

## **Prof. dr hab. Paweł Kowalczyk**

### **Działalność**

- The Kielanowski Institute of Animal Physiology and Nutrition, Polish Academy of Sciences: Jabłonna, PL

### **Artykuły naukowe**

- Evaluation of Antibacterial Activity against Nosocomial Pathogens of an Enzymatically Derived  $\alpha$ -Aminophosphonates Possessing Coumarin Scaffold
- Evaluation of Antimicrobial Activities against Various E. coli Strains of a Novel Hybrid Peptide—LENART01
- Plant Growth Promotion Using Bacillus cereus
- Molecular Oxygen Levels and Percentages of DNA Damage in TPN Patients
- Enzymatic Synthesis of a Novel Coumarin Aminophosphonates: Antibacterial Effects and Oxidative Stress Modulation on Selected E. coli Strains
- Bioremediation of Heavy Metals by the Genus Bacillus
- Synthesis and Antimicrobial Activity of the Pathogenic E. coli Strains of p-Quinolins: Additive Effects of Copper-Catalyzed Addition of Aryl Boronic Acid to Benzoquinones
- Aluminium(III) Oxide—The Silent Killer of Bacteria
- A Novel Biocidal Nanocomposite: Spherical Silica with Silver Ions Anchored at the Surface
- Cannabidiol and Nano-Selenium Increase Microvascularization and Reduce Degenerative Changes in Superficial Breast Muscle in C. perfringens-Infected Chickens
- Central Stimulatory Effect of Kynurenic Acid on BDNF-TrkB Signaling and BER Enzymatic Activity in the Hippocampal CA1 Field in Sheep
- A Series of Green Oxovanadium(IV) Precatalysts with O, N and S Donor Ligands in a Sustainable Olefins Oligomerization Process
- The Synthesis and Evaluation of Diethyl Benzylphosphonates as Potential Antimicrobial Agents

- Promiscuous Lipase-Catalyzed Knoevenagel–Phospha–Michael Reaction for the Synthesis of Antimicrobial  $\beta$ -Phosphono Malonates
- Functionalised Anodised Aluminium Oxide as a Biocidal Agent
- Influence of Open Chain and Cyclic Structure of Peptidomimetics on Antibacterial Activity in *E. coli* Strains
- Relationship between Structure and Antibacterial Activity of  $\alpha$ -Aminophosphonate Derivatives Obtained via Lipase-Catalyzed Kabachnik–Fields Reaction
- Lactoferrin as a Human Genome “Guardian”—An Overall Point of View
- The Lactoferrin Phenomenon—A Miracle Molecule
- Carbon-Supported Noble-Metal Nanoparticles for Catalytic Applications—A Review
- Promiscuous Lipase-Catalyzed Markovnikov Addition of H-Phosphites to Vinyl Esters for the Synthesis of Cytotoxic  $\alpha$ -Acyloxy Phosphonate Derivatives
- The Evaluation of DHPMs as Biotoxic Agents on Pathogen Bacterial Membranes
- Dipicolinate Complexes of Oxovanadium(IV) and Dioxovanadium(V) with 2-Phenylpyridine and 4,4'-Dimethoxy-2,2'-bipyridyl as New Precatalysts for Olefin Oligomerization
- Preparation of Allyl Alcohol Oligomers Using Dipicolinate Oxovanadium(IV) Coordination Compound
- Influence of the Zinc and Fibre Addition in the Diet on Biomechanical Bone Properties in Weaned Piglets
- Mitochondrial Oxidative Stress—A Causative Factor and Therapeutic Target in Many Diseases
- Catalytic Activity of New Oxovanadium(IV) Microclusters with 2-Phenylpyridine in Olefin Oligomerization
- The Synthesis and Evaluation of Amidoximes as Cytotoxic Agents on Model Bacterial *E. coli* Strains
- Pyridine Derivatives—A New Class of Compounds That Are Toxic to *E. coli* K12, R2–R4 Strains
- The Synthesis and Evaluation of Aminocoumarin Peptidomimetics as Cytotoxic Agents on Model Bacterial *E. coli* Strains
- Improvement of Biogas Yield by Pre-Treating Poultry Waste with Bacterial Strains
- Synthesis of Vertically Aligned Porous Silica Thin Films Functionalized by Silver Ions

- Protective Action of *L. salivarius* SGL03 and Lactoferrin against COVID-19 Infections in Human Nasopharynx
- A Low-Dimensional Layout of Magnetic Units as Nano-Systems of Combinatorial Logic: Numerical Simulations
- $\delta$ -Lactones—A New Class of Compounds That Are Toxic to *E. coli* K12 and R2–R4 Strains
- The Immunological Role of the Placenta in SARS-CoV-2 Infection—Viral Transmission, Immune Regulation, and Lactoferrin Activity
- Tuning Anti-Biofilm Activity of Manganese(II) Complexes: Linking Biological Effectiveness of Heteroaromatic Complexes of Alcohol, Aldehyde, Ketone, and Carboxylic Acid with Structural Effects and Redox Activity
- The Influence of Diet on Oxidative Stress and Inflammation Induced by Bacterial Biofilms in the Human Oral Cavity
- Impact of the Diet on the Formation of Oxidative Stress and Inflammation Induced by Bacterial Biofilm in the Oral Cavity
- Comparison of Osmotic Resistance, Shape and Transmembrane Potential of Erythrocytes Collected from Healthy and Fed with High Fat-Carbohydrates Diet (HF-CD) Pigs—Protective Effect of *Cistus incanus* L. Extracts
- 1,2-Diarylethanol—A New Class of Compounds That Are Toxic to *E. coli* K12, R2–R4 Strains
- Effects of Fish Oil and Dietary Antioxidant Supplementation on Bone Health of Growing Lambs
- All That Glitters Is Not Silver—A New Look at Microbiological and Medical Applications of Silver Nanoparticles
- $\alpha$ -Amidoamids as New Replacements of Antibiotics—Research on the Chosen K12, R2–R4 *E. coli* Strains
- Nanostructured Silica with Anchoring Units: The 2D Solid Solvent for Molecules and Metal Ions
- Ruthenium(IV) Complexes as Potential Inhibitors of Bacterial Biofilm Formation
- The Effect of Allopregnanolone on Enzymatic Activity of the DNA Base Excision Repair Pathway in the Sheep Hippocampus and Amygdala under Natural and Stressful Conditions

- Effect of *Ligilactobacillus salivarius* and Other Natural Components against Anaerobic Periodontal Bacteria
- Coumarin Derivatives as New Toxic Compounds to Selected K12, R1–R4 *E. coli* Strains
- A benzimidazole-based ruthenium(IV) complex inhibits *Pseudomonas aeruginosa* biofilm formation by interacting with siderophores and the cell envelope, and inducing oxidative stress