

Environmental Protection and Management

**The Chemical Faculty
of the Gdansk University
of Technology**

*become
our
student!*

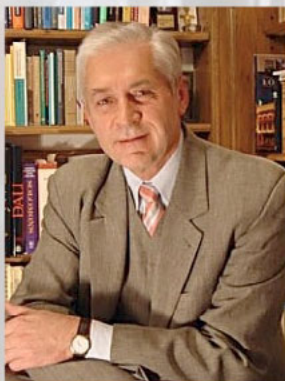


WELCOME TO GDANSK UNIVERSITY OF TECHNOLOGY

Gdansk University of Technology is the oldest and the largest scientific and technological academic institution in Pomerania region, employing 2 500 staff including 1200 academics. The number of students approximates 20,000, most of them studying full-time. Their career choices vary from architecture to business and management, from mathematics and computer science to biotechnology and environmental engineering, from applied chemistry to geodesy and transport, from ocean engineering to mechanical engineering and ship technology, from civil engineering to telecommunication, electrical and control engineering; but their life goals are common: to meet the challenge of the changing world.

Gdansk University of Technology provides broad-based education and research within engineering science, natural science and architecture. Education and cooperation with industry are an increasingly important part of our existence and have now become a life-long process.

GUT's aim is to play a key role throughout the whole of this chain. At our University we focus principally on the Eng, M.Sc.Eng, M.Arch and Ph.D programmes. Our role in this life-long learning process will increase in the future. All teaching at Gdansk University of Technology is based on a solid, scientific foundation and a great deal of the research conducted at our University is well to the fore in the international arena.



Our faculties cover a much wider range of education than other Polish technical universities do, and the scientific research comprises the areas which include the domains of technology of the 21st century. This refers to all the faculties constituting the basic core of the school but is also appropriate for numerous non-faculty units. The most remarkable representation of adapting the University to the challenges of the 21st century is embodied by the unique scientific and research equipment, exemplified by NMR 500 MHz apparatus, powerful supercomputers (ranked as belonging to an exclusive group of a few hundred fastest mathematical machines in the world, see list TOP 500!), which can be found in the Academic Computer Centre TASK. This equipment, combined with very high and noteworthy qualifications of computer scientists makes our school one of the best schools in Poland and one of better recognised schools in Europe, educating unique specialists in programming technology and computer methods of solving most complicated scientific, engineering, organisational and economic problems.

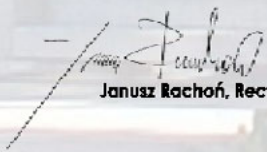
Apart from education and research, Gdansk University of Technology has a very old tradition and rich yet classic student life, with student union activities and cultural and sport events of a wide and varied nature.

I am glad to announce that the Polish weekly "Newsweek", having the largest number of readers in Poland, ranked the Gdansk University of Technology as the best Polish university of technology this year. This ranking comprised the educational level in the so-called high technology, the general assessment of the schools and first of all the employers opinions about our graduates.

The Chemical Faculty is one of the biggest and most famous faculties of Gdansk University of Technology. Great number of scientific achievements in the past, present research and high quality of education causes that faculty has a solid reputation in Poland and the whole world. There is an experienced staff of 120 academic teachers working at the Faculty, including 45 professors. Students at the Faculty can choose one of the 5 curricula: Chemistry, Chemical Technology, Biotechnology, Technologies of Environmental Protection, and Material Engineering at both B.Sc. and M.Sc. level. There is also special line of studies: Environmental Protection and Management - a unique multidisciplinary course at B.Sc. level, designed especially for foreign students, where all the courses are given in English. A lot of students, after completion of their M. Sc course stay at the Faculty at the Ph. D level. Our graduates have no problem with finding work at their profession, and lots of them work in big companies or research institutions outside Poland.

My ambition is that Gdansk University of Technology will continue to develop and what it has to offer, coupled with an appealing environment, will attract students and teachers/researchers, not only from Poland but also from the whole world. Interaction with an ever-changing society, and in particular with industry, must also be continued at a high level.

I do hope that finding the information you require about activities at Gdansk University of Technology will be as quick and uncomplicated as possible, thanks to the Web (www.pg.gda.pl).


Janusz Rachon, Rector

A MESSAGE FROM THE DEAN OF THE CHEMICAL FACULTY



*Thank you for your interest in the Chemical Faculty
of the Gdańsk University of Technology*

Gdańsk is a great place to be a student. Here we understand that what counts is not only the time you spend studying but your total student experience. Therefore, we have recently invested heavily in improvement of learning, living and entertainment facilities within the University. We enjoy excellent reputation for our student support and this, combined with high employment rate among our graduates (both in Poland and abroad), might have contributed to our being the largest chemical faculty in Poland with about two thousands of students enrolled. Our experienced staff of 120 academic teachers, including 45 professors, lead the students into the intricacies of 5 different curricula: Chemistry, Chemical Technology, Biotechnology, Technologies of Environmental Protection, and Material Engineering at both B.Sc. and M.Sc. level. Special line of studies: Environmental Protection and Management (B.Sc. level only) is designed especially for foreign students – all the courses are given in English.

After completion of their Master's theses, many students stay with us to study at Ph.D. level. Their work contributes a lot to our scientific efforts and among their instructors are not only our faculty members but also eminent specialists from the whole world. Many of them spend part of their study in universities and research institutes abroad. Many of our alumni are nowadays professors at universities in Europe, Canada and the United States.

We enjoy also solid reputation in science and research. Every year, the faculty members are authors of more than two hundred scientific papers in renowned international journals and present their achievements at numerous international and national symposia, congresses and conferences. Our laboratories are well equipped and some of them are at par with those best in the world. Our chemical library is the second largest in the country. All these factors contribute to the unique, creative environment of studies. Since Poland's joining the European Union we have steady increasing number of enrollments of students from Germany, The Netherlands, Italy, Portugal, Spain and Greece.

Our students' activities reach far beyond their studies. They can enhance their scientific interests in two Students Scientific Circles and the Youth Section of the Polish Chemical Society. They reveal also wide social and cultural activity, exploiting to the brim opportunities created by both the university and the big cultural and historically rich center of the City of Gdańsk.

I am glad I have a chance to address you in this way, though more detailed information on activities of the Chemical Faculty is available at our Web site at:

<http://www.pg.gda.pl/chem/indexeng.php>

Yours sincerely

A handwritten signature in black ink, appearing to read 'Jacek Namieśnik'.

Professor Jacek Namieśnik

HISTORY OF THE CHEMICAL FACULTY



History of the Gdansk University of Technology, inseparably linked with the history of Gdańsk and interwoven with the history of our nation, is a fascinating fragment of the development of technical universities in Europe.

The history of GUT is a chain of transformations which are proved by its changing names within the space of the last 100 years: Königlische Technische Hochschule Danzig (1904-1918), Technische Hochschule zu Danzig (1918-1921), Technische Hochschule der Freien Stadt Danzig (1921-1939), Reichshochschule Danzig (1939-1941), Gdansk University of Technology (since 1945).

The history of Gdansk University of Technology is marked by two basic dates, namely: October 6, 1904 and May 24, 1945. The first date is connected with the beginning of the technical education at academic level in Gdansk. On this very day, the first inauguration of an academic year at newly opened Royal Technical University in Gdansk, Prussian University, took place, whose task was technical education at academic level and increase of technical knowledge in Pomerania area. Solemn inauguration was performed by William II, King of Prussia in 1904.

Four buildings were erected during these years: the Main Building, the Chemistry Building, Electrical Engineering Building and the Machine Testing Laboratory (the one with the tall chimney) for the four faculties founded (Mechanical&Electrical Engineering, Chemical, Civil Engineering and Shipbuilding). In the duration of this first, almost 40-year functioning of the technical University of Gdańsk, beside German students, there were among others: Latvians, Lithuanians, Ukrainians and large group of Polish students. The Polish students had their social, political, scientific and sports organizations – creating a beautiful page of the history of Polish academic environment. In the programmes of their activity we can find, first of all, patriotic motto, and the programme itself opposes to discrimination and insults the Polish students were subject and finally illegally relegated from the university in February 1939. Lecturing language at the University during the 1904 – 1945 period was German.

The second date is connected with establishing the Gdansk University of Technology, Polish state academic university. In two weeks after the World War II was over, by the Decree of May 24, 1945, Gdańsk University of Technology was founded and the ceremonial lecture by Prof. Ignacy Adamczewski started the education at all the faculties. It was the first lecture in Polish language delivered within these walls. In 1945 there were established 5 faculties: Architecture, Civil Engineering, Mechanical & Electrical Engineering, Shipbuilding and Chemical Faculty. After the destructions of World War II, Gdansk University of Technology was being built by Polish professors and engineers who came from Lvov, Vilnius and Warsaw.



In 2005 our Faculty celebrated its sixtieth anniversary. During sixty years, the Chemical Faculty significantly increased and improved its facilities, granted some 1000 engineer's diplomas, above 3000 MS degrees, bestowed almost 400 PhD degrees and almost 80 DSc degrees. The roster of professors active during the period includes 43 persons.



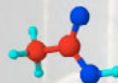
Today the Chemical Faculty of GUT has research ties worldwide and ranks consistently among the top 10 Polish public colleges and universities in funded research. We offer innovative, intellectually stimulating courses taught by experienced faculty. Special research programs within student scientific circles offer undergraduates the invaluable opportunity to collaborate with Faculty on important investigations.

EDUCATIONAL OFFER BY THE CHEMICAL FACULTY

Kinds of Courses

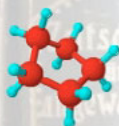
Biotechnology *Sector Hi-Tech*

3,5 year full time BSc courses; 5 year full time MSc courses



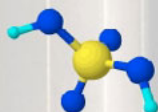
New Courses Chemistry

3,5 year full time BSc courses; 5 year full time MSc courses



Material Engineering *Sector Hi-Tech*

3,5 year full time BSc courses; 5 year full time MSc courses



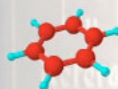
New Courses Technologies

of Environmental Protection

3,5 year full time BSc courses; 5 year full time MSc courses

Chemical Technology *Classic Courses*

3,5 year full time BSc courses; 5 year full time MSc courses



Courses in English Environmental Protection and Management

3,5 year full time BSc courses

MSc Supplementary Courses

1,5 year full time

Postgraduate Courses

1,5 year full time MSc courses

PhD Degree Studies

4 year full time

Short Supplementary Courses

COURSES DELIVERED IN ENGLISH

Full BSc Curriculum

Environmental Protection and Management

General Concept

In this 3.5 years Bachelor of Science line of studies all the courses are delivered in English. The students are taught by academic teachers from different Departments of Gdansk University of Technology and by invited speakers.

The Field of Study

The students are expected to achieve interdisciplinary knowledge concerning all fields of technology and environmental management with the following subjects: ecology, protection of soil, water and air as well as environmental policy along with organization of environmental services.

The Graduate Profile

The graduates of this course are prepared to undertake activity in wide variety of professions requiring skills in environmental protection and implementation of new technologies. They possess also a good knowledge in the scope of economics, management and marketing. Moreover, the graduates are well trained in exploitation of modern equipment in chemical laboratory.

Options for Students (Specializations)

- Chemical Systems of Environmental Protection
- Water Management

COURSES DELIVERED IN ENGLISH

Full BSc Curriculum

Environmental Protection and Management

Subjects



Physic
Chemistry

Mathematics
Basic Electronics
Geographic Information System
Computer Science



Environmental Biology
Technical Microbiology
Environmental Biotechnology



Introduction To Environmental Science
Proecological Aspects Of Chemical Technology
Ecotoxicology
Eco-philosophy
Civllisation Threats & Sustainable Development

Geology, Geomorphology & Soil Science
Protection & Remediation Of Groundwater
Environment
Water Resources Management



Design
Economics
Management
Environmental Audits
Environmental Policy
Environmental Law & Planning

Forest Management



COURSES DELIVERED IN ENGLISH

Full BSc Curriculum

Environmental Protection and Management

Subjects



Pollutants Transport Phenomena
Air Quality Control
Monitoring & Analysis of Environmental Pollutants

Construction Materials
Fundamentals of Process Engineering
Material Science
Manufacturing Technology



Meteorology
Air - Sea Interactions
Environmental Aspects of Port & Coastal Engineering

Water Quality Control
Water Supply & Wastewater Disposal



Physical & Chemical Bases of Energy Generation
Advances in Energy Conversion Technologies
Renewable Energy Resources
Fund. of Engineering Thermodynamics & Heat Transfer

Disposal of Hazardous Waste Chemicals
Waste Management



Food Quality



List of subjects with discription you can find on website:
http://www.pg.gda.pl/chem/edukacja/protect_program.pdf

SOCRATES/ERASMUS PROGRAMME

Since 1998 GUT has been involved in the Socrates (currently Socrates-Erasmus) programme, which promotes the exchange of students. The programme has developed rapidly over the span of 7 years. Starting with two bilateral agreements, we have reached 44. Since Poland's joining the European Union, students from Western Europe have begun coming here. They chiefly choose courses from our EPM (BSc) curriculum, where all the courses are delivered in English. Experimental work on one's thesis (BSc or MSc) is also possible. We started with 5 students in 2004/05 academic year, having about 12 this year and progress – similar to that in the number of agreements – may be expected, as numerous enquiries are recorded.

Foreign students from the universities having signed bilateral agreements with GUT, can study at the Chemical Faculty from 3 to 12 months. In order to join the programme, the candidates have to contact the Socrates office at their own university or college, then fill the application form, the proposed learning agreement and send the lot to the Socrates co-ordinator at GUT. Socrates exchange students pay no fees; they are only charged for accommodation in a student hostel. More information on the technical details (e.g. the list of foreign universities having signed the exchange agreement with the Chemical Faculty, GUT) you may find on the web site:

<http://www.pg.gda.pl/chem/InfOgolne/Cooperation/Erasmus/index.htm>

You can also contact directly our Socrates co-ordinator and Dean's Plenipotentiary in Charge of the International Studies, assistant professor Wojciech Chrzanowski by e-mail to:

wojtek@chem.pg.gda.pl

Our local chapter of the Erasmus Students Network is also very active and they assist foreign students in solving everyday issues, arrange cultural events and get together meetings. They can be reached on the web at:

<http://www.esn.pg.gda.pl/index.php?menu=incoming&lang=en>

SOCRATES/ERASMUS PROGRAMME

List of European universities having signed bilateral agreements on the exchange of students within the SOCRATES-ERASMUS programme with the Chemical Faculty, Gdansk University of Technology (valid for 2005/06 academic year)

Electrochemistry, Corrosion and Material Science

- Professor Kazimierz Darowicki, Dr Zbigniew Klenowicz*
 - 30 - Vrije Universiteit, Brussel, Belgium
 - 24 - Instituto Superior Tecnico, Lisbon, Portugal
 - 10 - University College Northampton, Northampton, United Kingdom
 - 24 - Katholieke Universiteit Leuven, Belgium
 - 12 - Institute of Chemistry, Vilnius, Lithuania

Technology of Polymers - Asst. Professor Józef Haponiuk

- 10 - Universidad de Navarra, TECNUN, San Sebastian, Spain

Technology of Polymers - Dr Helena Janik

- 12 - Katholieke Universiteit Leuven, Belgium
- 24 - Università degli Studi di Lecce, Italy
- 24 - Università degli Studi di Perugia, Italy
- 24 - Brunel University, Uxbridge, United Kingdom

Technology of Pharmaceuticals and Biochemistry

- Dr Agnieszka Bartoszek

- 16 - Université Joseph Fourier, Grenoble, France

Technology of Fats and Detergents

- Professor Krystyna Mędrzycka

- 12 - Université Montpellier II, Montpellier, France, (PhD level only)
- 10 - Hochschule Niederrhein, Krefeld, Germany
- 8 - Kungl. Tekniska Högskolan, Stockholm, Sweden
- 24 - Brandenburgische Technische Universität, Cottbus, Germany

Chemical Technology - Professor Maria Bocheńska

- TS** - Université Louis Pasteur – Strasbourg I, Strasbourg, France

Physical Chemistry - Asst. Professor Wojciech Chrzanowski

- 10 - Babes-Bolyai University Cluj-Napolca, Cluj-Napolca, Rumania
- 12 - Hochschule Bremen, Bremen, Germany

SOCRATES/ERASMUS PROGRAMME

Chemical Technology - Professor Jan Biernat
10 - Universiteit Anwerpen, Belgium

Chemical Technology
- **Asst. Professor Anna Lisowska-Oleksiak**
12 - Université de Bourgogne, Dijon, France
20 - Technische Universität Wien, Austria
20 - Vilnius University, Vilnius, Lithuania

Analytical Chemistry - Professor Waldemar Wardencki
10 - Christian-Albrechts-Universität zu Kiel, Kiel, Germany
12 - University of Ioannina, Ioannina, Greece
9 - Instituto Politecnico do Porto, Portugal

Analytical Chemistry - Professor Marek Biziuk
24 - University of Athens, Greece
48 - Aristotle University of Thessaloniki, Greece
24 - Technische Universiteit Delft, The Netherlands
10 - University of Twente, Enschede, The Netherlands
24 - Universität Bayreuth, Bayreuth, Germany
10 - Universität Leipzig, Leipzig, Germany
12 - University of Sofia, Sofia, Bulgaria
6 - Université de Perpignan via Domitia, Perpignan, France
10 - Universidad Politécnica de Valencia, Valencia, Spain
12 - Universidade de Beira Interior, Covilha, Portugal
TS** - Technische Universität München, Monachium, Germany

Analytical Chemistry - Professor Jacek Namieśnik
30 - Universidade do Algarve, Faro, Portugal
12 - Université de Liege, Liege, Belgium
12 - Université de Pau et des Pays de l'Adour, Pau, France
10 - Universität Karlsruhe, Karlsruhe, Germany
12 - Johannes Kepler Universität Linz, Austria
12 - Technische Universität Wien, Austria

Analytical Chemistry - Professor Bogdan Zygmunt
12 - University of Portsmouth, Portsmouth, United Kingdom
10 - Universidad Complutense de Madrid, Madrid, Spain

* Department - local tutor(s)

** currently Teaching Staff exchange only

Numbers mean amount of student-months

COURSES DELIVERED IN ENGLISH

Individual Curriculum System

There is a possibility to undertake both BSc and MSc courses in the individual curriculum systems (ICS). It may be the choice for the capable students, who are interested in broadening their knowledge in chemistry related fields. This educational offer is provided not only within the Environmental Protection & Management line of studies, but is also enriched with the courses for our doctoral fellows taught by academic teachers from other faculties of Gdańsk University of Technology and from abroad. Moreover, ICS students may participate in activities of our two Students Scientific Circles (in Chemistry and in Biotechnology) and our chapter of the Youth Section of the Polish Chemical Society. The activities in these organizations bring about the following advantages: participation in summer scientific camps, where the members improve their abilities in team work, contacts with students from other universities, both national and European, participation in research projects dealing with local environmental problems. Results of these projects are presented at conferences and seminars. In last four years, the members of the aforementioned students' organizations have been authors or co-authors of seventeen contributions.

The URLs of the related web sites and e-mail contacts are: Biotechnology - www.biotechnologiapg.webpark.pl - ksbpg@wp.pl, Chemistry (in general meaning) - www.technologia.gda.pl/nkch - nkch@chem.pg.gda.pl.

PhD Degree Studies

4 year full time studies

Three lines of study:

Organic Chemistry
Inorganic Chemistry
Chemical Technology

More information you can find on web site:

<http://www.pg.gda.pl/chem/index.php?dzial=informacje&site=studium>

SERVICES

Accommodation



You can be accommodated in one of our student hostels, all of them are located in the vicinity of the GUT grounds. You will be given bed linen, but you are expected to bring your own towels. All the hostels offer self-catering facilities located on floors to be used by single students and families.

www.pg.gda.pl/informacje/adresy_ds.shtml

Library

The Main Library of GUT has the largest collection of books on technology and science in Northern Poland. We cooperated with many Polish library and some foreign. Networked terminals which are installed in our library give access to the Library Catalogues.



www.pg.gda.pl/biblioteka/index.php

Computer Centre



The Chemical Faculty has a modern computer lab. The Computer Center is available 12 hours a day. It is located in the main building of the Chemistry Faculty ("Chemistry A") on the 3rd storey.

www.pg.gda.pl/chem/InneJednostki/WCI/wci.htm

Sports Centre

The University offers a wide range of sports clubs. GUT has gymnasiums, a sports hall for team games, two swimming pools, fitness room, tennis courts, football field. The Sports Centre offers a different kind of activity form: aerobic, athletics, gymnastics, swimming, tennis and rehabilitation. During holidays students can improve physical fitness by skiing and sailing.



STUDENTS' OPINION



"Environmental Protection and Management undergraduate program is an interdisciplinary and very demanding course taught by highly professional academic faculty. Therefore you will have a privilege to obtain knowledge directly from authors of numerous scientific articles. Together you will explore how we can achieve sustainable development by balancing socio-economic growth with environmental protection. Additionally, if you have some technical interests, you will have a chance to get an inside into the engineering processes that govern the environmental protection technologies. Upon graduation from this program, you'll be perfectly prepared to begin professional career or continue your education at the world's finest universities."

Piotr Berebecki, 4th year EPM Student
Winner of The Ministry of National Education Scholarship

"I have been studying at the Technical University of Gdańsk for one semester and I am completely satisfied by the level of the subjects, by the approach of professors towards me, and by the overall conditions that prevail at the [Technical] University of Gdańsk."

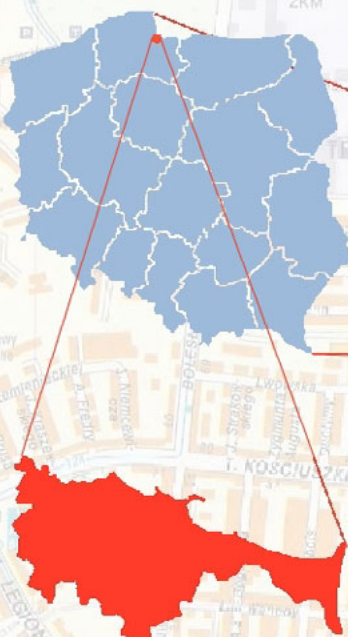
Lampros Dimitrakopoulos, Athens, Greece, EPM Student

"When I came to Gdańsk I was looking for a place different from my country, new and full experiences, and meeting new people. When I arrived here, I found that and even more: a neat and beautiful town, an amazing university and people out of series! I have only one feeling; I want to come back [here]."

Antonio David, Lisbon, Portugal, EPM Student


Originals in longhand are in possession of the Faculty SOCRATES-ERASMUS Co-ordinator

Studying at the Chemical Faculty of GUT is a good choice!



GDAŃSK

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Under the Supervision of the Dean of the Chemical Faculty

Professor Jacek Namieśnik

GDANSK UNIVERSITY OF TECHNOLOGY

2006