



Politechnika Gdańska

**Gdansk  
University of  
Technology**  
65/106  
years of  
Academic  
Tradition

[www.pg.gda.pl](http://www.pg.gda.pl)

# **Rebuilding the Transatlantic Bridge: U.S.- Polish Cooperation on Science, Technology, and Innovation**

## **The National Academies, Washington D.C., 3-4 December 2009**



**Gdansk  
University of  
Technology and  
its Regional  
Opportunity**

Henryk Krawczyk and Jan Hupka



Politechnika Gdańska

# Location in Poland





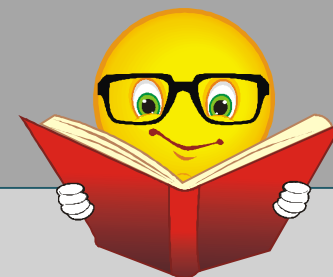
## Pomerania Region Challenges for the Near Future

- Conversion of research to products and services to create jobs and improve living standards through innovations
- Sources of energy which power the economy and protect national security
- Attract businesses which use local suppliers and infrastructure - intellectual property protection guaranteed
- Clusters of businesses which bring new products and services to the market
- Further development of e-management systems for city administrations; on-line public services for citizens with web-based, mobile and smart card applications; e-participation services for citizens with interactive consultative applications



Politechnika Gdańska

# About GUT



<b>B.Sc. and M.Sc. students</b>	<b>25 457</b>
<b>Ph.D. students</b>	<b>509</b>
<b>employees</b>	<b>2 552</b>
<b>academic teachers</b>	<b>1 186</b>
<b>faculties</b>	<b>9</b>
<b>fields of study (planned)</b>	<b>27 (5)</b>
<b>Academic rights to award dr and hab.dr degrees</b>	<b>17+11</b>
<b>Major structural projects, E.U. projects, and grants</b>	<b>29+20+65</b>

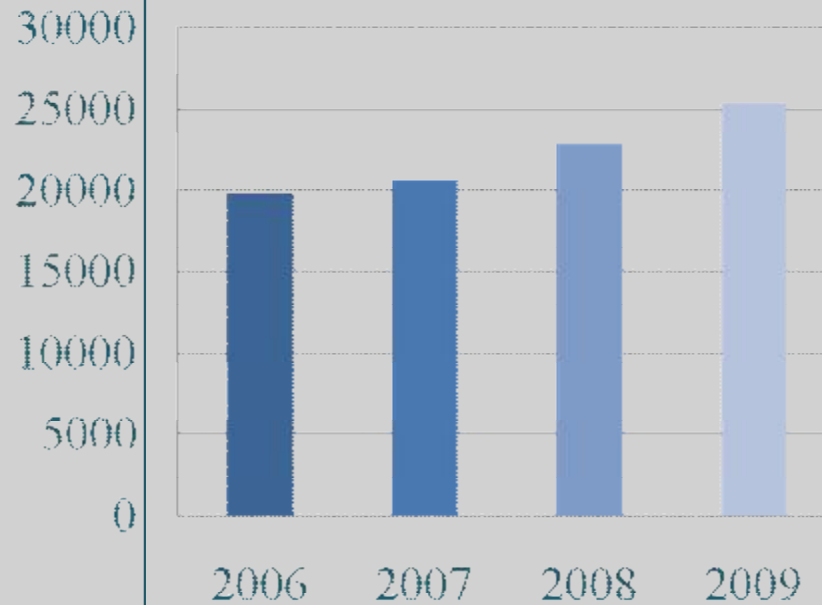




Politechnika Gdańska

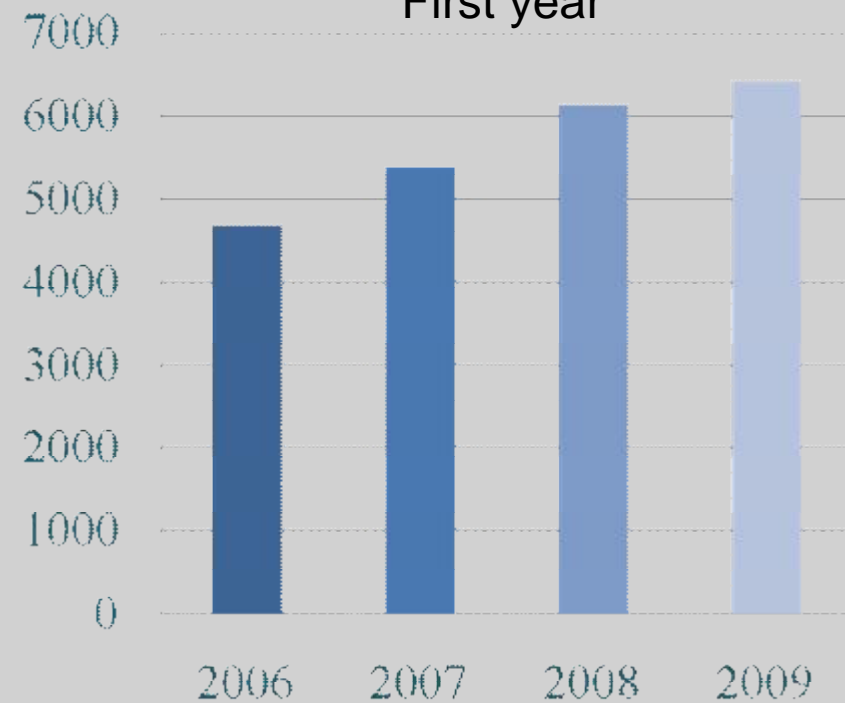
# Number of Students at GUT

Overall



Despite worsening  
demographic situation

First year





Politechnika Gdańska

# Partnerships in Higher Education in Pomerania



**Clustered Pomeranian Institutes of Higher Education – 14 May 2009  
a Letter of Intent was signed**

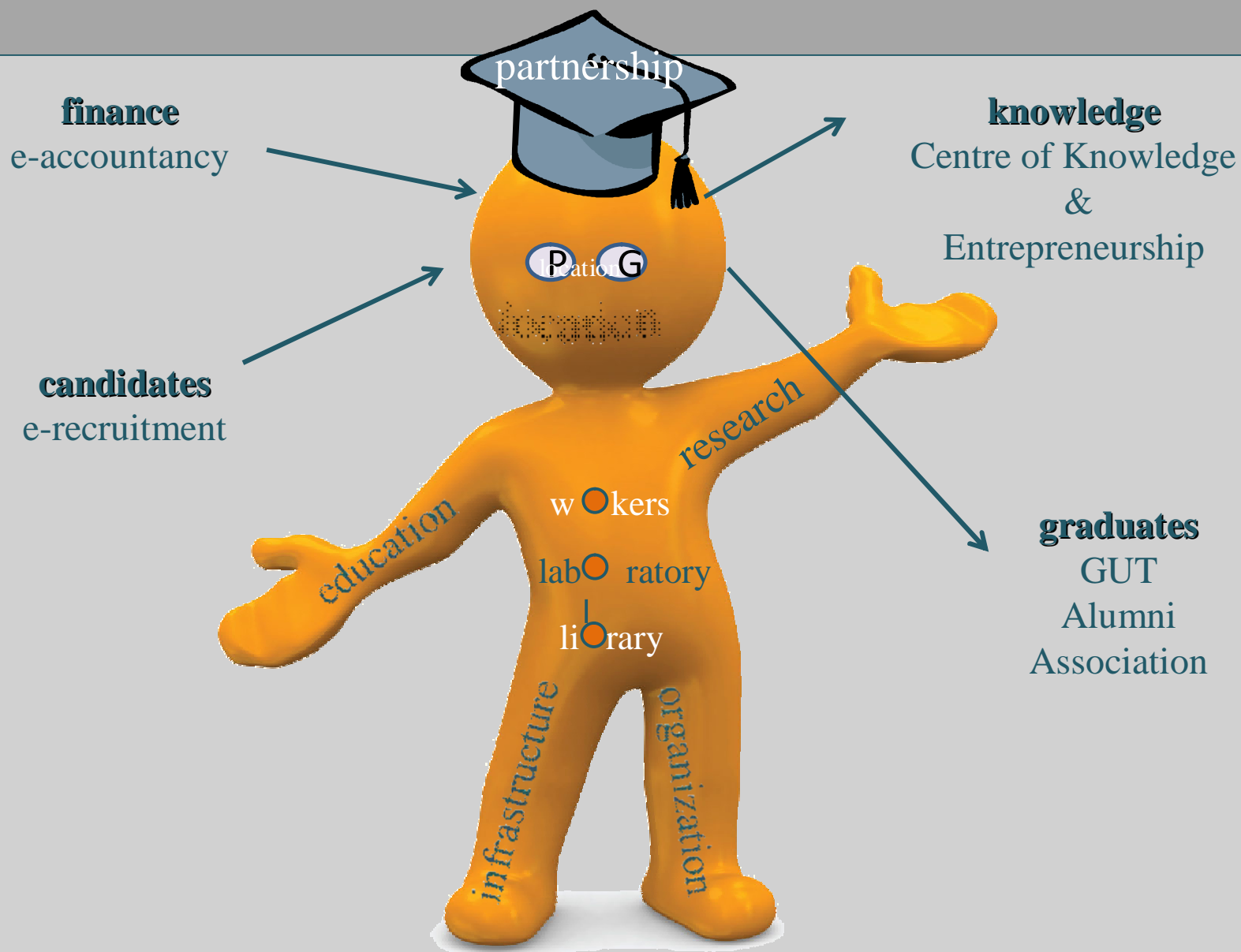
**üConnects the intellectual potential, human and financial resources,  
and background technology, organisation, and I.T., of the  
Institutions**

**üThe signatories of the Letter of Intent are 11 institutions**



Politechnika Gdańska

# New Model of GUT Functioning





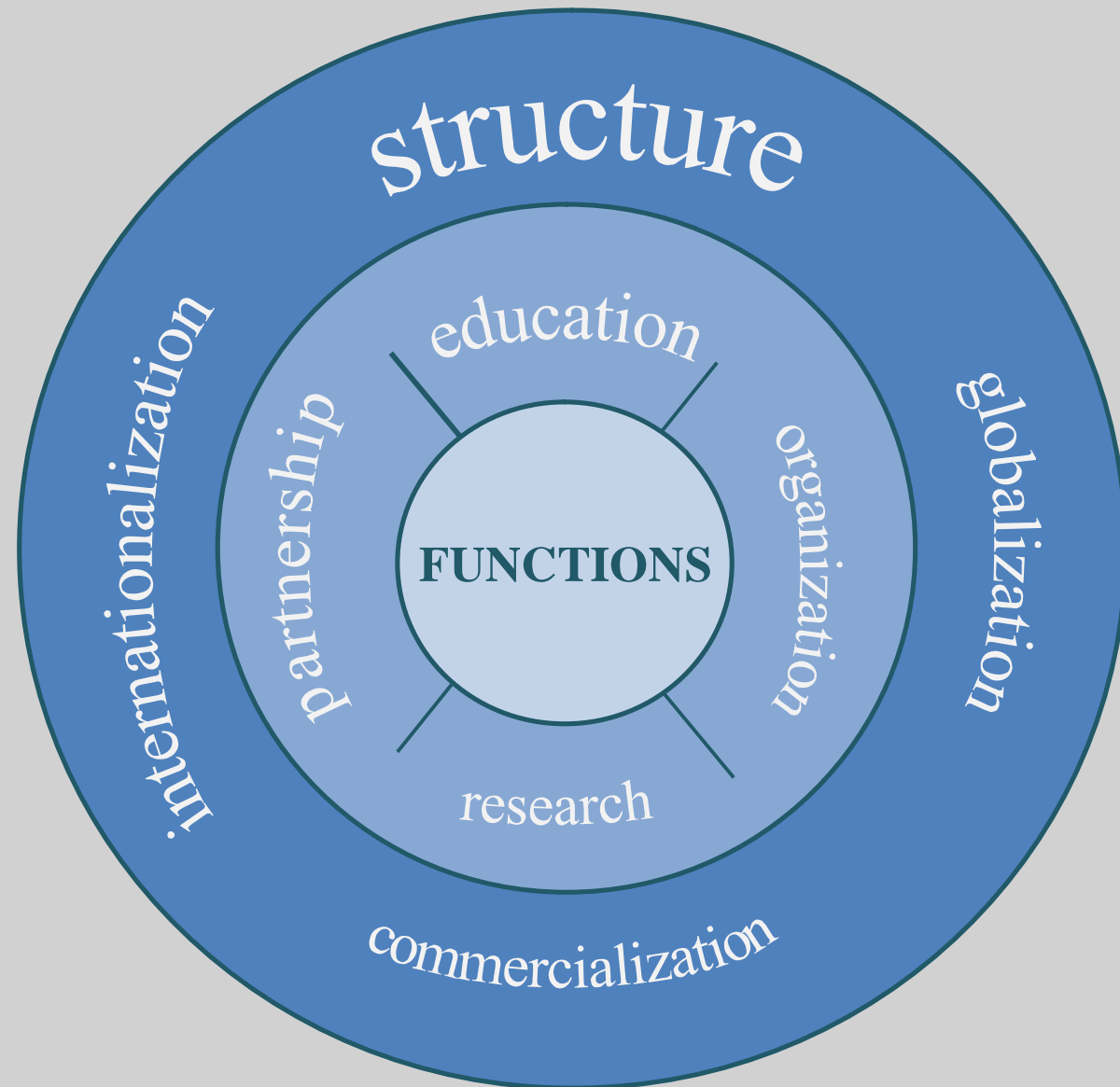
# GUT Resources





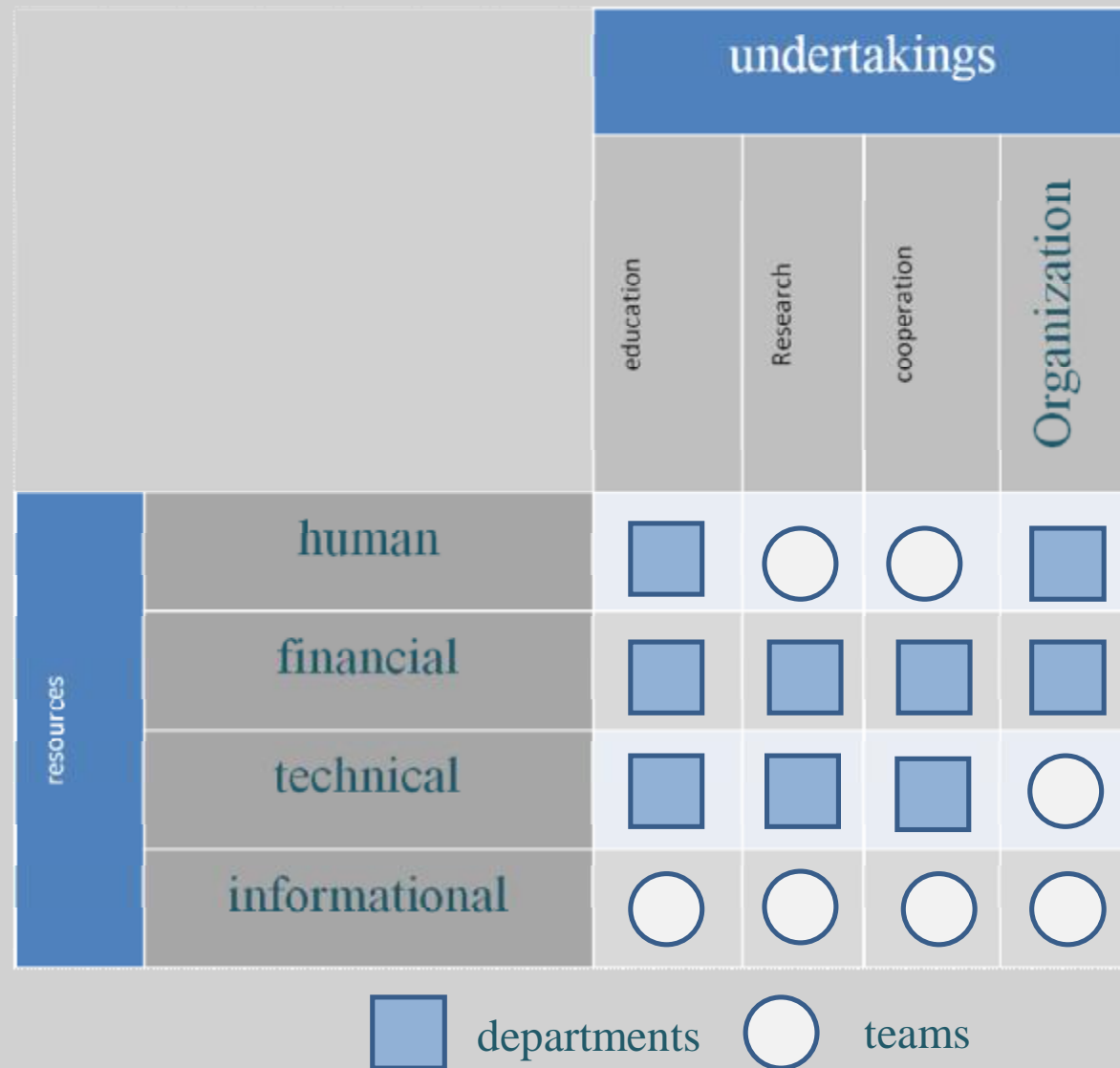


# GUT Major Functions





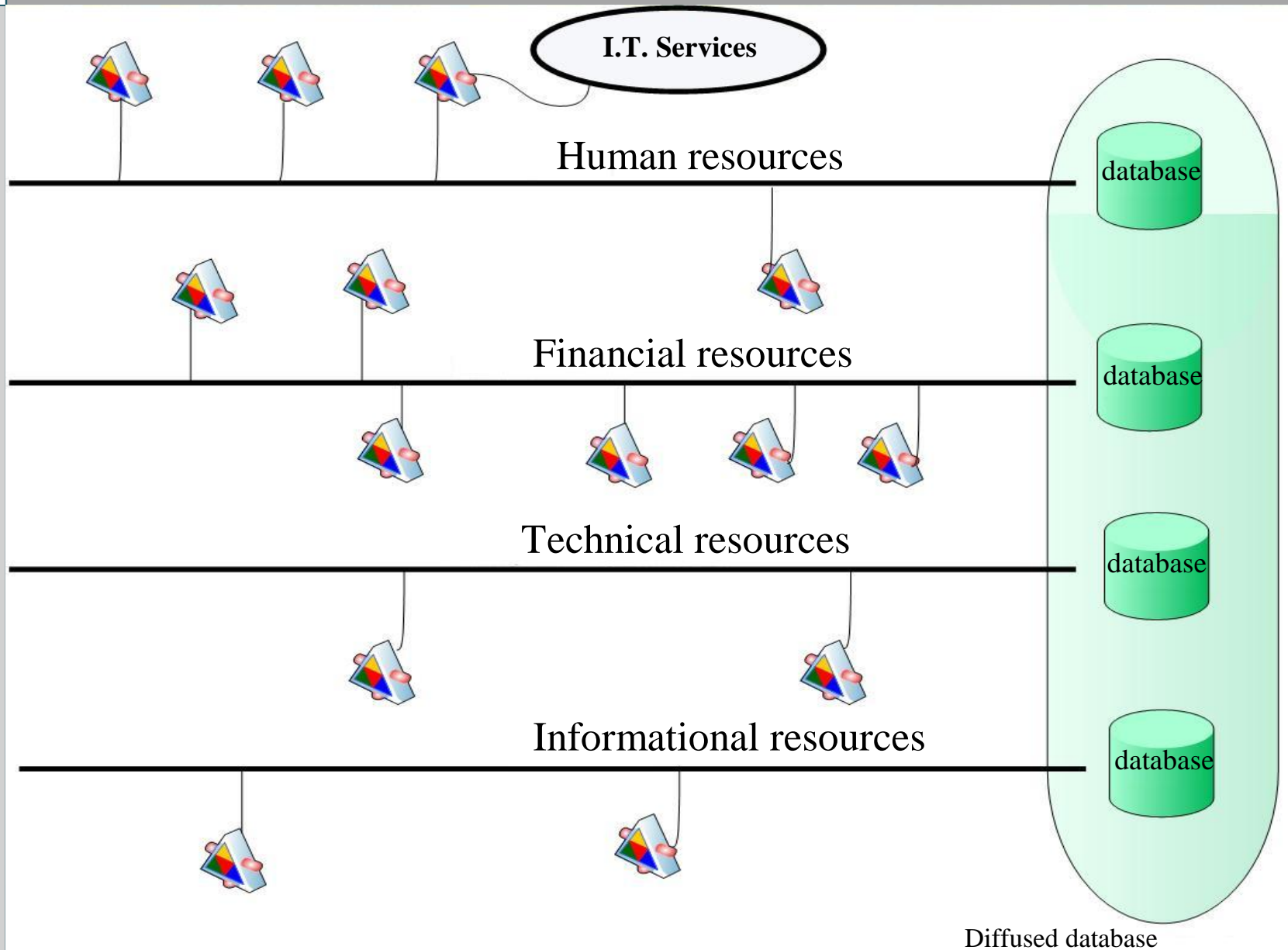
# Basic Organization Structure of GUT





Politechnika Gdańska

# Use of ICT in GUT Management





Politechnika Gdańska

# Teaching and Research Center of ICT.

**The most intelligent building in Pomerania**  
– Faculty of Electronics, Telecoms and I.T.

- Computer laboratories for 4000 ICT students
- Headquarters of Tri-City Academic Computer-Net
- Location for **CASCADE** platform





Politechnika Gdańska

# Nanotechnology Center – to be completed by 2011

**New intelligent  
building, housing  
material  
engineering ,  
advanced catalysis  
and  
nanotechnology  
labs for 750  
students**







# Center of Knowledge and Entrepreneurship

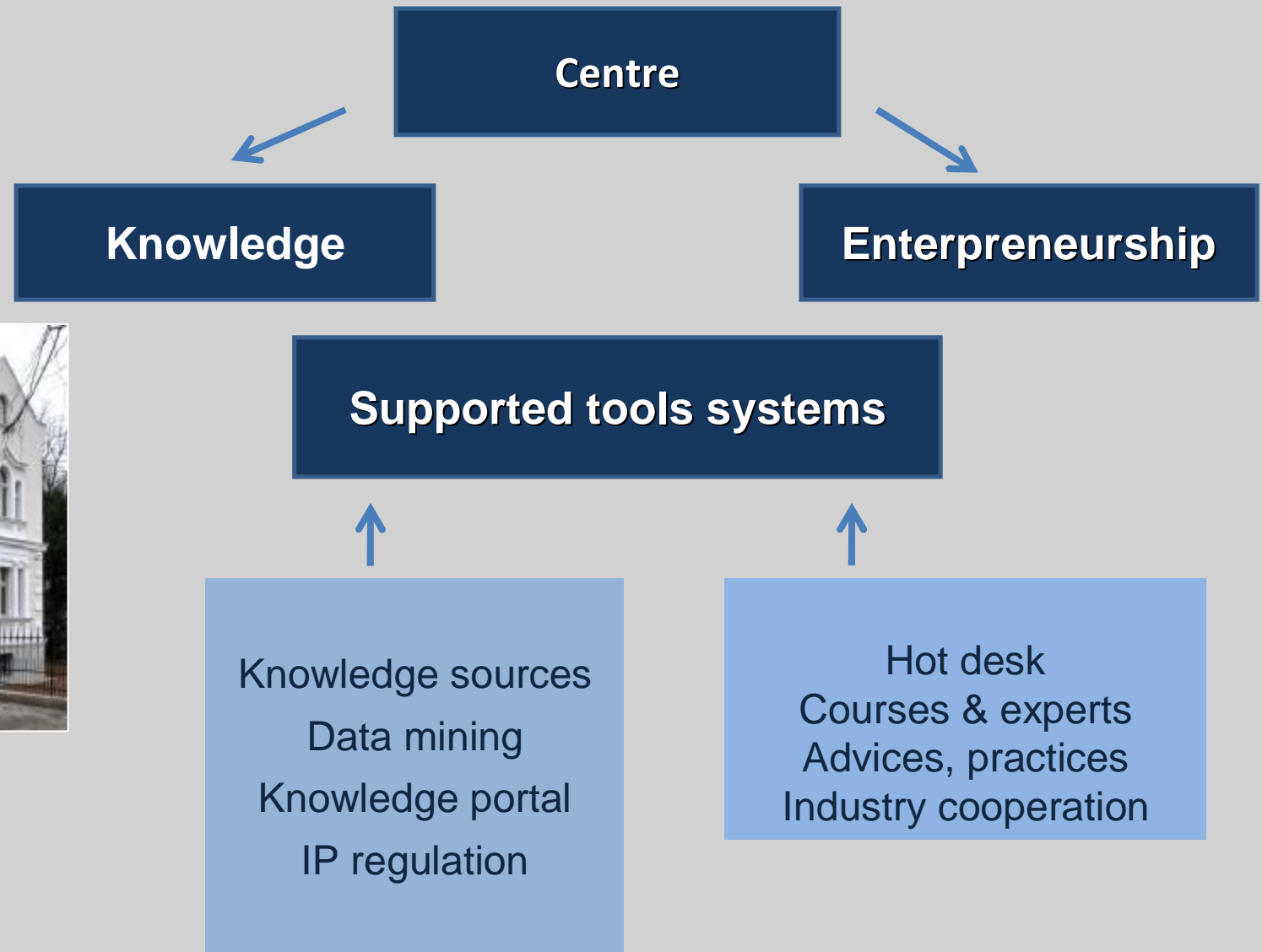
- § Management of the GUT's intellectual property
- § Commercialization and promotion of the results of the intellectual property
- § Organizing workshops, courses in how to organize academic activities, and how to protect intellectual property
- § Leading the Academic Incubator Project
- § Partnership with outside firms, including business institutions and local government





Politechnika Gdańska

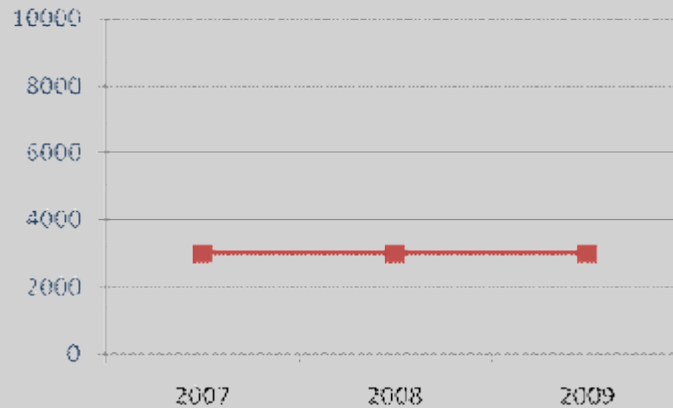
# GUT - Centre of Knowledge and Entrepreneurship



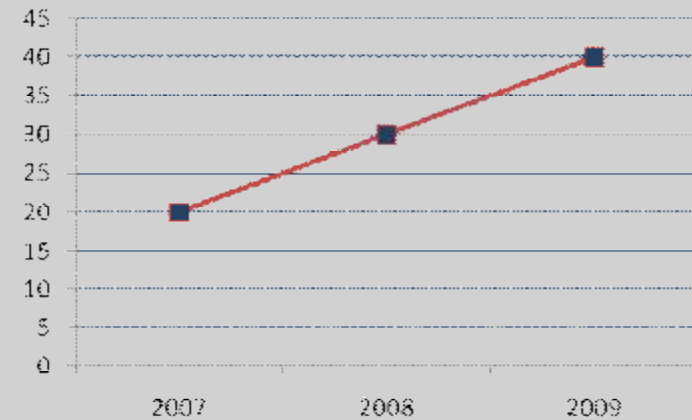


# Gdańsk University of Technology

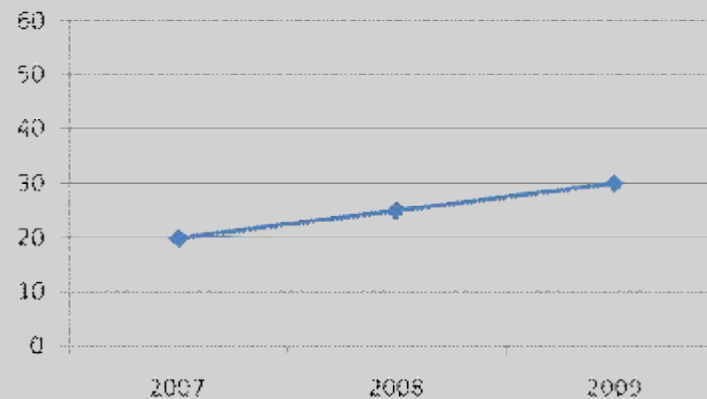
The number of publications



The number of inventions



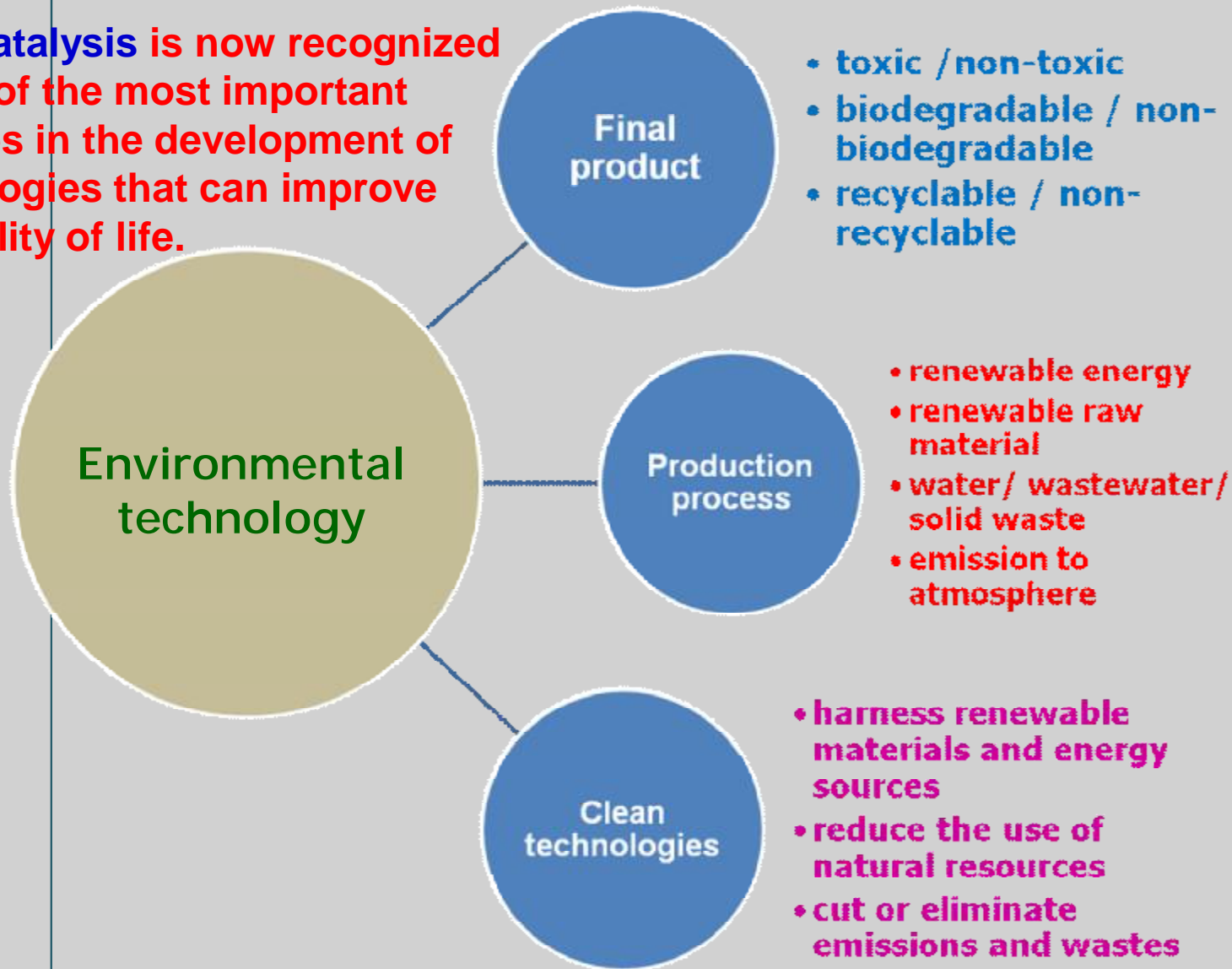
The number of structural projects





# Environmental Technology

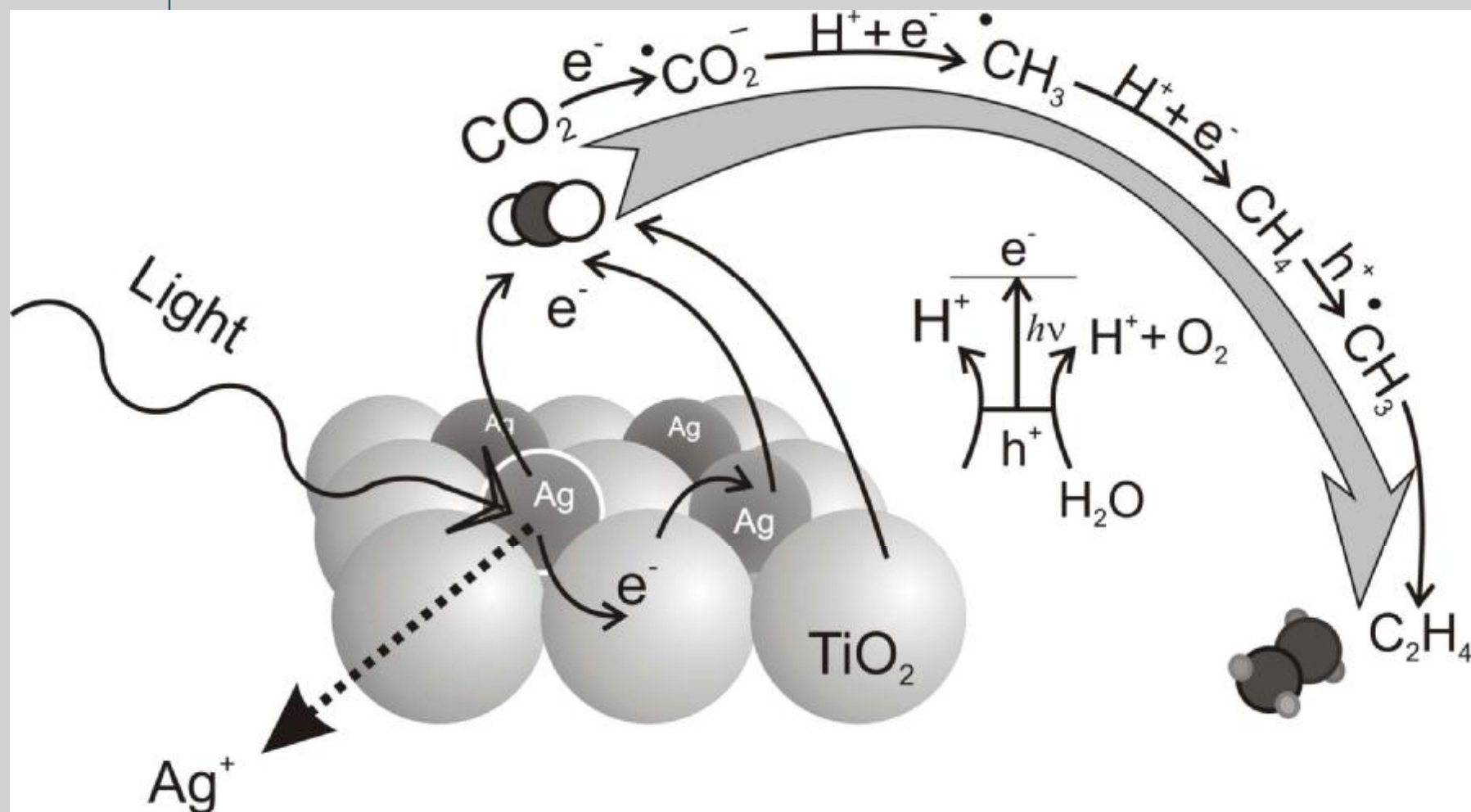
**Photocatalysis is now recognized as one of the most important sciences in the development of technologies that can improve the quality of life.**





Politechnika Gdańska

# Proposed mechanism of ethene formation at the surface of Ag-modified $\text{TiO}_2$







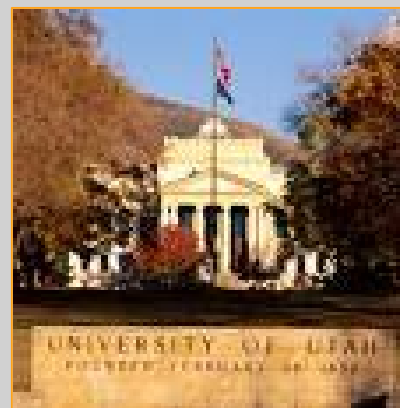
Politechnika Gdańska

# Cooperation between GUT and University of Utah



**Professor Jan D Miller**  
Departmental Chair  
The Ivor Thomas Professor of  
Metallurgical Engineering  
A member of the National  
Academy of Engineering

Collaboration has begun in 1981. Up to today, 35 students and researches have had research training at the University of Utah in the Prof. J.D.Miller group, which has resulted in numerous publications and joint projects.





Politechnika Gdańska



Prepared for:  
The Technical University of Gdansk  
Gdansk, Poland  
Attention: Dr. Antoni Nowakowski, Vice President

Prepared by:  
Gordon F. Jensen, Director  
Utah Engineering Experiment Station  
University of Utah, EMRO-104  
Salt Lake City, Utah 84112  
(801) 581-6348, Telephone  
(801) 581-5440, Fax

September 1, 1992

WORK-IN-PROGRESS REPORT

---

## THE ROLE AND NETWORKING OF THE UTAH ENGINEERING EXPERIMENT STATION

---



Prepared for:  
The Technical University of Gdansk  
Gdansk, Poland  
Attention: Dr. Antoni Nowakowski, Vice President

Prepared by:  
Gordon F. Jensen, Director  
Utah Engineering Experiment Station  
University of Utah, EMRO-104  
Salt Lake City, Utah 84112  
(801) 581-6348, Telephone  
(801) 581-5440, Fax

September 1, 1992



Politechnika Gdańska

# Gdansk University of Technology

*a technical university with imagination and future*



**Thank-you for your attention**