

**Biotechnological
laboratories**

**Laboratoria
biotechnologiczne**



Opracowanie:
Tomasz Twardowski
Krystyna Ludwiczak

■ **Biochemical Laboratory**
Laboratorium Biochemiczne

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 plant breeding (mainly potato)

application:

virus detection, *in vitro* cultures, chemotaxonomic, identification of cultivars

service offered:

journals:

„Biuletyn Instytutu Ziemniaka” (“Institute Bulletin”), „Ziemniak Polski” (“Potato”)

contact person:

Jerzy Lewosz, associate professor and Head of the Laboratory

■ **Department of Ornamental Plants**
Instytut Roślin Ozdobnych

University of Technology and Agriculture
Akademia Rolniczo-Techniczna
85-029 Bydgoszcz
ul. Bernardyńska 6
phone (052) 39 10 03
fax (052) 366 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**
Zakład Biotechnologii Środowiskowej

Faculty of Environmental and Energy Engineering
Silesian Technical University
Wydział Inżynierii Środowiska i Energetyki
Uniwersytet Śląski
44-101 Gliwice
ul. Konarskiego 18
phone (032) 37 29 46
fax (032) 37 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**

Institut Biochemii Lekarskiej

Jagiellonian University
Uniwersytet Jagielloński
31-034 Kraków
ul. Kopernika 7
phone (012) 22 32 72, 22 74 00
fax (012) 21 46 64

fields of research:

enzymology, phosphorylation and transphosphorylation of proteins and nucleic acids

contact person:

Włodzimierz S. Ostrowski, professor, member of the Polish Academy of Sciences

■ **Department of Cattle Breeding**

Katedra Hodowli Bydła

Agricultural University
Akademia Rolnicza
30-059 Kraków
aleja Mickiewicza 24/28
phone (012) 33 18 98
fax (012) 233 23 55

fields of research:

animal breeding and management, population genetics and immunogenetics, technology of animal production

application:

breeding and management of: cattle, poultry, milk and meat evaluation, animal production

journal:

"Bulletin of Agriculture University"

contact person:

Jan Szarek, professor and Head of the Department

■ **Institute of Inventiveness and
Protection of Intellectual
Property**

*Institut Wynalazczości i Ochrony
Własności Intelektualnej*

Jagiellonian University
Uniwersytet Jagielloński
31-110 Kraków
ul. Marszałka J. Piłsudskiego 13
phone (012) 22 04 82, 226 11 55
fax (012) 22 63 06

fields of research:

intellectual property rights, patents and trade marks

contact person:

Janusz Fiołka, Ph.D., Michał du Vall, Ph.D.

■ **Department
of Animal Reproduction**

Zakład Rozrodu Zwierząt

National Research Institute of Animal Production
Institut Zootechniki
32-083 Kraków, Balice 1
phone (012) 11 32 11 ex. 457, 11 31 11 ex. 308

fields of research:

experimental embryology, reproduction of farm animals
farm animals breeding

application:

"Annuals of Zootechnics"

journal:

contact persons:

Jędrzej Krupiński, professor and Director of the Institute;
Stefan Wierzbowski, professor; Zdzisław Smorąg, professor
and Head of the Department

■ **Department
of Pharmaceutical Botany**

*Katedra i Zakład Botaniki
Farmaceutycznej*

Faculty of Pharmacy Collegium Medicum
Jagiellonian University
Wydział Farmaceutyczny
Collegium Medicum
Uniwersytet Jagielloński
30-688 Kraków
ul. Medyczna 9
phone (012) 58 35 77, 58 40 21 ex. 202, 203

fields of research:

biologically active secondary metabolites from mycelial and
plant tissue cultures

application:

pharmaceutical industry

contact persons:

Jan Grzybek, professor and Head of the Department

■ **Department
of Food Biotechnology**

Zakład Biotechnologii Żywności

Agricultural University
Akademia Rolnicza
31-425 Kraków
ul. 29 Listopada 46
phone (012) 11 91 44 ex. 568, 567, 576
fax (0-12) 33 62 45

fields of research:

amylases in starch industry, phosphatases in foods and
nutrition, alcoholic beverages

application:

food processing and nutrition

contact persons:

Maciej Kujawski, professor and Head of the Department;
Krzysztof Żyła, assistant professor

■ **Department
of Food Technology and Storage**

*Katedra Technologii Przemysłu
Rolno-Spożywczego
i Przechowalnictwa*

Agricultural University
Akademia Rolnicza
20-950 Lublin
ul. Akademicka 13
phone (081) 37 67 73
fax (081) 335 49

fields of research:

ethanol fermentation, food technology, yeast technology

application:

microbiology

contact person:

Stanisław Bujak, professor

■ **Department
of Food Technology**

Instytut Technologii Żywności

Agricultural University
Akademia Rolnicza
20-950 Lublin
ul. Akademicka 13
phone (081) 55 47 70
fax (081) 335 49

fields of research:

biosynthesis and application enzymes

contact person:

Zdzisław Targoński, professor and Head of the Department

- **Institute of Genetics and Plant Breeding**
Institut Genetyki i Hodowli Roślin
Agricultural University
Akademia Rolnicza
20-934 Lublin
ul. Akademicka 15
phone (081) 37 66 75
fax (081) 335 49
- fields of research:** cytogenetics of triticale and wheat
application: crops breeding
service offered: plant collection of *Triticale* and *Triticum Durum*
contact persons: Czesław Tarkowski, professor and Director of the Institute;
M. Miazga, Ph.D.
- **Department of Molecular Biology**
Zakład Biologii Molekularnej
Institute of Microbiology, Maria Curie-Skłodowska University
Institut Mikrobiologii, Uniwersytet Marii Curie-Skłodowskiej
20-033 Lublin
ul. Akademicka 19
phone (081) 37 50 48, 37 50 17, 37 50 36
fax (081) 33 669
- 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, associate professor
- **Institute of Microbiology**
Institut Mikrobiologii
Maria Curie-Skłodowska University
Uniwersytet Marii Curie-Skłodowskiej
20-033 Lublin
ul. Akademicka 19
phone (081) 37 59 06
fax (081) 37 51 02
- 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 General Microbiology**
Zakład Mikrobiologii Ogólnej

Maria Curie-Skłodowska University
Uniwersytet Marii Curie-Skłodowskiej
20-033 Lublin
ul. Akademicka 19
phone (081) 37 50 73
fax (081) 37 51 02

fields of research:

biological nitrogen fixation, *Rhizobium* genetics and immunochemistry

application:

leguminous plants inoculants

service offered:

sugar and fatty acid analyses

contact persons:

Wincenty Drożański, professor; Zbigniew Lorkiewicz, professor; Ryszard Russa, professor; Anna Skorupska, professor

■ **Department of Biochemistry**
Institut Biochemii

Maria Curie-Skłodowska University
Uniwersytet Marii Curie-Skłodowskiej
20-031 Lublin
pl. M. Curie-Skłodowskiej 3
phone (081) 37 56 65, 37 57 37, 37 57 22, 37 56 68, 37 56 66
fax (081) 37 51 02, 33 669
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; M. Wojtaś-Wasilewska, professor; Jerzy Łobarzewski, professor; Jerzy Rogalski, professor

■ **Department of Crystallography**
Zakład Krytalografii

University of Łódź
Uniwersytet Łódzki
90-236 Łódź
ul. Pomorska 149/153
phone (042) 78 52 80

fields of research:

crystallography

application:

pharmacology, bio-tech industry

services offered:

structure determination by X-ray analysis (proteins, peptides and organic compounds)

contact person:

Andrzej Brzozowski, Ph.D., researcher

■ **Centre
of Microbiology and Virology**
Centrum Mikrobiologii i Wirusologii

Polish Academy of Sciences
Polska Akademia Nauk
93-232 Łódź
ul. Lodowa 106
phone (042) 49 22 77, 49 22 63

fields of research:

mechanisms of microbial enzymes control, biotransformation of steroids

application:

manufacturing of medical steroids

contact persons:

Leon Sedlaczek, professor and Director of the Centre;
A. Jaworski, professor;
J. Długoński, Ph.D.

■ **Department
of Polymer Biotechnology**
Zakład Biotechnologii Polimerów

Institute of Chemical Fibres
Instytut Włókien Chemicznych
90-570 Łódź
ul. M. Skłodowskiej-Curie 19
phone (042) 37 67 44, 37 65 10
fax (042) 37 62 14

fields of research:

biosynthesis of polymers, biotechnological processing of polymers and fibers

application:

chemical fibers and polymers

journal:

"Chemical Fibers", "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
90-151 Łódź
ul. Muszyńskiego 1
phone (042) 78 48 33 ex. 218
fax (042) 79 06 56

fields of research:

microbial biotechnology, plant cell biotechnology, cell immobilization, biosynthesis of drugs

application:

pharmaceutical industry

contact person:

Aleksander Chmiel, professor and Head of the Laboratory,
vice-Director of the Institute

■ **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
90-924 Łódź
ul. Wólczańska 175
phone (042) 31 37 00
fax (042) 36 56 63

fields of research:

thermodynamics of drying, heat and mass transfer
design of dryers and drying processes, food preservation
evaluation of drying kinetics, drying theory, application and design

application:

services offered:

journal:

"Bulletin of Łódź Technical University", Chemical Engineering Series

contact persons:

Czesław Strumiłło, professor and Head of the Department;
Władysław Kamiński, Ph.D., D.Sc.

■ **Institute of Fermentation Technology and Microbiology**

Instytut Technologii Fermentacji i Mikrobiologii

Technical University of Łódź
Politechnika Łódzka
90-530 Łódź
ul. Wólczańska 175
phone (042) 36 36 39, 36 55 22 ex. 709
fax (042) 88 42 20, 88 47 16

fields of research:

yeast and lactic bacteria: physiology, storage, preservation and stabilization

application:

industrial microbiology, food microbiology

contact persons:

Helena Oberman, professor and Head of the Department;
Zdzisława Libudzisz, Ph.D.

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

Technical University of Łódź
Politechnika Łódzka
90-924 Łódź
ul. Stefanowskiego 4/10
phone (042) 36 66 18

fields of research:

purification, characterization and application of enzymes, biosynthesis of microbial enzymes, monitoring and computer control of microbial and enzymatic processes, downstream processing, improvement of microbial strains, biopolymers, immobilized biocatalysts, biocatalysis in organic solvents laundry, medicine, industrial food enzymology, pharmaceutical and chemical industry

application:

services offered:

production, purification and application of enzymes, immobilized biocatalysis

contact persons:

Edward Galas, professor, Director of the Institute;
Marianna Turkiewicz, associate professor

**Institute
of Chemical Technology of Food**

*Institut Chemicznej Technologii
Żywności*

Technical University of Łódź
Politechnika Łódzka
90-924 Łódź
ul. Stefanowskiego 4/10
phone (042) 36 74 88, 36 55 22
fax (042) 31 34 02, 36 85 22
telex 88 42 20, 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;
Czesław Strumiłło, professor; 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*
90-363 Łódź
ul. Sienkiewicza 112
phone (042) 81 97 44
fax (042) 81 54 83

fields of research:

bioorganic chemistry, molecular biology, stereospecific synthesis of P-chiral biophosphates, bioorganic chemistry, synthesis and DNA/RNA modification, structure of protein control of cellular proliferation pharmaceuticals, modulators of gene expression, gene therapy, production of Hrec α TNF DNA synthesis, protein sequencing

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

Wojciech Jacek Stec, professor and Head of the Department, Chairman of the Biotechnology Committee of the Polish Academy of Sciences; member of the Polish Academy of Sciences; Andrzej Okruszek, associate professor;
Wojciech Niewiarowski, Ph.D

- **Department of Bioprocess Engineering**
Zakład Inżynierii Bioprocessowej
- Faculty of Process Environmental Engineering
Technical University of Łódź
Wydział Inżynierii Procesowej i Ochrony Środowiska
Politechnika Łódzka
90-924 Łódź
ul. Wólczańska 175
phone (042) 31 37 15
fax (042) 36 56 63
- 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 Food Biotechnology**
Zakład Biotechnologii Żywności
- Institute of Food Biotechnology
University of Agriculture and Technology
Instytut Biotechnologii Żywności
Akademia Rolniczo-Techniczna
10-957 Olsztyn
pl. Cieszyński 1, Kortowo 45 c/10
phone (089) 23 36 87, 23 32 33
fax (089) 27 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 Department;
Andrzej Babuchowski, Ph.D.;
Kazimierz Kornacki, professor

- **Department of Animal Biochemistry**
Zakład Biochemii Zwierząt
- University of Agriculture and Technology
Akademia Rolniczo-Techniczna
10-728 Olsztyn-Kortowo
ul. Oczapowskiego 5
phone (089) 23 33 91
fax (089) 27 49 38, 27 39 08
- fields of research:** biochemistry and immunology of animal semen, cryobiochemistry of spermatozoa, preservation of male gametes
- application:** animal production

■ **Department of Biochemistry**

Zakład Biochemii

Institute of Biochemistry and Biotechnology
Agricultural University
Instytut Biochemii i Biotechnologii
Akademia Rolnicza
60-637 Poznań
ul. Wołyńska 35
phone (061) 22 45 81 ex. 171, 176
fax (061) 41 10 22

fields of research:

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

application:

contact persons:

Urszula Szybiak-Stróżycka, Ph.D.;
Cezary Mądrzak, Ph.D.

■ **Department of Biochemistry
and Biotechnology**

Instytut Biochemii i Biotechnologii

Agricultural University
Akademia Rolnicza
60-637 Poznań
ul. Wołyńska 35
phone (061) 22 45 81 ex. 186
fax (061) 41 10 22

fields of research:

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

application:

contact persons:

Witold Stefan Walerych, professor and Head of the Department;
Piotr Dullin, Ph.D.

■ **Laboratory of General Botany**

Laboratorium Botaniki Ogólnej

Faculty of Biology
Adam Mickiewicz University
Wydział Biologii
Uniwersytet im. Adama Mickiewicza
61-713 Poznań
al. Niepodległości 14
phone (061) 52 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
60-623 Poznań
ul. Mazowiecka 48
phone (061) 22 45 81
fax (061) 48 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*
61-704 Poznań
ul. Noskowskiego 12/14
phone (061) 52 89 19, 52 85 03, 52 85 04
fax (061) 52 05 32
e-mail: legocki@ibch.poznan.edu.pl

fields of research:

plant molecular biology, plant-microbe interactions

application:

agriculture

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*
61-704 Poznań
ul. Noskowskiego 12/14
phone (061) 52 85 03
fax (061) 52 05 32
e-mail: twardows@rose.poznan.edu.pl

fields of research:

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

application:

"Biotechnologia" ("Biotechnology Review")

journal:

contact person:

Tomasz Twardowski, professor and Head of the Laboratory,
editor-in-chief

**Department
of Genetics Engineering***Pracownia Inżynierii Genetycznej*

Institute of Plant Genetics
Polish Academy of Sciences
Instytut Genetyki Roślin
Polska Akademia Nauk
60-479 Poznań
ul. Strzeszyńska 34
phone (061) 23 35 11

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 Chełkowski, professor and Director of the Institute;
Bożena Chwilkowska, Ph.D.**Laboratory
of Molecular Genetics***Laboratorium Genetyki
Molekularnej*

Institute of Plant Genetics
Polish Academy of Sciences
Instytut Genetyki Roślin
Polska Akademia Nauk
60-479 Poznań
ul. Strzeszyńska 30/36
phone (061) 23 35 11 ex. 246
fax (061) 22 11 22

fields of research:

molecular biology, genetic engineering of plants

application:

biology, agriculture

contact person:Sławomir Bartkowiak, associate profesor and Head of the
Laboratory**Department
of Molecular Pathology
and Mutagenesis***Laboratorium Patologii
Molekularnej i Mutagenезy*

Institute of Human Genetics
Polish Academy of Sciences
Zakład Genetyki Człowieka
Polska Akademia Nauk
60-479 Poznań
ul. Strzeszyńska 32
phone (061) 23 32 35, 23 30 11
fax (061) 23 32 35

fields of research:hereditary susceptibility to cancer, benzo/ α /pyrene,**application:**locus Ah, ataxia telangiectasia, familial polyposis coli
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
60-479 Poznań
ul. Strzeszyńska 32
phone (061) 23 32 35, 23 30 11
fax (061) 23 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*

61-707 Poznań
ul. Libelta 27
phone (061) 52 56 16, 52 40 03
fax (061) 52 74 63

fields of research:

natural biologically active compounds, phytochemistry, pharmacology, agriculture and breeding of medicinal plants, technology of plant drugs, plant tissue culture, polysaccharide, immunostimulatory effects, *Asteraceae* pharmaceutical industry

application:

"Herba Polonica"

journal:

contact persons:

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

■ **Department
of Pharmaceutical Botany**

Zakład Botaniki Farmaceutycznej

Faculty of Pharmacy
Medical Academy
Wydział Farmaceutyczny
Akademia Medyczna
61-712 Poznań
ul. Wieniawskiego 1
phone (061) 53 69 38

fields of research:

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

application:

natural drugs

contact person:

Lutosława Skrzypczak, professor and Head of the Department;
Jaromir Budzianowski, associate professor

■ **Department
of Tobacco Breeding
and Production**

*Zakład Hodowli
i Produkcji Tytoniu*

Institute of Soil Science and Plant Cultivation
Instytut Uprawy, Nawożenia i Gleboznawstwa
24-100 Puławy — Osada Pałacowa
ul. Czartoryskich 8
phone (0831) 34 21 ex. 216
fax (0831) 45 47

fields of research:

interspecific gene transfer, tissue and cell cultures

application:

plant breeding

contact persons:

Apoloniusz Berbeć, researcher;
Teresa Doroszewska, researcher; Dorota Laskowska,
researcher

■ **Laboratory of Hop Protection**

Laboratorium Ochrony Chmielu

Institute of Soil Science and Plant Cultivation
Instytut Uprawy, Nawożenia i Gleboznawstwa
24-100 Puławy — Osada Pałacowa
phone (0831) 34 21, 34 22

fields of research:

hop protection and diseases (fungi, viruses, spider mites)

application:

control of diseases and pests

contact person:

Ewa Solarska, Ph.D., Head of the Laboratory

■ **Department
of Small Animal Diseases**

*Zakład Zwierząt Mięsożernych
i Futerkowych*

National Veterinary Research Institute
Państwowy Instytut Weterynaryjny
24-100 Puławy
ul. Partyzantów 57
phone (0831) 30 51
fax (0831) 25 95

fields of research:

virology, immunology, technology of biopreparates, drugs and vaccines

application:

immunoprophylaxis of rabbits and fur animals

service offered:

research and control of vaccines, diagnosis of viral diseases

contact person:

Jerzy Górski, professor and Head of the Department

■ **Serum and Vaccine Laboratory**

*Laboratorium Surowic
i Szczepionek*

BIOWET
24-100 Puławy — Michałówka
phone (0831) 30 91
fax (0831) 33 53

fields of research:

virus replication and tissue culture

application:

technology of biopreparates for immunoprophylaxis of dogs
and fur animals

contact person:

Czesława Górską, associate professor and Head of the Department

■ Department of Swine Diseases*Zakład Chorób Świń*

National Veterinary Research Institute

Państwowy Instytut Weterynaryjny

24-100 Puławy

phone (0831) 30 51

fax (0831) 25 95

tlx 0642401

fields of research:

virology and immunology of pests viruses and herpes viruses

application:

production of KITS and vaccines for veterinary

services offered:

production of vaccines, treatment and prophylaxis of swine diseases

journal:

"Bulletin Veterinary" Institute of Puławy

contact persons:Zygmunt Pejsak, professor and Head of the Department;
A. Lipowski, Ph.D.**■ Laboratory of Plant Tissue Culture***Laboratorium Roślinnych Kultur Tkankowych*

Research Institute of Vegetable Crops

Instytut Warzywnictwa

96-100 Skierniewice

ul. Konstytucji 3-go Maja 1-3

phone 34 34

fax 88 66 49

fields of research:tissue culture of vegetable crops, clonal propagation, somaclonal variation, *in vitro* selection**application:**

plant breeding

contact person:

Tomasz Badzian, associate professor and Head of the Laboratory

■ Department of Standardization of Agriculture Food Products*Zakład Standaryzacji Rolniczych Produktów Żywnościowych*

Polish Committee for Standardization

Measures and Quality Control

Polski Komitet Standaryzacji, Miar i Kontroli Jakości

00-139 Warszawa

ul. Elektoralna 2

phone (022) 27 41 15

fax (022) 20 83 78

fields of research:

fruit and vegetables products, methods of tests

application:

standardization and quality control

service offered:

exchange of information concerning methods of tests of fruits, vegetables and derived products

journal:

"Normalization"

contact person:

Maria Wiślińska, senior specialist, ISO/TC 34/SC 3 secretary

■ **Department of Molecular Biology**
Zakład Biologii Molekularnej

Cancer-Center Institute
Centrum Onkologii
02-781 Warszawa
ul. Findera 101
phone (022) 644 50 24 ex. 2093

fields of research:

DNA repair, DNA replication, gene expression

application:

diagnosis on cancer disease

contact person:

Janusz Siedlecki, Ph.D., Head of the Department

■ **Department of Food Technology**
Zakład Technologii Żywności

Warsaw Agricultural University
Akademia Rolnicza
03-849 Warszawa
ul. Grochowska 272
phone (022) 10 35 51, 10 01 63

fields of research:

meat aging and quality changes

application:

meat technology

contact persons:

Andrzej Pisula, professor;
Jan Mroczek, professor and Head of the Department

■ **Department of Plant Genetics, Breeding and Biotechnology**
Katedra Genetyki, Hodowli Roślin i Biotechnologii

Warsaw Agricultural University
Akademia Rolnicza
02-766 Warszawa
ul. Nowoursynowska 166
phone (022) 43 09 82
fax (022) 47 15 62

fields of research:

somatic embryogenesis, *in vitro* selection, gene technology, molecular genetics of sex

contact person:

Stefan Malepszy, professor and Director of the Department

■ **Sera and Vaccines Central Research Laboratory**
Centralne Laboratorium Surowic i Szczepionek

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

fields of research:

therapeutic and prophylactic sera, blood derivatives, vaccines production and control, susceptibility to antimicrobial agents and mechanisms of resistance

application:

bacteria cultivation and purification of the antigens, isolation and purification of plasma and serum proteins

contact persons:

Jacek Sawicki, Ph.D., Director of the Institute
Waleria Hryniewicz, professor, vice-Director for Research

■ Department of Biology and Pharmaceutical Botany

*Katedra i Zakład Biologii
i Botaniki Farmaceutycznej*

Faculty of Pharmacy
Warsaw Medical Academy
*Wydział Farmacji
Akademia Medyczna*
02-097 Warszawa
ul. Banacha 1
phone (022) 23 59 84

fields of research:

application:

contact person:

medicinal plant biotechnology
drug production of natural origin
Mirosława Furmanowa, professor and Head of the Department

■ Department of Biochemistry

Zakład Biochemii

Institute of Biotechnology and Antibiotics
Instytut Biotechnologii i Antybiotyków
02-516 Warszawa
ul. Starościńska 5
phone (022) 49 60 51 ex. 255
fax (022) 49 42 07

fields of research:

application:

service offered:

contact person:

enzymes and antibiotics biosynthesis
technology of antibiotics and enzymes production
collection of *Streptomyces*
Lidia Paśś-Dzięgielewska, Ph.D., Head of the Laboratory

■ Faculty of Chemical and Process Engineering

*Wydział Inżynierii Chemicznej
i Procesowej*

Warsaw Technical University
Politechnika Warszawska
00-645 Warszawa
ul. Waryńskiego 1
phone (022) 25 85 64, 25 14 40, 21 03 61
fax (022) 25 14 40

fields of research:

application:

contact persons:

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;
Stanisław Wroński, professor;
Krzysztof W. Szewczyk, associate professor

■ **Department of Tissue Culture**

Zakład Kultur Tkankowych

Plant Breeding and Acclimatization Institute

Instytut Hodowli i Aklimatyzacji Roślin

05-870 Błonie k. Warszawy

phone (022) 55 26 11, 55 36 11

fax (022) 55 47 14

fields of research:

in vitro culture, cereals, wheat, triticum, somatic embryogenesis, anther culture of *Gramineae*

application:

plant breeding and genetics

journal:

"Bulletin IHAR"

contact persons:

Henryk J. Czembor, professor and Director of the Institute;

Zygmunt Tomaszewski Jr., Ph.D., researcher;

Janusz Zimny, Ph.D., assistant professor;

Andrzej Czaplicki, assistant professor

■ **Department of Fermentation and Fruit and Vegetable Technology**

Katedra Technologii Przemysłu

Fermentacyjnego

i Owocowo-Warzywnego

Agricultural University

Akademia Rolnicza

02-528 Warszawa

ul. Rakowiecka 26/30

phone (022) 49 22 51 ex. 231

fields of research:

wine (fruit-, grape-, honey-, whey-), fruit juices and beer technology

application:

wine technology

contact person:

Wiesław Wzorek, associate professor

■ **Department of Protein Biosynthesis**

Zakład Biosyntezy Białka

Institute of Biochemistry and Biophysics

Polish Academy of Sciences

Instytut Biochemii i Biofizyki

Polska Akademia Nauk

02-106 Warszawa

ul. Pawińskiego 5a

phone (022) 658 47 90, 659 70 72

fax (022) 39 12 16 23

fields of research:

potato viroids and viruses, protein synthesis

application:

detection of potato viroids and viruses

contact persons:

Przemysław P. Szafranski, professor and Head of the Department;

Włodzimierz Zagórski-Ostoja, professor and Director of the

Institute; Marek Welnicki Ph.D.

■ **Department
of Molecular Biology**

Zakład Biologii Molekularnej

Institute of Biochemistry and Biophysics
Polish Academy of Sciences
Instytut Biochemii i Biofizyki
Polska Akademia Nauk
02-106 Warszawa
ul. Pawińskiego 5a
phone (022) 658 44 99 ex. 3334
fax (022) 39 12 16 23

fields of research:

photobiology of psoralens and enzymology
medicine

application:

contact person:

Zofia Zarębska, associate professor and Head of the Laboratory

■ **Department
of Comparative Biochemistry**

Zakład Biochemii Porównawczej

Institute of Biochemistry and Biophysics
Polish Academy of Sciences
Instytut Biochemii i Biofizyki
Polska Akademia Nauk
02-106 Warszawa
ul. Pawińskiego 5a
phone (022) 658 47 38
fax (022) 39 12 16 23

fields of research:

structure of nucleolytic enzymes

application:

enzymology

contact persons:

Jan W. Szarkowski, professor and Head of the Department;
A. Przykorska, Ph.D.

■ **Department of Biophysics**

Zakład Biofizyki

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

fields of research:

structure-function relationship in nucleic acids and proteins
DNA recombinant technology of proteins for basic research
and medical applications

application:

contact persons:

Kazimierz L. Wierzchowski, professor and Head of the
Department, member of the Polish Academy of Sciences;
Andrzej Bierzyński, associate professor; 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
02-106 Warszawa
ul. Pawińskiego 5a
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
02-106 Warszawa
ul. Pawińskiego 5a
phone (022) 658 44 99 ex. 1214
fax (022) 658 46 36
- fields of research:** plant molecular biology, gene cloning and radiobiopreparations
application: molecular biology
contact person: Lidia D. Wasilewska, professor and Head of the Laboratory
- **Department of Plant Biochemistry**
Zakład Biochemii Roślin
- Institute of Biochemistry and Biophysics
Polish Academy of Sciences
Instytut Biochemii i Biofizyki
Polska Akademia Nauk
02-532 Warszawa
ul. Rakowiecka 36
phone (022) 658 44 99 ex. 1200
fax (022) 658 46 36
- fields of research:** plant biochemistry, cell and tissue culture, transformation, plant pathogens
application: potato breeding
contact persons: M. Borkowska, researcher;
Kazimierz Kleczkowski, professor

■ **Department
of Plant Biochemistry**
Zakład Biochemii Roślin

Institute of Biochemistry and Biophysics
Polish Academy of Sciences
Instytut Biochemii i Biofizyki
Polska Akademia Nauk
02-106 Warszawa
ul. Pawińskiego 5a
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, dephosphorylation

application:

potato breeding, plant genome regulation

services offered:

potato and tobacco tissue culture, micropropagation, enzyme preparation

contact persons:

Jerzy Buchowicz, professor;
Bernard Wielgat, associate professor and Deputy Director;
B. Kłos, researcher;
Grażyna Muszyńska, professor and Deputy Director

■ **Department
of Technical Microbiology**
Zakład Mikrobiologii Technicznej

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

fields of research:

technical microbiology, biotechnology, strain improvement, mutation, protoplast, fusion, culture collection IPF 212 microbial industry

application:

contact person:

Olga Ilnicka-Olejniczak, professor and Head of the Department

■ **Department
of Technical Microbiology
and Biochemistry**
*Zakład Mikrobiologii
i Biochemii Technicznej*

Institute of Agro- and Food Biotechnology
Instytut Biotechnologii Przemysłu Rolno-Spożywczego
02-532 Warszawa
ul. Rakowiecka 36
phone (022) 49 02 41, 49 01 71
fax (48) 29 12 16 23
tlx 813845 ips pl

fields of research:

industrial application of enzyme preparations

application:

production of microbial enzyme preparations

contact person:

Regina Sawicka-Żukowska, Ph.D. and Head of the Laboratory

■ **Department
of Organic Chemistry**
Zakład Chemii Organicznej

Institute of Chemistry
Wrocław University
*Instytut Chemii
Uniwersytet Wrocławski*
50-383 Wrocław
ul. Joliot-Curie 14
phone (071) 22 92 83
fax (071) 22 14 06

fields of research:

chemistry and biology of peptides

application:

theoretical medicine and therapy

service offered:

circular dichroism measurements

contact person:

Ignacy Zenon Siemion, professor and Head of the Department

■ **Department
of Food Biotechnology**
Katedra Biotechnologii Żywności

Academy of Economics
Akademia Ekonomiczna
53-345 Wrocław
ul. Komandorska 118/120
phone (071) 68 02 69
fax (071) 67 27 78
e-mail: zbgarnc@unix.ok.ae.wroc.

fields of research:

control of fermentation process

application:

baker's yeast

contact person:

Tadeusz Miśkiewicz, Ph.D.

■ **Department
of Bioprocess Engineering**
Zakład Inżynierii Bioprosowej

Institute of Chemical Engineering
Technical University of Wrocław
*Instytut Inżynierii Chemicznej
Politechnika Wrocławska*
53-373 Wrocław
ul. Norwida 4/6
phone (071) 20 26 77, 20 24 02, 20 36 49, 21 13 18
fax (071) 21 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.

■ **Biochemical Laboratory**

Laboratorium Biochemii

Institute of Immunology and Experimental Therapy
 Polish Academy of Sciences
Instytut Immunologii i Terapii Doświadczalnej
Polska Akademia Nauk
 53-114 Wrocław
 ul. Czerska 12
 phone (071) 67 90 81 ex. 191, 177
 fax (071) 67 91 11

fields of research:

immunodiagnostics: detection and assay of human
 choriogonadotropin

application:

pregnancy and trophoblastic diseases

contact person:

Apolinary Szewczuk, professor and Head of the Laboratory

■ **Department of Microbiology**

Zakład Mikrobiologii

Institute of Immunology and Experimental Therapy
 Polish Academy of Sciences
Instytut Immunologii i Terapii Doświadczalnej
Polska Akademia Nauk
 53-114 Wrocław
 ul. Czerska 12
 phone (071) 67 90 81
 fax (071) 67 91 11

fields of research:

immunology, microbiology, experimental therapy

application:

medicine, biology, pharmacy

service offered:

geno-taxonomical tests, supply of bacterial cultures
 (collection of 2000 strains), bacteriophages for therapy,
 consulting on microbiology, molecular biology, immunology
 "Archivum Immunologiae et Therapiae Experimentalis"
 („Postępy Higieny i Medycyny Doświadczalnej")

journals:

Marian Mordarski, professor, Head of the Department and
 Director of the Institute;

contact persons:

Stefan Rowiński, Ph.D., curator of culture collection

■ **Department
 of Immunochemistry**

Zakład Immunochemii

Institute of Immunology and Experimental Therapy
 Polish Academy of Sciences
Instytut Immunologii i Terapii Doświadczalnej
Polska Akademia Nauk
 53-114 Wrocław
 ul. Czerska 12
 phone (071) 73 22 74, 73 23 16 ex. 217
 fax (071) 67 91 11

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 Polymer Physicochemistry***Zakład Fizykochemii Polimerów*

Institute of Organic and Polymer Technology
Technical University of Wrocław
Instytut Technologii Organicznej i Tworzyw Sztucznych
Politechnika Wroclawska
50-370 Wrocław
ul. Wybrzeże Wyspiańskiego 27
phone (071) 20 38 26, 20 32 73
fax (071) 20 36 78
e-mail: kolarzb@fots.ch.pwr.wroc.pl

fields of research:

reactive polymers

application:

carriers for immobilization of biological active substances

contact person:

Bożena Natalia Kolarz, professor

Department of Chemistry*Zakład Chemii*

Institute of Organic Chemistry, Biochemistry and Biotechnology
Technical University of Wrocław
Instytut Chemii Organicznej, Biochemii i Biotechnologii
Politechnika Wroclawska
50-370 Wrocław
ul. Wybrzeże Wyspiańskiego 27
phone (071) 20 34 46
fax (071) 22 36 64

fields of research:

chemistry of natural products

application:

insect control

contact person:Andrzej Zabża, professor, vice-Chairman of the Biotechnology
Committee of the Polish Academy of Sciences