

**Biochemical  
Laboratory**

**Laboratorium  
Biochemiczne**



Opracowanie:  
Krystyna Ludwiczak  
Tomasz Twardowski

- **Institute for Potato Research**  
Instytut Ziemniaka
- 76-009 Bonin near Koszalin  
phone (094) 42 30 31  
fax (094) 42 70 28
- fields of research:** plant resistance to microorganism, storage proteins, biochemistry and physiology of the resistance to pests
- application:** plant breeding (mainly potato)
- service offered:** virus detection, *in vitro* cultures, chemotaxonomic, identification of cultivars
- contact person:** **Jerzy Lewosz**, associate professor and Head of the Laboratory
- 
- **Department of Ornamental Plants**  
Zakład Roślin Ozdobnych
- University of Technology and Agriculture  
Akademia Rolniczo-Techniczna  
ul. Bernardyńska 6, 85-029 Bydgoszcz  
phone (052) 379 10 03  
fax (052) 373 66 01
- fields of research:** somatic mutagenesis in ornamental plants induced *in vitro* by ionizing radiation
- application:** mutation breeding
- contact person:** **Marek Jerzy**, professor and Head of the Department
- 
- **Department of Environmental Biotechnology**  
Katedra Biotechnologii Środowiskowej
- Faculty of Environmental and Energy Engineering  
Technical University of Silesian  
Wydział Inżynierii Środowiska i Energetyki  
Politechnika Śląska  
ul. Akademicka 2, 44-101 Gliwice  
phone (032) 237 29 46  
fax (032) 237 17 94
- fields of research:** environmental biotechnology, wastewater treatment, waste and environmental management
- application:** urban and industrial wastewater treatment, waste management, environmental protection
- contact person:** **Korneliusz Miksch**, professor and Head of the Department
- 
- **Institute of Medical Biochemistry**  
Instytut Biochemii Lekarskiej
- Jagiellonian University  
Uniwersytet Jagielloński  
ul. Kopernika 7, 31-143 Kraków  
phone (012) 422 32 72  
fax (012) 422 27 91
- fields of research:** enzymology, phosphorylation and transphosphorylation of proteins and nucleic acids
- contact person:** **Włodzimierz S. Ostrowski**, professor, vice-President of the Polish Academy of Sciences

- **Department of Phytochemistry**  
*Zakład Fitochemii*  
Institute of Pharmacology  
Polish Academy of Sciences  
*Instytut Farmakologii*  
*Polska Akademia Nauk*  
ul. Smętna 12, 31-343 Kraków  
phone (012) 423 70 87  
fax (012) 637 45 00
- fields of research:** medicinal plants, plant tissue culture, isolation and structure elucidation of bioactive secondary metabolites
- application:** phytotherapy and plant chemotaxonomy
- contact person:** **Wanda Kisiel**, professor and Head of the Department,  
**Anna Stojakowska**, Ph.D.
- **Department of Animal Reproduction**  
*Zakład Rozrodu Zwierząt*  
National Research Institute of Animal Production  
*Instytut Zootechniki*  
32-083 Kraków, Balice 1  
phone (012) 285 67 12
- fields of research:** experimental embryology, reproduction of farm animals
- application:** farm animals breeding
- journal:** „Annuals of Zootechnics”
- contact persons:** **Andrzej Krupiński**, professor and Director of the Institute;  
**Stefan Wierzbowski**, professor; **Zdzisław Smorąg**, professor and Head of the Department
- **Department of Food Technology**  
*Katedra Technologii Żywności*  
Agricultural University  
*Akademia Rolnicza*  
ul. Akademicka 13, 20-950 Lublin  
phone (081) 525 47 70  
fax (081) 533 35 49
- fields of research:** biosynthesis and application enzymes, organic acids
- contact person:** **Zdzisław Targoński**, professor and Head of the Department
- **Department of Molecular Biology**  
*Zakład Biologii Molekularnej*  
Institute of Microbiology and Biotechnology,  
Maria Curie-Skłodowska University  
*Instytut Mikrobiologii i Biotechnologii*  
*Uniwersytet Marii Curie-Skłodowskiej*  
ul. Akademicka 19, 20-033 Lublin  
phone (081) 537 59 07  
fax (081) 537 59 07  
tlx 64 32 23
- fields of research:** enzymology, protein phosphorylation and protein kinases, translation in yeast system
- service offered:** consulting on regulation of cellular processes by phosphoregulation
- contact persons:** **Nikodem Grankowski**, professor, Head of the Department;  
**Teresa Jakubowicz**, professor

■ **Institute of Microbiology and Biotechnology**

*Instytut Mikrobiologii i Biotechnologii*

Maria Curie-Skłodowska University  
*Uniwersytet Marii Curie-Skłodowskiej*  
ul. Akademicka 19, 20-033 Lublin  
phone (081) 537 59 58  
fax (081) 537 59 59

**fields of research:**

enzyme biosynthesis, citric acid fermentation, fungal pectinases, glucomylase, glucose oxidase

**application:**

industrial microbiology

**contact persons:**

**Zdzisław Ilczuk**, professor and Head of the Department;  
**Jan Fiedurek**, Ph.D.

■ **Department of Biochemistry**

*Instytut Biochemii*

Maria Curie-Skłodowska University  
*Uniwersytet Marii Curie-Skłodowskiej*  
pl. M. Curie-Skłodowskiej 3, 20-031 Lublin  
phone (081) 537 56 65 or (081) 537 57 37 or (081) 537 57 22,  
or (081) 537 56 68 or (081) 537 56 66  
fax (081) 533 751 02 or (081) 533 36 69  
e-mail: leon@hermes.umcs.lublin.pl

**fields of research:**

biotransformation, plant polymers, ligninocellulose, metabolism of phenols, fungal enzymes, wood rotting fungi, edible fungi

**application:**

production of edible fungal fruit bodies and biomass for feeding and nutrition, immobilization of enzymes, affinity chromatography

**contact persons:**

**Andrzej Leonowicz**, professor and Head of the Department;  
**Maria Wojtaś-Wasilewska**, professor;  
**Jerzy Łobarzewski**, professor;  
**Jerzy Rogalski**, professor,  
**Elżbieta Malarczyk**, professor

■ **Centre of Microbiology and Virology**

*Centrum Mikrobiologii i Wirusologii*

Polish Academy of Sciences  
*Polska Akademia Nauk*  
ul. Lodowa 106, 93-232 Łódź  
phone (042) 649 22 77 or (042) 649 22 63  
fax (042) 649 16 33

**fields of research:**

mechanisms of microbial enzymes control, biotransformation of steroids

**application:**

manufacturing of medical steroids

**contact persons:**

**Adam Jaworski**, professor and Director of the Centre;  
**Leon Sedlaczek**, professor; Associate Director for Scientific Affairs;  
**Jerzy Długoński**, professor

■ **Department of Polymer  
Biotechnology**

*Zakład Biotechnologii Polimerów*

Institute of Chemical Fibres  
*Instytut Włókien Chemicznych*  
ul. M. Skłodowskiej-Curie 19, 90-570 Łódź  
phone (042) 637 67 44 or (042) 637 65 10  
fax (042) 637 62 14

**fields of research:**

biosynthesis of polymers, biotechnological processing  
of polymers fibers and cellulose pulps

**application:**

chemical fibers and polymers

**journals:**

„Chemical Fibers” and „Fibers & Textiles in Eastern Europe”

**contact person:**

**Henryk Struszczyk**, professor, vice-Director for Research

■ **Laboratory of Biosynthesis  
of Drugs**

*Samodzielna Pracownia  
Biosyntezy Środków Leczniczych*

Institute of Technology and Chemistry of Drugs  
Medical University of Łódź  
*Instytut Technologii i Chemii Leków*  
*Akademia Medyczna*  
ul. Muszyńskiego 1, 90-151 Łódź  
phone (042) 678 46 43 or (042) 678 48 33 ex. 218  
fax (042) 678 83 98

**fields of research:**

microbial biotechnology, plant cell biotechnology  
biosynthesis of pharmacologically active compounds,  
microbial cell immobilization, biotransformations  
transformed (plant) root cultures

**application:**

pharmaceutical industry

**contact person:**

**Aleksander Chmiel**, professor and Head of the Laboratory

■ **Department of Heat and Mass  
Transfer Processes**

*Katedra Procesów Ciepłych  
i Dyfuzyjnych*

Faculty of Process and Environmental Engineering  
Technical University of Łódź  
*Wydział Inżynierii Procesowej i Ochrony Środowiska*  
Politechnika Łódzka  
ul. Wólczańska 213/215, 90-924 Łódź  
phone (042) 631 37 00  
fax (042) 636 56 63  
e-mail: cstrumil@wipos.o.lodz.pl

**fields of research:**

thermodynamics of drying, heat and mass transfer

**application:**

design of dryers and drying processes, food preservation

**services offered:**

evaluation of drying kinetics, drying theory, application and  
design

**journal:**

„Bulletin of Łódź Technical University”, Chemical Engineering  
Series

**contact persons:**

**Czesław Strumiło**, professor and Head of the Department;  
**Ireneusz Zbiciński**, Ph.D., D.Sc.

■ **Institute of Fermentation  
Technology and Microbiology**  
*Instytut Technologii Fermentacji  
i Mikrobiologii*

Technical University of Łódź  
*Politechnika Łódzka*  
ul. Stefanowskiego 4/10, 90-924 Łódź  
phone (042) 636 36 39 or (042) 631 34 79  
e-mail: libudzisz@mikrob.p.lodz.pl

**fields of research:**

microorganisms (bacteria, yeasts and moulds) used in biotechnological processes; physiology, maintenance, optimization bioprocesses, food microbiology, technology of fruit wine and beer making, ethanol fermentation process and baker yeast production

**services offered:**

identification and diagnostics of microorganisms (bacterium yeasts and filamentous fungi), microbial analysis of food and environment, teaching short courses on, food microbiology, rapid methods in food microbiology, lyophilized starters for bread production, analysis of beer and wine and spirits products

**culture collection:**

(WFCC) as LOCK 105, the collection maintains 650 strains of yeasts, filamentous fungi and bacteria for traditional and modern biotechnological processes

**contact persons:**

**Zdzisława Libudzisz**, professor, Director of the Institute;  
**Eugeniusz Pogorzelski**, associate professor

■ **Institute of Technical  
Biochemistry**  
*Instytut Biochemii Technicznej*

Technical University of Łódź  
*Politechnika Łódzka*  
ul. Stefanowskiego 4/10, 90-924 Łódź  
phone (042) 631 34 30 or (042) 636 77 04  
tel/fax (042) 636 66 18  
e-mail: biochem@ck-sg.p.lodz.pl

**fields of research:**

technology of fruit and vegetable processing, technology of vitamins, downstream processing, biosynthesis and bioconversion of polysaccharides, structural analysis of enzymes

**application:**

food and paper industry, medicine, laundry, environmental protection

**services offered:**

production, purification and application of enzymes, structural analysis of compounds, immobilized biocatalysis, HPLC, FPLC systems (Beckman, Knauer, Dionex), liquid chromatography system (LKB-Pharmacia), gas chromatograph (Hewlett Packard), PCR system, fermenters (2,4,14,130 and 150 l), solid state fermentation system, downstream processes equipment, X-ray diffractometer and Silicon Graphic station, image processing system

**culture collection:**

the collection maintains 400 strains of bacteria, yeasts, filamentous fungi (including about 150 marine and soil Antarctic strains) useful for biotechnological processes

**contact persons:**

**Stanisław Bielecki**, professor, Director of the Institute;  
**Marianna Turkiewicz**, professor, vice-Director for Research

**Institute of Chemical Technology of Food**

*Institut Chemicznej Technologii Żywności*

Technical University of Łódź

*Politechnika Łódzka*

ul. Stefanowskiego 4/10, 90-924 Łódź

phone (042) 636 74 88 or (042) 636 55 22

fax (042) 631 34 02 or (042) 636 85 22

telex 88 42 20 or 88 61 36

**fields of research:**

chemistry of calcium-sucrose compounds, mathematical models of sugar factories, direct heat transfer, effect of thermal treatment on foodstuff properties and microorganism destruction, energy savings

**application:**

improvement of processes in sugar production, continuous thermal sterilization and choice of conditions for thermal processing of food, heat management of sugar plants, technologies in potato and starch industries, refrigeration, storage of food

**service offered:**

modernization of existing and development of new technologies

**contact persons:**

**Jan Iciek**, professor and Head of the Institute;  
**Stanisław Michałowski**, professor and Head of the Department

**Department of Bioorganic Chemistry**

*Zakład Chemii Bioorganicznej*

Centre of Molecular and Macromolecular Studies

Polish Academy of Sciences

*Centrum Badań Molekularnych i Makromolekularnych*

*Polska Akademia Nauk*

ul. Sienkiewicza 112, 90-363 Łódź

phone (042) 681 97 44

fax (042) 681 54 83

**fields of research:**

bioorganic chemistry, molecular biology, stereospecific synthesis of P-chiral biophosphates, synthesis and DNA/RNA modification, structure of protein

**application:**

control of cellular proliferation pharmaceuticals, modulators of gene expression, gene therapy, production of Hrec  $\alpha$ TNF DNA synthesis

**service offered:****contact persons:**

**Wojciech Jacek Stec**, professor and Head of the Department, Member of the Polish Academy of Sciences;  
**Andrzej Okruszek**, associate professor;  
**Wojciech Niewiarowski**, Ph.D.; **Piotr Guga**, Ph.D.,  
**Maria Koziolkiewicz**, Ph.D.

■ **Department of Bioprocess Engineering**

*Katedra Inżynierii Bioprocessowej*

Faculty of Process Environmental Engineering  
 Technical University of Łódź  
*Wydział Inżynierii Procesowej i Ochrony Środowiska*  
 Politechnika Łódzka  
 ul. Wólczańska 213, 90-924 Łódź  
 phone (042) 631 37 15  
 fax (042) 636 56 63 or (042) 631 37 38

**fields of research:**

bioprocess and bioreactor engineering, environmental biotechnology, mass transfer with biochemical reaction, solid waste and wastewater biotreatment, ethanol and citric acid fermentation

**application:**

improved construction of mixing and aeration in bioreactors, air-lift bioreactors in citric acid fermentation

**service offered:**

designing and evaluation of processes and equipment for ethanol and citric acid production

**contact person:**

**Stanisław Ledakowicz**, professor and Head of the Department

■ **Department of Plant Physiology and Biochemistry**

*Katedra Fizjologii i Biochemii Roślin*

University of Łódź  
*Uniwersytet Łódzki*  
 ul. Banacha 12/16, 90-237 Łódź  
 phone (042) 635 44 14  
 fax (042) 635 44 23

**fields of research:**

plant-microbe interactions in pathogenesis, plant defence reactions and systemic acquired resistance, biologically active compounds from *in vitro* cultures micropropagation of plants, plant cell cultures

**application:**

**contact person:**

**Henryk Urbanek**, professor and Head of the Department

■ **Pulp and Paper Research Institute**

*Instytut Celulozowo-Papierniczy*

ul. Gdańska 121, 90-950 Łódź  
 phone (042) 636 53 00  
 fax (042) 636 53 23

**fields of research:**

environmental protection in pulp and paper industry, treatment of industrial biodegradable wastewater, waste management

**application:**

industrial wastewater treatment, waste utilization

■ **Department of Food  
Biotechnology**

*Institut Biotechnologii Żywności*

Institute of Food Biotechnology  
University of Agriculture and Technology  
*Institut Biotechnologii Żywności*  
*Akademia Rolniczo-Techniczna*  
ul. Heweliusza 1, 10-957 Olsztyn-Kortowo 45c/10  
phone (089) 523 36 87 or (089) 523 32 33  
fax (089) 527 39 08

**fields of research:**

food biotechnology — dairy meat, grains, lipids, proteins,  
biomass production, fermentation, microorganisms

**application:**

food industry, dairy products, commodities

**service offered:**

consulting, product development

**contact persons:**

**Arnold Reps**, professor and Director of the Institute;  
**Włodzimierz Bednarski**, professor and Head of the Chair;  
**Andrzej Babuchowski**, Ph.D.; **Kazimierz Kornacki**, professor

■ **Department of Animal  
Biochemistry**

*Katedra Biochemii Zwierząt*

University of Agriculture and Technology  
*Akademia Rolniczo-Techniczna*  
ul. Oczapowskiego 5, 10-728 Olsztyn-Kortowo  
phone (089) 523 33 91  
fax (089) 275 49 38  
e-mail: kbz@moskit.art.olsztyn.pl

**fields of research:**

biochemistry and immunology of animal semen,  
cryobiochemistry of spermatozoa, preservation of male gametes  
animal production

**application:**

■ **Department of Food Microbiology**

*Zakład Mikrobiologii Żywności*

Institute of Animal Reproduction and Food Research  
Polish Academy of Sciences  
*Institut Rozrodu Zwierząt i Badań Żywności*  
*Polska Akademia Nauk*  
ul. Tuwima 10, 10-747 Olsztyn  
phone (089) 535 74 27  
fax (089) 535 74 21

**fields of research:**

food microbiology

**application:**

probiotic foods, cultured dairy products, dairy biotechnology

**service offered:**

resolving of microbiological problems in dairy and food  
industries, microbiological analysis

**journals:**

„Polish Journal of Food and Nutrition Sciences”

**contact persons:**

**Maria Bielecka**, associate professor

■ **Department of Biochemistry**

*Zakład Biochemii*

Institute of Biochemistry and Biotechnology  
Agricultural University  
*Katedra Biochemii i Biotechnologii*  
*Akademia Rolnicza*  
ul. Wołyńska 35, 60-637 Poznań  
phone (061) 848 72 02 ex. 171, 176  
fax (061) 848 72 11

**fields of research:**

plant-microbe interactions, plant genes, nodulins,  
organospecific and host-specific gene expression

**application:**

agriculture, plant molecular virology

**contact persons:**

**Urszula Szybiak-Stróżycka**, Ph.D.;  
**Cezary Mądrzak**, associate professor

■ **Institute of Biochemistry  
and Biotechnology**

*Katedra Biochemii i Biotechnologii*

Agricultural University  
*Akademia Rolnicza*  
ul. Wołyńska 35, 60-637 Poznań  
phone (061) 848 72 07  
fax (061) 848 72 11

**fields of research:**

potato transformation using genetic engineering techniques,  
regulation of transcription in higher plants, transcription  
factors

**application:**

agriculture

**contact persons:**

**Witold Stefan Walerych**, professor;  
**Piotr Dullin**, Ph.D.

■ **Laboratory of General Botany**

*Laboratorium Botaniki Ogólnej*

Faculty of Biology  
Adam Mickiewicz University  
*Wydział Biologii*  
*Uniwersytet im. Adama Mickiewicza*  
al. Niepodległości 14, 61-713 Poznań  
phone (061) 852 56 03

**fields of research:**

experimental embryology of angiosperms, plant cell culture,  
micropropagation of plants

**application:**

production of hybrid plants, micropropagation of plants,  
production of haploids

**contact persons:**

**Maciej Zenkteler**, professor and Head of the Laboratory;  
**Rafał Mól**, Ph.D.; **Barbara Stefaniak**, Ph.D.

■ **Department of Biotechnology  
and Food Microbiology**

*Katedra Biotechnologii  
i Mikrobiologii Żywności*

Agricultural University  
*Akademia Rolnicza*  
ul. Mazowiecka 48, 60-623 Poznań  
phone (061) 848 73 54  
fax (061) 848 71 46

**fields of research:**

applied microbiology, fermentation technology, lactic acid and  
propionic acid bacteria

**application:**

food and feed industry, bioenergetics

**service offered:**

microbiological analysis, plant design, technology design

**contact persons:**

**Włodzimierz Grajek**, professor and Director of the Institute;  
**Krystyna Trojanowska**, professor

■ **Department of Plant Molecular Biology**

*Pracownia Biologii Molekularnej  
Roślin*

Institute of Bioorganic Chemistry  
Polish Academy of Sciences  
*Instytut Chemii Bioorganicznej  
Polska Akademia Nauk*  
ul. Noskowskiego 12/14, 61-704 Poznań  
phone (061) 852 89 19 or (061) 852 85 03 or (061) 852 85 04  
fax (061) 852 05 32  
e-mail: legocki@ibch.poznan.pl

**fields of research:**

plant molecular biology, plant-microbe interactions  
agriculture

**application:**

**contact person:**

**Andrzej B. Legocki**, Director of the Institute, Member of the Polish Academy of Sciences

■ **Laboratory of Protein Biosynthesis**

*Laboratorium Biosyntezy Białka*

Institute of Bioorganic Chemistry  
Polish Academy of Sciences  
*Instytut Chemii Bioorganicznej  
Polska Akademia Nauk*  
ul. Noskowskiego 12/14, 61-704 Poznań  
phone (061) 852 85 03  
fax (061) 852 05 32  
e-mail: twardows@rose.poznan.edu.pl  
and twardows@ibch.poznan.pl.

**fields of research:**

regulation of protein biosynthesis at translational level,  
intellectual property rights and legal aspects of biotechnology  
protein biosynthesis

**application:**

**journal:**

„Biotechnologia”

**contact person:**

**Tomasz Twardowski**, professor and Head of the Laboratory,  
editor-in-chief „Biotechnologia”

■ **Department of Genetics Engineering**

*Pracownia Inżynierii Genetycznej*

Institute of Plant Genetics  
Polish Academy of Sciences  
*Instytut Genetyki Roślin  
Polska Akademia Nauk*  
ul. Strzeszyńska 34, 60-479 Poznań  
phone (061) 822 11 12  
fax (061) 822 11 22

**fields of research:**

genetics of somatic cells of potato

**application:**

preparation *in vitro* of new potato genotypes characterized  
by differential ability to assimilate various nitrogen forms

**contact persons:**

**Jerzy Chelkowski**, professor and Director of the Institute;  
**Bożena Chwiłkowska**, Ph.D.

■ **Department of Molecular Pathology and Mutagenesis**

*Laboratorium Patologii Molekularnej i Mutogenezy*

Institute of Human Genetics  
Polish Academy of Sciences  
*Zakład Genetyki Człowieka*  
*Polska Akademia Nauk*  
ul. Strzeszyńska 32, 60-479 Poznań  
phone (061) 823 32 35 or (061) 823 30 11  
fax (061) 823 32 35

**fields of research:**

hereditary susceptibility to cancer, benzo/ $\alpha$ /pyrene, locus Ah, ataxia telangiectasia, familial polyposis coli

**application:**

ecogenetics, pharmacogenetics, molecular dosimetry of exposure and biological effect of polycyclic aromatic hydrocarbons

**contact person:**

**Andrzej L. Pawlak**, professor and Head of the Department

■ **Department of Immunogenetics**

*Zakład Immunogenetyki*

Institute of Human Genetics  
Polish Academy of Sciences  
*Zakład Genetyki Człowieka*  
*Polska Akademia Nauk*  
ul. Strzeszyńska 32, 60-479 Poznań  
phone (061) 823 30 11 or (061) 822 13 12  
fax (061) 823 32 35

**fields of research:**

molecular genetics of human diseases, immunogenetics, cytogenetics, nucleic acids, regulation of gene expression, lymphocyte antigens and receptors, rearrangement of immunoglobulin and T cell receptor genes, leukemia, erythrocyte IL-2 receptor, TCR-and Ig genes

**application:**

molecular and cytogenetic diagnostics of genetic diseases classification and diagnosis of lymphoproliferative diseases

**contact person:**

**Jerzy Nowak**, professor and Director of the Institute

■ **Institute of Medicinal Plants**

*Instytut Roślin i Przetworów Zielarskich*

ul. Libelta 27, 61-707 Poznań  
phone (061) 852 56 16 or (061) 852 40 03  
fax (061) 852 74 63

**fields of research:**

natural biologically active compounds, phytochemistry, agriculture and breeding of medicinal plants, technology of plant drugs, plant tissue culture

**application:**

pharmaceutical industry

**journal:**

„Herba Polonica”

**contact persons:**

**Jerzy Lutomski**, professor, Director of the Institute;  
**Anna Krajewska-Patan**, Ph.D.

■ **Department of Pharmaceutical Botany**

*Zakład Botaniki Farmaceutycznej*

Faculty of Pharmacy  
University of Medical Sciences in Poznań  
*Wydział Farmaceutyczny*  
Akademia Medyczna im. K. Marcinkowskiego  
ul. Św. Marii Magdaleny 14, 61-861 Poznań  
phone (061) 852 90 57

**fields of research:**

*in vitro* culture of medicinal plants, phytochemistry, isolation and structure elucidation of plant secondary metabolites, biologically active substances  
natural drugs

**application:**

**contact person:**

**Lutosława Skrzypczak**, professor (retired);  
**Jaromir Budzianowski**, professor and Head of the Department

■ **Department of Swine Diseases**

*Zakład Chorób Świń*

National Veterinary Research Institute  
*Państwowy Instytut Weterynaryjny*  
24-100 Puławy  
phone (081) 886 30 51  
fax (081) 886 25 95  
tlx 0642401

**fields of research:**

**application:**

**services offered:**

virology and immunology of pestiviruses and herpesviruses  
production of diagnostic kits and vaccines for veterinary  
production of vaccines, treatment and prophylaxis of swine diseases

**journal:**

**contact persons:**

„Bulletin Veterinary” Institute of Puławy  
**Zygmunt Pejsak**, professor and Head of the Department;  
**A. Lipowski**, Ph.D.

■ **Department of Plant Genetics, Breeding and Biotechnology**

*Katedra Genetyki, Hodowli Roślin i Biotechnologii*

Warsaw Agricultural University  
*Akademia Rolnicza*  
ul. Nowoursynowska 166, 02-766 Warszawa  
phone (022) 843 09 82  
fax (022) 843 09 82

**fields of research:**

**contact person:**

somatic embryogenesis, *in vitro* selection, gene technology, molecular genetics of sex  
**Stefan Malepszy**, professor and Director of the Department

■ **Sera and Vaccines Central Research Laboratory**

*Centralne Laboratorium Surowic i Szczepionek*

ul. Chełmska 30/34, 00-725 Warszawa  
phone (022) 41 29 49 or (022) 41 33 67  
fax (022) 41 29 49

**fields of research:**

**application:**

**contact persons:**

therapeutic and prophylactic sera, blood derivatives, vaccines  
production and control, susceptibility to antimicrobial agents and mechanisms of resistance  
bacteria cultivation and purification of the antigens, isolation and purification of plasma and serum proteins  
**Waleria Hryniewicz**, professor, Director of the Institute

■ **Department of Biology and Pharmaceutical Botany**

*Katedra i Zakład Biologii i Botaniki Farmaceutycznej*

Faculty of Pharmacy  
Warsaw Medical Academy  
*Wydział Farmacji  
Akademia Medyczna*  
ul. Banacha 1, 02-097 Warszawa  
phone (022) 823 59 84  
fax (022) 823 14 87

**fields of research:**

**application:**

**contact person:**

medicinal plant biotechnology  
drug production of natural origin  
**Mirosława Furmanowa**, professor

■ **Faculty of Chemical and Process Engineering**

*Wydział Inżynierii Chemicznej i Procesowej*

Technical University of Warsaw  
*Politechnika Warszawska*  
ul. Waryńskiego 1, 00-645 Warszawa  
phone (022) 825 85 64 or (022) 825 14 40  
fax (022) 825 14 40

**fields of research:**

**application:**

**contact persons:**

bioreactor engineering, up- and downstream processing, solid state fermentation, bioprocesses modelling  
bioprocess engineering, enzymes production  
**Ryszard Pohorecki**, professor and Head of the Department, vice-Chairman of the Biotechnology Committee of the Polish Academy of Sciences;  
**Krzysztof W. Szewczyk**, associate professor

■ **Department of Tissue Culture**

*Zakład Roślinnych Kultur Tkankowych*

Plant Breeding and Acclimatization Institute  
*Instytut Hodowli i Aklimatyzacji Roślin*  
05-870 Błonie k. Warszawy  
phone (022) 725 26 11  
fax (022) 725 47 14

**fields of research:**

**application:**

**journal:**

**contact persons:**

*in vitro* culture, cereals, wheat, triticum, somatic embryogenesis, anther culture of *Gramineae*  
plant breeding and genetics  
„Bulletin IHAR”  
**Henryk J. Czembor**, professor;  
**Janusz Zimny**, associate professor;  
**Andrzej Czapliski**, assistant professor

■ **Department of Protein Biosynthesis**

*Zakład Biosyntezy Białka*

Institute of Biochemistry and Biophysics  
Polish Academy of Sciences  
*Instytut Biochemii i Biofizyki  
Polska Akademia Nauk*  
ul. Pawińskiego 5a, 02-106 Warszawa  
phone (022) 658 47 24  
fax (022) 658 46 36

**fields of research:**

**application:**

**contact persons:**

potato viroids and viruses, protein synthesis  
detection of potato viroids and viruses  
**Przemysław Szafranski**, professor and Head of the Department; **Włodzimierz Zagórski-Ostoja**, professor and Director of the Institute

■ **Department of Biophysics**

*Zakład Biofizyki*

Institute of Biochemistry and Biophysics  
Polish Academy of Sciences  
*Instytut Biochemii i Biofizyki*  
*Polska Akademia Nauk*  
ul. Pawińskiego 5a, 02-106 Warszawa  
phone (022) 658 44 99  
fax (022) 39 12 16 23

**fields of research:**

structure-function relationship in nucleic acids and proteins

**application:**

DNA recombinant technology of proteins for basic research and medical applications

**contact persons:**

**Kazimierz L. Wierchowski**, professor and Head of the Department, Member of the Polish Academy of Sciences;  
**Andrzej Bierzyński**, associate professor; and Head of the Laboratory  
**Magdalena Fikus**, professor and Head of the Laboratory

■ **Department of Microbial Biochemistry**

*Zakład Biochemii Drobnoustrojów*

Institute of Biochemistry and Biophysics  
Polish Academy of Sciences  
*Instytut Biochemii i Biofizyki*  
*Polska Akademia Nauk*  
ul. Pawińskiego 5a, 02-106 Warszawa  
phone (022) 658 45 05  
fax (022) 39 12 16 23

**fields of research:**

regulation of gene expression

**application:**

agriculture

**contact person:**

**Maria D. Hulanicka**, professor and Head of the Department

■ **Department of Plant Biochemistry**

*Zakład Biochemii Roślin*

Institute of Biochemistry and Biophysics  
Polish Academy of Sciences  
*Instytut Biochemii i Biofizyki*  
*Polska Akademia Nauk*  
ul. Pawińskiego 5a, 02-106 Warszawa  
phone (022) 658 38 48  
fax (022) 658 46 36

**fields of research:**

molecular biology, expression of plant genome, cell and tissue culture, plant enzymology, phosphorylation,

**application:**

dephosphorylation, genetic transformation

**services offered:**

potato breeding, plant genome regulation

**contact persons:**

potato and tobacco tissue culture, micropropagation, enzyme preparation

**Jerzy Buchowicz**, professor;

**Bernard Wielgat**, associate professor and Deputy Director;

**Grażyna Muszyńska**, professor

**Jacek Hennig**, associate professor

■ **Department of Food  
Biotechnology**

*Katedra Biotechnologii Żywności*

Warsaw Agricultural University  
*Szkoła Główna Gospodarstwa Wiejskiego (SGGW)*  
ul. Rakowiecka 26/30, 02-528 Warszawa  
phone (022) 49 09 78  
fax (022) 49 13 75

**fields of research:**

microbiological quality of food and food products,  
quality systems in food production, technology  
of fermentation (wine, beer, distillery), genetic  
modification (electrofusion) of yeast

**application:**

all branches of food industry (food microbiology and  
biotechnology)

**services offered:**

microbiological analysis of food

**commercial product:**

industrial strain of wine yeast

**contact persons:**

**Eugeniusz Sobczak**, professor and Head of the Department,  
**Wanda Duszkiewicz-Reinhard**, associate professor

**Department of Technical  
Microbiology  
and Biochemistry**

*Zakład Mikrobiologii Technicznej  
i Biochemii*

Institute of Agro- and Food Biotechnology  
*Instytut Biotechnologii Przemysłu Rolno-Spożywczego*  
ul. Rakowiecka 36, 02-532 Warszawa  
phone (022) 49 04 06 or (022) 49 01 71 ex. 274  
fax (022) 49 04 26

**fields of research:**

food microbiology, biochemistry, technical microbiology,  
biotechnology, strain improvement, mutation, protoplast,  
fusion, culture collection IPF 212

**application:**

microbial industry

**contact person:**

**Andrzej Krakowiak**, associate professor and Head  
of the Department

■ **Department of Environmental  
Biology**

*Zakład Biologii Środowiska*

Institute of Environmental Engineering Systems  
Warsaw University of Technology  
*Instytut Systemów Inżynierii Środowiska*  
*Politechnika Warszawska*  
ul. Nowowiejska 20, 00-653 Warszawa  
phone (022) 621 29 79  
fax (022) 625 43 05

**fields of research:**

environmental biotechnology, biodegradation of pollutants,  
biotreatment systems, environmental toxicology  
bioremediation, biotreatment

**application:**

**service offered:**

processes, toxicological testing, biodegradation testing,  
corrosion protection

**contact person:**

**Zofia Kańska**, professor;  
**Maria Lebkowska**, D.Sc., Ph.D., professor and Head of the  
Department;  
**Anna Grabińska-Łoniewska** D.Sc., Ph.D., assistant professor

- Food and Agriculture Department** Polish Committee for Standardization  
*Zespół Rolno-Żywnościowy* *Polski Komitet Normalizacyjny*  
 ul. Świętokrzyska 14B, 00-950 Warszawa  
 P.O.Box 411  
 phone (022) 828 18 37 or (022) 826 54 31 ex. 272  
 fax (022) 827 41 15
- fields of research:** fruits and vegetables products, test methods  
**application:** standardization and quality control  
**service offered:** exchange of information concerning methods of tests of fruits and vegetables  
**contact person:** **Jolanta Kochońska**, Director; **Małgorzata Wiśniewska** secretary
- Department of Bioprocess Engineering** Institute of Chemical Engineering  
*Zakład Inżynierii Bioprocessowej* *Technical University of Wrocław*  
*Instytut Inżynierii Chemicznej* *Politechnika Wroclawska*  
 ul. Norwida 4/6, 53-373 Wrocław  
 phone (071) 320 26 77 or (071) 320 24 02 or (071) 320 36 49  
 or (071) 328 13 18  
 fax (071) 328 13 18
- fields of research:** immobilization of enzymes, bioreactors, membrane separation, mass and momentum transport in membrane process  
**application:** pharmaceutical plants, bioreactors, biotechnology, food industry, wastewater treatment  
**service offered:** consulting on membrane separation and water management  
**contact persons:** **Andrzej Noworyta**, professor and Director of the Institute; **Jolanta Bryjak**, Ph.D.; **Andrzej Kołtuniewicz**, Ph.D.
- Department of Immunology of Infectious Diseases** Institute of Immunology and Experimental Therapy  
*Zakład Immunologii* *Polish Academy of Sciences*  
*Chorób Zakaźnych* *Instytut Immunologii i Terapii Doświadczalnej*  
*Polska Akademia Nauk*  
 ul. Weigla 12, 53-114 Wrocław  
 phone (071) 73 22 74 or (071) 73 23 16 ex. 212  
 fax (071) 67 91 11 or (071) 73 25 87
- fields of research:** structure and function of polysaccharide antigens, mechanisms of bacterial pathogenesis  
**application:** vaccines and diagnostic kits  
**service offered:** culture collections of bacteria and bacteriophages  
**journal:** „Archivum Immunologiae et Therapiae Experimentalis”  
 „Postępy Higieny i Medycyny Doświadczalnej”  
**contact person:** **Andrzej Gamian**, Ph.D.

■ **Department of Chemistry**

*Laboratorium Chemii  
Ekologicznej*

Institute of Organic Chemistry, Biochemistry  
and Biotechnology  
Technical University of Wrocław  
*Instytut Chemii Organicznej, Biochemii i Biotechnologii  
Politechnika Wrocławska*  
ul. Wybrzeże Wyspiańskiego 27, 50-370 Wrocław  
phone (071) 320 34 46  
fax (071) 328 40 64

**fields of research:**

chemistry of natural products

**application:**

insect control

**contact person:**

**Andrzej Zabża**, professor, Chairman of the Biotechnology  
Committee of the Polish Academy of Sciences