

**LIV INTERNATIONAL
BIOMETRICAL COLLOQUIUM**

OLSZTYN

SEPTEMBER 7-10, 2025

CONFERENCE PROGRAMME

ORGANISERS

POLISH BIOMETRIC SOCIETY

DEPARTMENT OF GENETICS, PLANT BREEDING AND BIORESOURCE ENGINEERING

UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN

DEPARTMENT OF APPLIED MATHEMATICS AND COMPUTER SCIENCE

UNIVERSITY OF LIFE SCIENCES IN LUBLIN

SCIENTIFIC COMMITTEE

ANDRZEJ BOCHNIAK
IVETTE GOMES
MAŁGORZATA GRACZYK
ZOFIA HANUSZ
MARIA KOZŁOWSKA
MIROSLAW KRZYŚKO
AGNIESZKA KUBIK-KOMAR
STANISŁAW MEJZA
MANUELA NEVES
AMILCAR OLIVEIRA
TERESA OLIVEIRA
DULCE PEREIRA
PAULO CANAS RODRIGUES
LESZEK SIECZKO
ŁUKASZ SMAGA
MIROSLAWA WESOŁOWSKA-JANCZAREK
WALDEMAR WOŁYŃSKI
DARIUSZ ZAŁUSKI

ORGANISING COMMITTEE

HEAD	DARIUSZ ZAŁUSKI
SECRETARY	URSZULA BRONOWICKA-MIELNICZUK
TREASURER	ANNA SZCZEPAŃSKA-ÁLVAREZ
MEMBERS	ANNA GODLEWSKA-ZAORSKA
	BERNADETTA OLENDER-JERMACZ
	MONIKA RÓŻAŃSKA-BOCZULA
	DOROTA DOMAGAŁA
	JACEK MIELNICZUK

CONFERENCE PROGRAMME

SUNDAY, SEPTEMBER 7, 2025

from 16:00	Arrival and accommodation of conference participants, Omega Hotel
18:30-20:00	A short trip to see the sunset over Lake Ukiel
17:00-20:00	Supper

MONDAY, SEPTEMBER 8, 2025

7:00 - 9:45	Breakfast	
10:00 - 10:15	Plenary session	Opening of the Conference President of the Polish Biometric Society, Małgorzata Graczyk
10:15 - 10:40		Chairperson: Dariusz Gozdowski Spatio-temporal patterns of methane emissions from 2019 onwards: A satellite-based comparison of high- and low-emission regions. Elżbieta Wójcik-Gront, Agnieszka Wnuk, Dariusz Gozdowski
10:40 - 11:05		Application of XLSTAT by Lumivero in multivariate analyses for environmental sciences. Katarzyna Glińska-Lewczuk
11:05 - 11:30		The application of multivariate analysis in studies of the variability of cereal breeding materials. Marian Wiwart, Elżbieta Suchowilska, Anna Szafrńska
11:30 - 12:15	Coffee break	
12:15 - 12:40	Plenary session	Chairperson: Elżbieta Wójcik-Gront Random forest models in detection of crop damage in rapeseed using RGB imagery acquired using UAV. Barbara Dobosz, Dariusz Gozdowski, Jerzy Koronczok, Jan Žukovskis, Elżbieta Wójcik-Gront
12:40 - 13:05		Changes in C and N concentration in wood dry mass during decomposition. Ewa Chećko, Bogdan Jaroszewicz
13:05 - 13:30		Vitiligo is associated with an increased risk of cardiovascular diseases: a large-scale, propensity-matched, US-based retrospective study. Alicja Frączek, Agnieszka Owczarczyk-Saczonek, Ralf J. Ludwig, Gema Hernandez, Sascha Ständer, Diamant Thaci, Henner Zirpel
13:30 - 15:00	Lunch	
15:00 - 15:25	Plenary session	Chairperson: Agnieszka Kubik-Komar How water stress affects the growth, development, and gene expression of Yellow Mealworm. Olga Kosewska, Sebastian Przemieniecki, Przemysław Białoskórski, Mariusz Jerzy Stolarski, Michał Krzyżaniak
15:25 - 15:50		Cascading use of poplar biomass in the bioeconomy - a case study. Ewelina Olba-Zięty, Mariusz Jerzy Stolarski, Michał Krzyżaniak
15:50 - 16:15		Industrial hemp solid hydro-distillation residue - properties and diversity. Paweł Dudziec, Kazimierz Warmiński, Mariusz Jerzy Stolarski
16:15 - 16:45	Coffee break	
16:45 - 17:10	Plenary session	Chairperson: Leszek Sieczko Exploring image representations for airborne pollen recognition. Alicja Wieczorkowska, Elżbieta Kubera, Agnieszka Kubik-Komar, Krystyna Piotrowska-Weryszko, Agata Konarska
17:10 - 17:35		Comparing machine learning methods in detecting Fahr's disease. Anna Mamchych, Łukasz Smaga
17:50 - 18:50	Meeting of the Polish Group of the International Biometric Society	
19:30	Conference dinner	

CONFERENCE PROGRAMME

TUESDAY, SEPTEMBER 9, 2025

7:00 - 9:45	Breakfast	
10:00 - 10:25	Plenary session	Chairperson: Małgorzata Graczyk Multimetric assessment of spatial interpolation methods for soil mapping. Urszula Bronowicka-Mielniczuk
10:25 - 10:50		Distribution of energy required to crush mineral fertilizer granules. Małgorzata Szczepanik
10:50 - 11:15		Multivariate analysis using PCA and clustering methods in the study of heterogeneous regional data. Zofia Kołoszko-Chomentowska, Kinga Noras, Leszek Sieczko
11:15 - 12:00	Coffee break	
12:00 - 13:00	General Assembly of the Polish Biometric Society	
13:00 - 14:30	Lunch	
14:30 - 14:45	Plenary session	Chairperson: Andrzej Kornacki Prediction of calving time based on sensor measurements of behavior in cattle. Laura Slebioda, Bogna Zawieja, Grzegorz Grodkowski, Tomasz Sakowski, Tomasz Szwaczkowski, Ton Baars
14:45 - 15:00		Phenolic acid content in fly agaric fruit bodies (Amanita muscaria) depending on the type of habitat and the end of harvest. Lidia Szwajkowska-Michalek, Anna Przybylska-Balcerek, Kinga Stuper-Szablewska, Piotr Łakomy, Małgorzata Graczyk, Grażyna Niedziela
15:00 - 15:15		Agronomic practices to maximize seed and straw yield of monoecious hemp cultivar 'Henola'. Jakub Frankowski, Agnieszka Łacka, Dominika Sieracka, Konrad Banaś
15:15 - 15:30		Statistical and bioinformatics methods for whole genome sequencing analysis of rare genetic disorders. Alicja Szabelska-Beręsewicz
16:00	Old Town in Olsztyn - a trip	
19:30	Dinner	

WEDNESDAY, SEPTEMBER 10, 2025

7:00 - 9:00	Breakfast	
9:00 - 9:20	Plenary session	Chairperson: Dariusz Załuski AI methods for medical and environmental data analysis. Elżbieta Kubera
9:20 - 9:40		Optimal grouping for Weibull models: Improved parameter estimation for the compressive strength of fertilizer granules. Paweł Kurasieński, Wojciech Przystupa, Norbert Leszczyński
9:40 - 10:00		Selected methods for assessing alder pollen concentration. Agnieszka Kubik-Komar, Łukasz Smaga, Elżbieta Kubera, Małgorzata Graczyk, Krystyna Piotrowska-Weryszko, Dorota Myszkowska, Łukasz Grewling, Idalia Kasprzyk, Ewa Łupikasa, Barbara Majkowska-Wojciechowska, Małgorzata Malkiewicz, Małgorzata Puc
10:00 - 10:30	Coffee break	
10:30 - 12:00	Panel discussion The challenges of teaching statistics and biometrics in the era of artificial intelligence. Moderator: Małgorzata Graczyk Keynote speakers: Agnieszka Kubik-Komar, Elżbieta Kubera, Urszula Bronowicka-Mielniczuk, Leszek Sieczko, Dariusz Załuski, Jacek Mielniczuk	
12:00 - 12:15	Closing of the Conference President of the Polish Biometric Society, Małgorzata Graczyk	