10 – 10:50	**Plenary Lecture** "**WHY SPACE EXPLORATION IS IMPORTANT FOR HUMANS ON EARTH?**" (*onsite*) Tadeusz Uhl, Space Technology Center, AGH University of Krakow, Poland
10:50 – 11:15	**Invited Talk** "**MODELLING AND TESTING THE MECHANICAL BEHAVIOUR OF LUNAR REGOLITH**" (*onsite*) Alberto Gallina, AGH University of Krakow, Poland
11:15 – 11:30	Oral presentation "**EFFICIENT DEPLOYMENT OF SIGNAL PROCESSING TO EMBEDDED SYSTEMS**" (*onsite*) Adam Jablonski, AGH University of Krakow, Poland
11:30 – 12:00 COFFEE BREAK & GROUP PHOTO	
PHYSICS, CHEMISTRY, BIOLOGY – Chairman: Zbigniew R. Struzik	
12:00 – 12:25	**Invited Talk** "**SEEING IS BELIEVING – CHALLENGES AND OPPORTUNITIES IN STRUCTURAL BIOLOGY**" (*onsite*) Sebastian Glatt, Malopolska Centre of Biotechnology, Jagiellonian University, Poland
12:25 – 12:50	**Invited Talk** "**PHASE TRANSITIONS IN PROTEIN SOLUTIONS: INSIGHTS FROM MOLECULAR DYNAMICS SIMULATIONS**" (*onsite*) Mateusz Chwastyk, Institute of Physics, Polish Academy of Sciences, Warsaw, Poland
12:50 – 13:05	Oral presentation "**ANTIBIOTIC RESISTANCE ON THE RISE: CHALLENGES AND PROPOSED STRATEGIES TO COMBAT THE GLOBAL THREAT**" (*onsite*) Monika Wojciechowska, Centre of New Technologies, University of Warsaw, Poland
13:05 – 14:15 LUNCH BREAK	
14:15 – 14:55	**Plenary Lecture** "**ON THE DYNAMICS OF PROGRESS**" (*onsite*) Zbigniew R. Struzik, The University of Tokyo, Japan *(Chairman: Mai Suan Li)*
ENGINEERING – Chairman: Adam Jabłoński	
14:55 – 15:20	**Invited Talk** "**OPTIMIZING EMERGENCY MEDICAL SERVICES RESPONSE THROUGH DATA-DRIVEN DYNAMIC AMBULANCE AVAILABILITY MAPS: A CASE STUDY FROM THE MAŁOPOLSKIE VOIVODESHIP, POLAND**" (*onsite*) Michał Lupa, AGH University of Krakow, Poland
15:20 – 15:45	**Invited Talk** "**CURRENT RESEARCH AND FUTURE CHALLENGES IN RELIABILITY, OPERATION & MAINTENANCE OF RENEWABLE ENERGY SYSTEMS**" (*online*) Cuong Dao, University of Bradford, United Kingdom
15:45 – 16:00	Oral presentation "**PHASE VELOCITY DISPERSION CURVE ESTIMATION IN SHEAR WAVE ELASTOGRAPHY WITH RESTRICTED TIME DOMAIN SIGNALS**" (*onsite*) Wiktor Jachym, AGH University of Krakow, Poland
16:00 – 16:15	Oral presentation "**MACHINE LEARNING AND COINTEGRATION FOR WIND TURBINE MONITORING AND FAULT DETECTION: FROM A COMPARATIVE STUDY TO A COMBINED APPROACH**" (*onsite*) Paweł Knes, IBM Poland, Krakow, Poland

16:15 – 16:35 COFFEE BREAK	
PHYSICS, CHEMISTRY, BIOLOGY – Chairs: Mateusz Chwastyk & Thi Hong Quan Vu	
16:35 – 17:00	Invited Talk "**THERMOELECTRIC PROPERTIES OF Cu(Se,Te) LIQUID-LIKE MATERIALS**" (*online*) Anh Tuan Duong, Phenikaa University, Viet Nam
17:00 – 17:15	Oral presentation "***AB-INITIO* STUDY OF THE ELECTRONIC STRUCTURE AND OPTICAL PROPERTIES OF DOUBLE PEROVSKITE Ba_2TiMnO_6**" (*online*) Thi Thu Ha Nguyen, University of the National Education Commission, Poland
17:15 – 17:25	Poster presentation "**STUDY THE BINDING INTERFACE STABILITY OF SARS-COV-2 VARIANTS WITH ACE2 BY STEERED MOLECULAR DYNAMICS SIMULATION**" (*online*) Minh-Thu Tran, Vietnam National University, Vietnam
17:25 – 17:50	Invited Talk "**TIME-RESOLVED X-RAY CRYSTALLOGRAPHY ON MEMBRANE PROTEINS: WATCHING IONS MOVING IN TIME AND SPACE**" (*onsite*) Przemyslaw Nogly, Dioscuri Centre for Structural Dynamics of Receptors, Jagiellonian University, Poland
17:50 – 18:05	Oral presentation "**A HIGHLY SENSITIVE RATIOMETRIC OPTICAL THERMOMETER BASED ON Sr2MgWO6 DOUBLE PEROVSKITE DOPED WITH Dy3+ EXPLOITING THERMALLY COUPLED AND UNCOUPLED LEVELS**" (*onsite*) Thi Hong Quan Vu, Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Poland
18:05 – 18:20	Oral presentation "**Binding of SARS-CoV-2 NSP1 to 40S Ribosome Inhibits mRNA Translation**" (*onsite*) Hung Nguyen, Institute of Physics, Polish Academy of Sciences, Poland
19:00 – 21:00 WORKSHOP DINNER, Mekong Restaurant, ul. Miechowska 18, Krakow	

16th NOVEMBER 2024 (SATURDAY)

8:45 – 9:25	Plenary Lecture "**ENABLING INTELLIGENT MULTI-MODULAR STRUCTURES FOR OFFSHORE SOLAR ENERGY HARVESTING**" (*online*) Dong Trong Nguyen, Norwegian University of Science and Technology, Norway *(Chairman: Phong Ba Dao)*
BIOTECHNOLOGY AND FOOD TECHNOLOGY – Chairman: Nguyen Truong Co	
9:25 – 9:40	Oral presentation "**UTILIZING BY-PRODUCTS WHEAT GERM TO ENHANCE THE NUTRITION OF SANDWICH BREAD BY SOURDOUGH FERMENTATION METHODS**" (*online*) Huynh Thai Nguyet, Industrial University of Ho Chi Minh City, Vietnam
9:40 – 9:55	Oral presentation "**ASSESSMENT OF ANTIOXIDANT ACTIVITIES FROM EXTRACTS OF *C. militaris* CULTIVATION SUBSTRATE OVER TIME IN VIETNAM**" (*online*) Khac Ky Lam, Industrial University of Ho Chi Minh City, Vietnam

9:55 – 10:10	Oral presentation "**CORRELATION OF AGE AND SEX WITH MERCURY CONTENT IN THE MUSCLE OF YELLOWFIN SEABREAM (*Acanthopagrus latus*)**" (*online*) Thiep Vo Van, Industrial University of Ho Chi Minh City, Vietnam
10:10 – 10:25	Oral presentation "**TEXTURAL AND SENSORY PROPERTIES OF VIETNAMESE STICKY RICE CAKE WITH RAMIE LEAF ADDED GINGER**" (*online*) Tran Huynh Loi, Industrial University of Ho Chi Minh City, Vietnam
10:25 – 10:40	Oral presentation "**PHYSICAL AND SENSORY PROPERTIES OF VEGETARIAN SAUSAGE WRAPPED IN BANANA LEAVES WITH ADDED SWEET POTATO**" (*online*) Uyen Phuong Dang, Industrial University of Ho Chi Minh City, Vietnam
10:40 – 10:50	Poster presentation "**EFFECT OF CALCIUM ION CONCENTRATION ON THE TOTAL POLYPHENOL CONTENT IN ALGINATE GEL CAPSULES CONTAINING PINEAPPLE JUICE**" (*online*) Ngoc Bao Ho, Industrial University of Ho Chi Minh City, Vietnam
10:50 – 11:10 COFFEE BREAK	
NATURAL SCIENCES – Chairman: Ngoc Loi Nguyen	
11:10 – 11:35	**Invited Talk** "**GEOTHERMAL ENERGY: OPPORTUNITIES AND CHALLENGES FOR HIGH-TEMPERATURE APPLICATIONS**" (*online*) Hieu Nguyen Hoang, SINTEF Industry, Norway
11:35 – 11:50	Oral presentation "**APPLY FLAC AND RS SOFTWARE PROGRAMS TO ESTIMATE THE STABILITY COEFFICIENT OF BENTONITE SLURRY TRENCH IN STRATUM WITH COHESIVE SOIL LAYERS**" (*online*) Thi Cat Tuong Le, Mien Trung University of Civil Engineering, Viet Nam
11:50 – 12:05	Oral presentation "**PYROLYSIS OF KHAT WASTE VS. COAL: EXPERIMENTAL AND ASPEN PLUS ANALYSIS**" (*online*) Geleta Afessa Moreda, Dambi Dollo University, Ethiopia
12:05 – 12:20	Oral presentation "**ECHOMETRIC MEASUREMENTS OF SALT CAVERNS MADE THROUGH A STEEL OBSTACLE**" (*onsite*) Tomasz Kubacka, AGH University of Krakow, Poland
12:20 – 12:35	Oral presentation "**FROM PRESENT TO PAST AND FUTURE: MARINE BIODIVERSITY INSIGHTS FROM ENVIRONMENTAL DNA**" (*onsite*) Ngoc Loi Nguyen, Institute of Oceanology, Polish Academy of Sciences, Poland
12:35 – 13:35 LUNCH BREAK	
SOCIAL SCIENCES AND HUMANITIES – Chairman: Ha Trung Hieu	
13:35 – 13:45	Poster presentation "**IMPACTS OF EMPLOYEE VALUE PROSPOSITION (EVP) ON EMPLOYEE ENGAGEMENT AMONG EMPLOYEES WORKING IN HO CHI MINH CITY, VIETNAM**" (*onsite*) Xuan T.T. Nguyen, Wrocławska Akademia Biznesu, Poland
13:45 – 14:00	Oral presentation "**PHAN BOI CHAU'S THOUGHTS ON STATE AND NATION**" (*online*) Binh Minh Ngo, Faculty of Philosophy, University of Warsaw, Poland
14:00 – 14:10	Poster presentation "**SELF-COMPASSION AND BODY COMPASSION IN KHI TAM YOGA THERAPY**" (*online*) Lan Huong Nguyen, SWPS University of Social Sciences and Humanities, Poland

14:10 – 14:20	Poster presentation "**THE ELEMENTS OF INNOVATION IMPACT GLOBAL ECONOMIC GROWTH AND PROPOSING POLICIES IMPLEMENTED FOR VIETNAM**" (*online*) Thao Nguyen Thanh, Hathaway Policy, Hanoi, Vietnam
14:20 – 14:30	Poster presentation "**EMPLOYEE RETENTION AND TURNOVER IN THE PAKISTANI PRIVATE RETAIL BANKING SECTOR: KEY FACTORS INFLUENCING WORKFORCE STABILITY**" (*online*) Zubar UL Qamar Khan, Bristol Business School, University of West of England, UK
14:30 – 14:50 COFFEE BREAK	
ENGINEERING – Chairman: Phong Ba Dao	
14:50 – 15:05	Oral presentation "**CONDITION MONITORING AND FAULT DETECTION FOR WIND TURBINE USING CHOW TEST**" (*onsite*) Abdelkareem Jebreel, Sapienza University of Rome, Italy
15:05 – 15:20	Oral presentation "**MACHINABILITY INVESTIGATION IN ELECTRIC DISCHARGE MACHINING OF CARBON FIBER REINFORCED COMPOSITES FOR AEROSPACE APPLICATIONS**" (*onsite*) Abual Hassan, AGH University of Krakow, Poland
15:20 – 15:45	**Invited Talk** "**ARTIFICIAL INTELLIGENCE ENABLED PROGNOSTICS AND HEALTH MANAGEMENT SYSTEM**" (*online*) Khanh T.P. Nguyen, University of Technology Tarbes Occitanie Pyrénées, France
15:45 – 16:00	Oral presentation "**PARAMETRIC STUDY OF AN EMPTY DIFFUSER GEOMETRIC PARAMETERS AND SHAPE FOR A WIND TURBINE USING CFD ANALYSIS**" (*online*) Debela Alema Teklemariyem, AGH University of Krakow, Poland
16:00 – 16:15	Oral presentation "**ANALYSING HIP IMPLANT USING FINITE ELEMENT ANALYSIS: DESIGN, FUNCTION, AND OUTCOMES**" (*online*) Syed Nasir Hussain Razvi, AGH University of Krakow, Poland
16:15 – 16:20	**SUMMARY AND CLOSING**

Notes:

Plenary lecture (40 minutes including Q&A)

Invited talk (25 minutes including Q&A)

Oral presentation (15 minutes including Q&A)

Poster presentation (10 minutes including Q&A)