



Regional Innovation Park

UNIPRESS, CELESTYNÓW

Mazovia region

Sylwester Porowski

Institute of High Pressure Physics
Unipress
Polish Academy of Sciences

22.08.2007

Unipress' History

1972 Foundation of Laboratory of High Pressure Physics and Technology - Unipress based on High Pressure Semiconductor Research Laboratory of Institute of Physics PAS

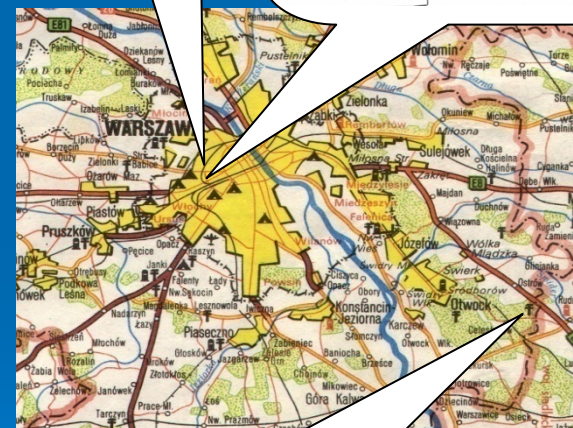
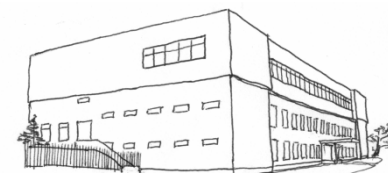
1982 High Pressure Research Center PAS

2004 Institute of High Pressure Physics PAS

New technologies building



Headquarters



Celestynów-Lasek



Current status of the Institute



1. R&D in solid state physics and materials sciences:

1. Physics of semiconductors, quantum structures and devices
2. Nanomaterials and nanocomposites
3. Biomaterials: protein under pressure, food processing
4. High pressure experimental techniques and equipment

2. High pressure physics and technology is a background for strong International position of the Institute:

2006 – 1st place in Minister of Science ranking in physics

2002 – EC Excellence Center in High Pressure Methods in Optoelectronics, Biophysics and Nanotechnology

2000 – EC Excellence Centre in High Pressure Physics and Technology



Staff -	100
Researchers-	50
PhD students -	15
Publications -	60-80/year
Invited lectures-	15-20/year

Institute's Structure



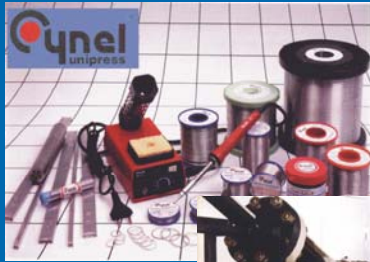
Physics of
semiconductors,
quantum structures and
devices

Nanomaterials
and
nanocomposites

Biomaterials

**High
pressure
experimental
techniques and
equipment**

Unipress high-tech spin-offs



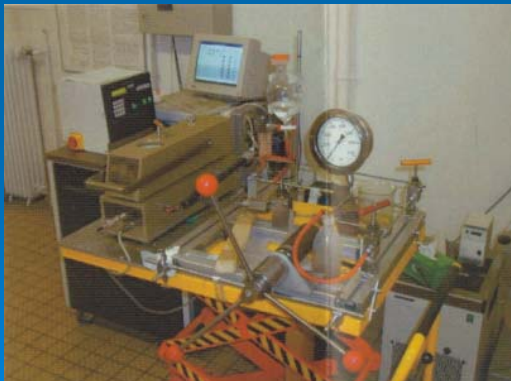
Cynel UNIPRESS, 1984



Hydron UNIPRESS, 1988



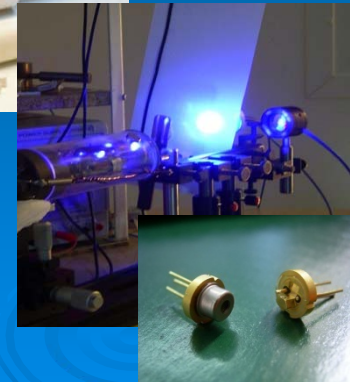
KD UNIPRESS, 1990



1994



WACER, 1992



TopGaN, 2001

UNIPRESS equipment
over 200 laboratories uses UNIPRESS
high pressure equipment

Location of the Park Celestynów



- **Celestynów Community has a long tradition in cooperation with Polish Academy of Sciences, Warsaw University of Technology and Warsaw Agricultural University**
- **The park can be located on the existing campus of the Institute of High Pressure Physics**
- **Access to highly trained personnel**

REGIONAL INNOVATION PARK



Park's shareholders:

- ✓ Local Authorities
- ✓ Institute of High Pressure Physics PAS
- ✓ Strategic companies

Share capital: 2.5 mln Eu

Intellectual capital:

- ✓ Short Wavelength Photonics Consortium
- ✓ Warsaw University of Technology
- ✓ Warsaw Agricultural University
- ✓ Institute of Economics PAS
- ✓ Institute of High Pressure Physics PAS

Costs

Work space and basic equipment
for the first 10 planned companies : **7 mln Eu**

Financial resources

Regional and Central Structural Funds
Operating programs for Novelty Economy,
NCBR (National Center of Research and Development) programs

REGIONAL INNOVATION PARK



Scope of activities:

1. **Building and leasing of laboratory and industrial space**
2. **Programs for commercialization of technologies**
3. **Specialized seed investments**
4. **Cooperation with other technology parks, mainly Warsaw Technology Park "TechnoPort" and Plock Industrial and Technological Park**
5. **Cooperation with New Connect of Warsaw Stock Exchange**
6. **Cooperation with regional companies**
7. **Cooperation with Local Authorities**

Technology for 10 new spin-off companies

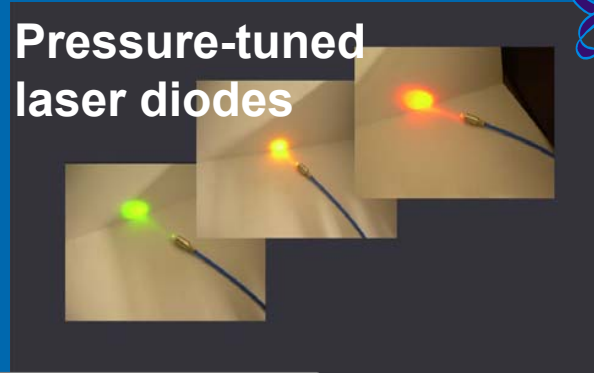
Ceramics



Equipment for Nanopowders synthesis



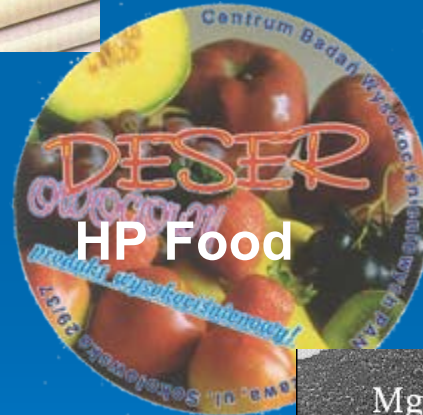
Pressure-tuned laser diodes



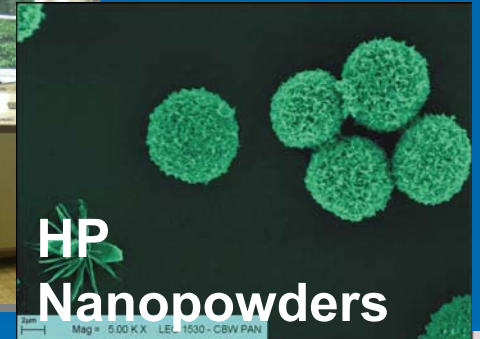
HP food equipment



Hydroextrusion



HP Food

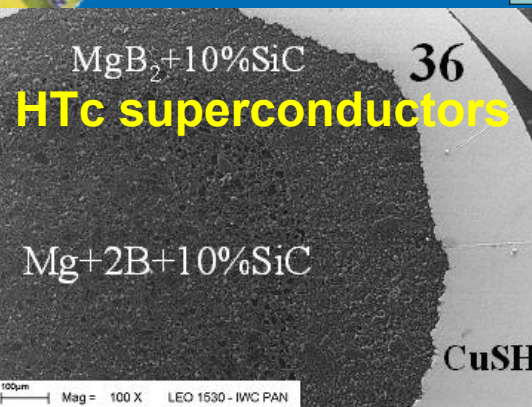


HP Nanopowders

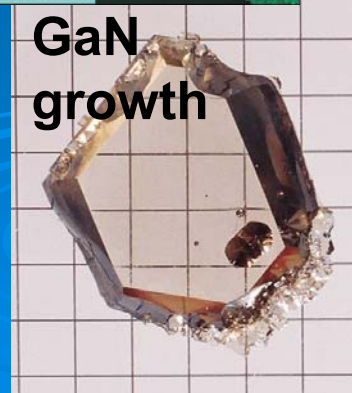
Unipress micromachining



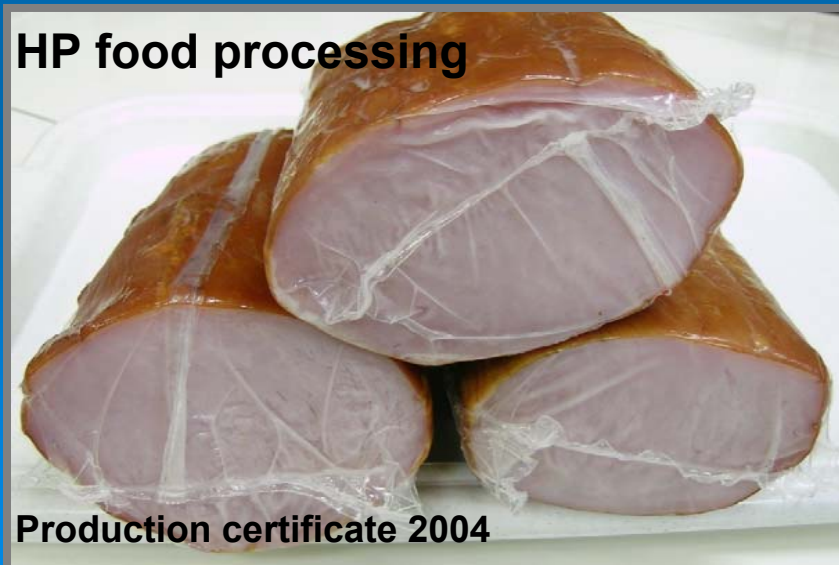
$MgB_2 + 10\%SiC$ 36
HTc superconductors



GaN growth



The first companies



Main role of the Park



**Acceleration of the commercialization process
of new technologies**

Seed investments

Leasing of laboratory and industrial space

Professional management

