Silesian University of Technology

Horizon 2020 Seminar

November 19, 2012
Geography – Poland in Europe
Geography – Gliwice in Poland

Distance to:
- Katowice: 30 km
- Ostrava: 60 km
- Krakow: 100 km
- Wroclaw: 150 km
- Warsaw: 300 km
- Berlin: 500 km
- Lviv: 450 km
- Prague: 350 km
- Bratislava: 300 km
- Wien: 300 km
- Budapest: 350 km
Gliwice, seat of SUT

• Founded in 13th century
• Population: 190 thousand
• First rank in Newsweek Ranking of Business-friendly Cities
• Member of World Technopolis Association
• Two business incubators, numerous high tech companies
Gliwice, cradle of European heavy industry

1796 - first coke-fired blast furnace on European continent

1788 - first steam engine on European continent

Zinc, lead, silver, coal mines, steelworks, zinc smelters.
Transformation of economy

Association of 14 neighboring towns
Population 2mln, density 642 person/sq km

Region turns into high tech region
within 22 years employment in mining reduced from 400 thousand – to 120 thousand
99.3% companies - SME

Special Economic Zone
14 thousand jobs - €1.4 billion invested
Most attractive region for investments in Poland

Role of Silesian University of Technology
- engineering education
- triple helix
- top managers - third University nationwide
1844 Lvov University of Technology established.

Famous Professors: Banach (functional analysis), Ulam (Monte Carlo), Mończewski (nitrogen fertilizers, President of Poland), Bartel (geometry, Prime Minister)

After WW II Poland lost Lvov and gained Upper Silesia (Oberschlesien). Exodus of Lvov Professors to Gliwice (Gleiwitz, OS) and Wrocław (Breslau).
SUT today

Reestablished as SUT in 1945 in Gliwice State University governed by elected Rector and Senate

3,385 employees
30,433 students

Degrees conferred - cumulative
- 150 thousand graduates
- 3.5 thousand PhDs
- 550 DSc (habilitations)
SUT today

main campus based at Gliwice, nearly 140 hectar

three branch campuses in Katowice, Zabrze and Rybnik

www.polsl.pl
### Departments

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Automatic Control, Electronics and Computer Science</th>
<th>Civil Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>Electrical Engineering</td>
<td>Mining and Geology</td>
</tr>
<tr>
<td>Energy and Environmental Engineering</td>
<td>Applied Mathematics</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Material Science, Metallurgy</td>
<td>Transport</td>
<td>Organization and Management</td>
</tr>
<tr>
<td>Biomedical Engineering</td>
<td></td>
<td>College of Foreign Languages</td>
</tr>
</tbody>
</table>
SUT today

Research centers

- Biotechnology (BioFarma)
- Biomedical Engineering
- Physics
- Civil Aviation Staff Training for Central and Eastern Europe
- Mechatronics
- Advanced Defense and Safety Technologies
- Prosument Energy
- Geometry and Engineering Graphics

www.polsl.pl
International Research

Framework Programmes 5, 6, 7

Research Fund for Coal and Steel

COST European Cooperation in the Field of Scientific and Technical Research

EUREKA coordination of innovation efforts of governments, research institutes and commercial companies

KIC Knowledge and Innovation Community. Collocation center for clean coal technologies

Other international schemes and bilateral projects
Cooperation with industry

Selected industrial partners

- ALSTOM
- FIAT
- SIEMENS
- TAURO WYTWARZANIE
- OKOPEX GROUP
- FUJIFILM
- VATTENFALL
- SGL GROUP
- elektrometal S.A. Cieszyn
- FOSTER WHEELER
- FLUOR
- SANDVIK
- eDF
- Pratt & Whitney
- MINOVA
- RYFAMA
- GRUPA GWARANT
- DOZUT
Technopark Gliwice Ltd
joint venture

Silesian University of Technology
City of Gliwice
Special Economic Zone Katowice
Capital: €2M

- 2011 – National Leader of Innovation
- 2012 – National Best municipal corporation
Budget

Total budget - €100M per annum

- Ministry, teaching: 2
- Ministry, research, ranking list dependent: 5
- Ministry, research project, open competition: 21
- Industry: 18
- Own source revenues: 2

Total budget: €100M per annum
SUT awarded 2012 prestigious Forbes Diamonds for worth accretion. 12th rank in the province 103 nationwide. Open competition with free market companies.
Conforming with Bologna Process

- 3.5 years Bachelor 210 ECTS
- 1.5 year Master 90 ECTS
- 3-5 years PhD
- 1 year Post Graduate Certificate

38 fields of study

Teaching Quality Assurance System

Distance Education Platform – 44 thousand users of 1648 courses
International Education

Member of Society for Engineering Education (SEFI)
European University Association (EUA)
Santander Group (SG)

ERASMUS
- Student and staff mobility
  Agreements with 186 Universities of 27 countries.
  300 outgoing 100 incoming students/year
- Mundus—collaboration with Central America

TEMPUS IV modernization of higher education
in 27 countries in the Western Balkans,
Central Asia, North Africa and the Middle East.

CEEDPU– Central European Exchange Programme for University Studies