



Prospects for Returning Young Hungarian Professionals

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Freedom of science



Why me?

Made in Florida by myself during working for NASA



Where do we come from? Where are we? Where are we going?



Paul GAUGUIN, 1897 (Boston, Museum of Fine Arts, 141x376 cm)



Questions to think about today

Where should we live? Hungary or abroad?

What is the recent situation and potential future in Hungary?

What is the potential future in abroad?

Who is in abroad? Scientists, Researchers, Inventors, Investors, Business Connections.

How can we help our Hungarians?

How can we connect Hungary better to the world?

How can we link individual Hungarians in the world better?



Recent situation in Hungary

Science, research and development change from academic research towards product oriented research.

What is the Product? Who are the Actors? Who is the Customer?

Actors in Hungary:

- Ministry of Economics,
- NKTH (National Research and Technology Office),
- Universities with Technological Transfer Offices, RET (Regional Science Centre), KKK (Cooperative Research Centre),
- Academic Institutes (reforming),
- Non-profit: Bay Zoltan Foundation for Applied Research,
- Polus program, clusters, platforms.
- Industrial Research Institutes (GE, Knorr Bremse, Sanofi etc.)



Bay Zoltán Foundation

Bridging Innovation

Bay Zoltán the Largest Applied
Research Establishment in
Hungary

www.bayzoltan.hu



Why was the Foundation named after „Bay Zoltán”?

24 July, 1900
(Gyulavári)

4 October,
1992
(Washington)



6 February, 1946:
Moonradar-test

1983
Definition of the
length, the **m.**



Institutes of Bay Zoltán Applied Research Foundation



Budapest

Bay-IKT
Institute for Applied
Telecommunication
Technologies

- Ambient Intelligence
- Embedded Systems
- Vehicular Systems
- Intelligent Transportation Systems
- Wireless Technologies
- Location Tracking
- Sensor Networks

Bay-ATI
Institute for Materials
Science and
Technology

- Metal technology and simulation
- Laser technology
- Polymer composites
- Electrochemical and mechanical alloying
- Environmental sensors and monitoring

Szeged

Bay-BIO
Institute for
Biotechnology

- Applied microbiology
- Bioremediation
- Tumor pathology and molecular diagnostics

Bay-GEN
Institute for plant
genomics and human
biotechnology

- Plant genomics
- Human biotechnology



Miskolc

Bay-LOGI
Institute for Logistics
and Production
Systems

- Information technology
- Rural development
- Mechatronics
- Energetic
- Structural integrity
- Recycling and logistics
- Manufacturing methodology
- Measurements and control
- Materials Development

**Bay-NANO
Medicine**

- Nano-medicine

Bay-NANO

- Nano-metrology
- Nano-dispersions
- Nano-composites
- Nano-deformation



Facts

- Non-profit laws were introduced in Hungary in 1992
- Bay Zoltán Foundation was established in 1993
- Founder: OMFB (National Council for Technology Development)
- Total assets:
 - ~20 m Euros (2006) **24 m Euros (2007)**
- Total revenue:
 - ~ 7 m Euros (2006) **10 m Euros (2007)**
- Permanent staff: 155 (2006) **200 (2007)**
- Contract staff: 80 (2006) **110 (2007)**



Key points

Elements of our portfolio

- Internationally Recognised Competences
- High-Tech Services
- Projects resulting in Intellectual Properties

In focus

- Research
- Innovation
- Technology Transfer



Bilateral cooperations are in the focus

Establishment of the new Bay Zoltán Institutes are focusing on bilateral cooperations with different nations:

Information Technology: Bay-Ikti - **Germany**

Nanotechnology: Bay-Nano **Russia**

Genetics: Bay-Gen **France**

Leaders and key persons of the institutes are internationally recognized Hungarian scientists returning back from USA, France, Germany:

Prof. János Hajtó, Prof. Kondorosi Éva, Dr. András Pungor
Dr. János Szebeni, Dr. Norbert Babcsán and others.



The Need

Individuals: Attractive Environment (individual and professional)

Bay Zoltán: Human Capital with International Contacts and Resources

Hungary: Brain (create, maintain and improve and network of Hungarian collaboration in Business and Science globally)



Association of Hungarian Researchers in Germany



Facts and Figures

- Database with 150 researchers.
- Home page:
<http://nmkt.exta.hu>
- 10.14.2005 first conference with 40 participants at the Hungarian Embassy in Berlin.





Other activity for supporting Hungarians abroad



Database of Hungarian
Researchers abroad
Contacted: 200
Potential: few 1000

NKTH data base through the Hungarian Scientific
Counsellor Network



Mission statement

"Szükséges a külföldön élő magyar kutatói közösségek magyarországi háttérintézményének megalakítása, egy Külföldi Magyar Kutatói Hallózat kialakítása. Szorgalmazni kell legálabb a TÉT attaséi hallózat országaiban magyar kutatói közösségek megalakulását és fenntartását illetve a külföldi magyar szakmai muhelyekkel való bilaterális kapcsolatfelvételt. Elo kell segíteni a brain gaint, azaz külföldön több éves tapasztalatot szerzett magyar kutatók és innovációs szakemberek hazatelepülését. Tért kell adni külföldi magyar kutatók tevékenységének széleskörü bemutatására a magyarországi médiában."



Actions

- Newsletters and Information portal <http://hudoc.extra.hu> .
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- Hungarian PPP Forum of PhDs, Postdocs, Professors (Young, Active and Mentors) regularly in Hungary and abroad.
- Introduction of Hungarian Scientists from abroad in the Hungarian Media.
- Organization development for Homecoming (administration and operation).
- Network building integrate NKTH, MTA and foreign databases.



Thank You