

XXXI Conference

Polish Chitin Society

Katowice

September, 23-25th, 2026



ŹRÓDŁO:
Wydział Promocji, Urząd Miasta Katowice

NEW ASPECTS ON CHEMISTRY AND APPLICATION OF CHITIN AND ITS DERIVATIVES



Patronage



**NICOLAUS COPERNICUS
UNIVERSITY
IN TORUŃ**

Faculty of Chemistry

**Urszula Kiełkowska, PhD, DSc
Faculty Dean**

Sponsor



LPPequipment Warsaw

XXXI Conference of Polish Chitin Society

*„NEW ASPECTS ON CHEMISTRY AND APPLICATION OF CHITIN AND ITS DERIVATIVES.
Chitin, chitosan, and other polysaccharides”*

XXXI Conference of Polish Chitin Society



**“NEW ASPECTS ON CHEMISTRY AND APPLICATION OF
CHITIN AND ITS DERIVATIVES.**

Chitin, chitosan, and other polysaccharides”

**Katowice, Poland
September 23-25th 2026
Polish Chitin Society**



“NEW ASPECTS ON CHEMISTRY AND APPLICATION OF CHITIN AND ITS DERIVATIVES.

Chitin, chitosan, and other polysaccharides”

Scientific Committee: Prof. Małgorzata JAWORSKA, Ph.D., D.Sc. – Honorary President of PTChit
Katarzyna STRUSZCZYK-ŚWITA, Ph.D. – President of PTChit

Prof. Urszula FILIPKOWSKA, Ph.D., D.Sc.
Prof. Olga MARCHUT-MIKOŁAJCZYK, Ph.D., D.Sc.
Katarzyna KRESSE-WALCZAK, PD Dr. med. dent.
Prof. Radosław WACH, Ph.D., D.Sc.
Aneta OSTRÓŻKA-CIEŚLIK, Ph.D.
Magdalena GIERSEWSKA, Ph.D.

Organizing Committee: Magdalena GIERSEWSKA, Ph.D. – chairmen

Dorota CHEŁMINIAK-DUDKIEWICZ, Ph.D.
Piotr DROŹDŻYŃSKI, Ph.D.
Kinga MYLKIE, Ph.D.
Aneta OSTRÓŻKA-CIEŚLIK, Ph.D.
Anna RYŁ, Ph.D.
Katarzyna STRUSZCZYK-ŚWITA, Ph.D.

CONFERENCE SCHEDULE**September 23rd 2026 – Wednesday**

17 ⁰⁰ -19 ⁰⁰	Registration
19 ⁰⁰ -20 ⁰⁰	Dinner

September 24th 2026 – Thursday

9 ³⁰ -10 ¹⁰	OPENING CEREMONY Katarzyna Struszczyk-Świta, Ph.D., President of PTChit
	Prof. Henryk Struszczyk prize - giving ceremony

SESSION A ORAL PRESENTATION		
Chairman		Radosław Wach, Ph.D., D.Sc.
A1	10 ¹⁰ -10 ³⁵	Weronika Gonciarz, Marek Brzeziński, Magdalena Chmiela UPREGULATION OF INNATE AND ADAPTIVE IMMUNE MECHANISMS FACILITATING PREVENTION OF GASTRIC <i>HELICOBACTER PYLORI</i> INFECTION IN GUINEA PIGS BY <i>PER OS</i> ADMINISTRATION OF CHITOSAN MICROPARTICLES LOADED WITH <i>MYCOBACTERIUM BOVIS</i> BCG
A2	10 ³⁵ -11 ⁰⁰	Katarzyna Kresse-Walczak, Heike Meissner, Bruna Neves de Freitas, Klaus Boening FROM ARTIFICIAL BIOFILM TO ARTIFICIAL CALCULUS: BIOPOLYMER- BASED EQUIVALENTS FOR RESEARCH AND EDUCATION
A3	11 ⁰⁰ -11 ²⁵	Olga Marchut-Mikołajczyk CHITOSAN-BASED SOLUTIONS FOR ENVIRONMENTAL REMEDIATION
A4	11 ²⁵ -11 ⁵⁰	Eugeniusz Świstur, Tomasz Bajda, Julia Czerska FROM FOREST PESTS TO BIOPOLYMERS: CHITIN OBTAINED FROM INSECTS COLLECTED DURING FOREST PROTECTION OPERATIONS
A5	11 ⁵⁰ -12 ¹⁵	Noira Vokhidova, Musurmon Yusupov DEVELOPMENT AND EVALUATION OF CHITOSAN-BASED SORBENTS FOR ENVIRONMENTAL POLLUTANT ELIMINATION: SYNTHESIS AND SORPTION PERFORMANCE
12 ¹⁵ -12 ³⁰		Coffee/tea break

12 ³⁰ –13 ³⁰	SESSION B POSTER PRESENTATION
B1	<u>Monika Sikora</u> , <u>Maria Wiśniewska-Wrona</u> , <u>Iwona Kucińska-Król</u> , <u>Joanna Olczyk</u> , <u>Anetta Walawska</u> , <u>Marcin Kudzin</u> HYDROMULCH BASED ON NATURAL POLYMERS
B2	<u>Maria Wiśniewska-Wrona</u> , <u>Monika Sikora</u> , <u>Iwona Kucińska-Król</u> , <u>Joanna Olczyk</u> , <u>Magdalena Olak-Kucharczyk</u> REMOVAL OF PETROLEUM-DERIVED CONTAMINANTS FROM SOIL AND GROUNDWATER THROUGH IN SITU ECOHYDROLOGICAL OZONATION USING NATURAL POLYMERS
B3	<u>Piotr Drożdżyński</u> CHITOSAN-BIOSURFACTANT HYBRID SYSTEMS: FROM PHYSICOCHEMICAL INTERACTIONS TO FUNCTIONAL BIOFORMULATIONS
B4	<u>Urszula Filipkowska</u> , <u>Tomasz Józwiak</u> OZONATION AS AN EFFECTIVE METHOD FOR DECOLORIZATION OF AQUEOUS DYE SOLUTIONS
B5	<u>Małgorzata Gnus</u> CHITOSAN MODIFIED WITH EPICHLOROHYDRIN AS AN ADDITION TO EPOXY RESIN
B6	<u>Agata Niemczyk</u> , <u>Daniel Deacu</u> , <u>Jolanta Baranowska</u> POLYSACCHARIDE THIN FILMS OBTAINED BY PULSED ELECTRON DEPOSITION
B7	<u>Barbara Hawrylak-Nowak</u> , <u>Maria Stasińska-Jakubas</u> , <u>Agata Majewska-Fala</u> EFFECTS OF CHITOSAN ON PHYSIOLOGICAL RESPONSES AND HIGH-TEMPERATURE STRESS TOLERANCE IN COMMON WHEAT (<i>TRITICUM AESTIVUM</i> L.)
B8	<u>Dominik Müller</u> , <u>Alicja Matyjewicz</u> , <u>Beata Paczosa-Bator</u> , <u>Magdalena Luty-Błocho</u> , <u>Bożena Muszyńska</u> , <u>Agata Krakowska</u> CHITOSAN EXTRACTED FROM <i>IN VITRO</i> MUSHROOM CULTURES OF <i>PLEUROTUS OSTREATUS</i> ENRICHED WITH GOLD NANOPARTICLES AS A NOVEL ANTIMICROBIAL AGENT IN WOUND HEALING
B9	<u>Łukasz Wujcicki</u> , <u>Joanna Kluczka</u> , <u>Jakub Adamek</u> , <u>Klaudiusz Gołombek</u> ORGANIC ACID-FUNCTIONALIZED CHITOSAN FOR THE RECOVERY OF CRITICAL METALS FROM BATTERY WASTEWATER
B10	<u>Karolina Czajkowska</u> , <u>Maciej Rybicki</u> , <u>Karol K. Kłosiński</u> , <u>Radostaw A. Wach</u> PREDICTING THE ANTIMICROBIAL EFFICACY OF CHITOSAN: A MULTIPLE REGRESSION ANALYSIS OF MOLECULAR WEIGHT AND DEGREE OF DEACETYLATION
B11	<u>Alicja Matyjewicz</u> , <u>Dominik Müller</u> , <u>Beata Paczosa-Bator</u> , <u>Tomasz Skalski</u> , <u>Bożena Muszyńska</u> , <u>Agata Krakowska</u> FUNGAL CHITOSAN AND L-POLYGLUTAMIC ACID BIOCOMPOSITE FOR WOUND DRESSING APPLICATIONS

B12	Aneta Ostróżka-Cieślík RESEARCH INTO HYBRID CHITOSAN HYDROGELS CONTAINING INSULIN IN THE CONTEXT OF POTENTIAL APPLICATIONS IN THE TREATMENT OF CHRONIC WOUNDS
B13	Katarzyna Struszczyk-Świta MICROWAVE-ASSISTED EXTRACTION OF CHITOSAN FROM FILAMENTOUS FUNGAL BIOMASS
B14	Aji Suhartoyo, Miloslav Machacek, Hana Jansova, Magdalena Wujak, Kinga Mylkie, Aleksander Smolarkiewicz-Wyczachowski, Marta Ziegler-Borowska, Dorota Chełminiak-Dudkiewicz ZINC PHTHALOCYANINE-FUNCTIONALIZED CHITOSAN BIOMATERIAL FOR POTENTIAL WOUND-HEALING APPLICATIONS

13 ³⁰ -14 ³⁰	Lunch
14 ³⁰ -19 ⁰⁰	Visiting the landmarks of Katowice with a guide. <i>Katowice: From Industrial Heritage to a Modern City</i>
20 ⁰⁰ -23 ⁰⁰	Gala Dinner: <i>A Taste of Silesian Hospitality</i>

September 25th 2026 – Friday

9 ⁰⁰ -10 ³⁰	General Assembly of the Polish Chitin Society (only for PTChit members)
SESSION C ORAL PRESENTATION	
Chairman	Katarzyna Kresse-Walczak, PD Dr. med. dent.
C1	10 ³⁰ -10 ⁵⁵ <u>Magdalena Gierszewska</u> , Ewa Olewnik-Kruszkowska THE ROLE OF DEEP EUTECTIC SOLVENT COMPOSITION IN TAILORING THE PROPERTIES OF CHITOSAN-BASED PACKAGING
C2	10 ⁵⁵ -11 ²⁰ <u>Tomasz Mańdok</u> , Joanna Kluczka, Klaudiusz Gołombek, Jakub Adamek SEPARATION OF GALLIUM FROM ALUMINIUM IONS USING ION-IMPRINTED CROSS-LINKED CHITOSAN SORBENT
C3	11 ²⁰ -11 ⁴⁵ <u>Joanna Odrobińska-Baliś</u> , Adriana Gilarska, Dorota Lachowicz, Krzysztof Szczepanowicz, Adelajda Adamczyk, Agnieszka Kłapcia, Agnieszka Radziszewska, Lilianna Szyk-Warszyńska, Dawid Lupa CHITOSAN HYDROGEL-POLYMERIC CAPSULE SYSTEM FOR EQUINE DISTAL LIMB WOUND MANAGEMENT
C4	11 ⁴⁵ -12 ¹⁰ <u>Daniel Deacu</u> , Paweł Figiel, Paweł Kochmański, Sebastian Fryska, Jolanta Baranowska, Dariusz Moszyński, Agata Goszczyńska, Tomasz Idzik, Jacek Sośnicki, Agata Niemczyk PULSED ELECTRON DEPOSITION OF GLUCOSE THIN FILMS: THE FIRST STEP TOWARD SOLVENT-FREE DEPOSITION OF POLYSACCHARIDES

12¹⁰-12³⁰		Coffee/tea break
C5	12³⁰-12⁵⁵	Kamila Rutka-Olszak, Anna Masek FUNCTIONALIZATION OF CHITOSAN WITH POLYPHENOLIC COMPOUNDS TO OBTAIN BIODEGRADABLE MATERIALS WITH ANTIOXIDANT PROPERTIES
C6	12⁵⁵-13²⁰	<u>Aji Suhartoyo</u>, Dorota Chelminiak-Dudkiewicz, Miloslav Machacek, Hana Jansova, Klara Konecna, Ondrej Jandourek, Puji Astuti, Sebastian Druzynski, Kinga Mylkie, Marta Ziegler-Borowska NON-CROSSLINKED GELLAN GUM-BASED SPONGE REINFORCED WITH MUSA SAPIENTUM AND FUNCTIONALIZED WITH CUCURBITA MAXIMA EXTRACT FOR ANTIOXIDANT AND ANTIBACTERIAL WOUND DRESSING
13²⁰-13⁴⁰		Coffee/tea break

13⁴⁰-14⁰⁰	Closing of the conference
14⁰⁰-15⁰⁰	Lunch