



Cosylab – A Provider of Control Systems, Specialized in Large Physics Facilities

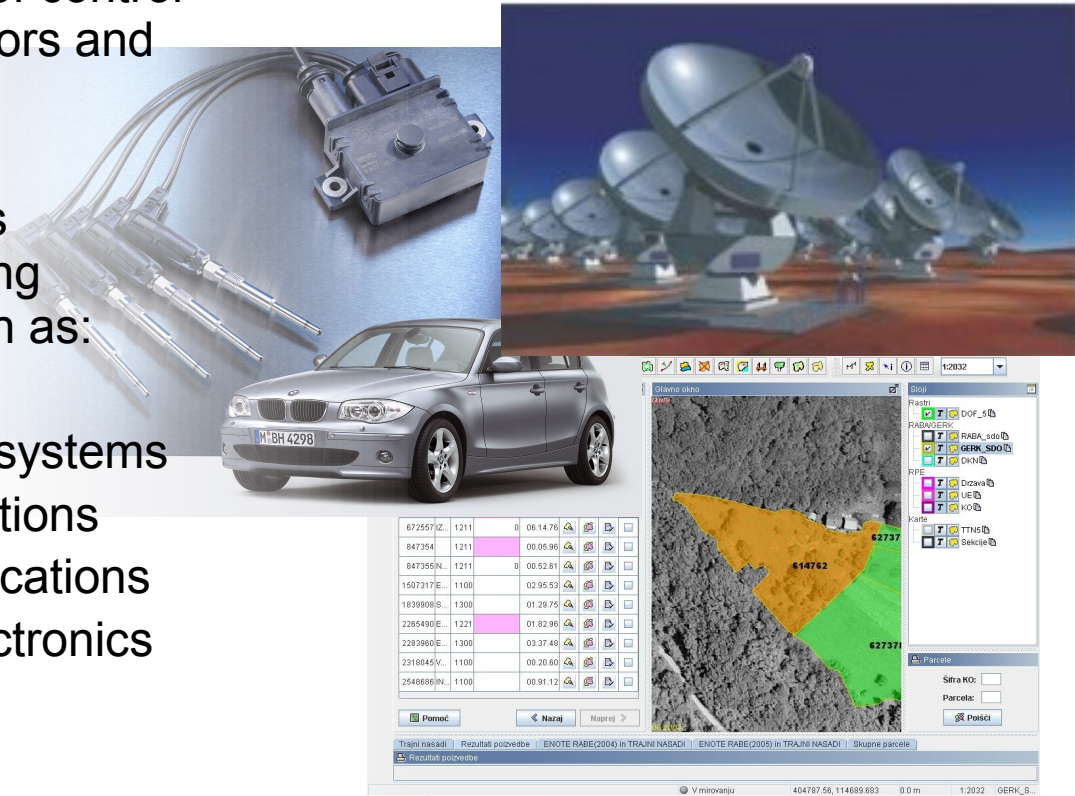
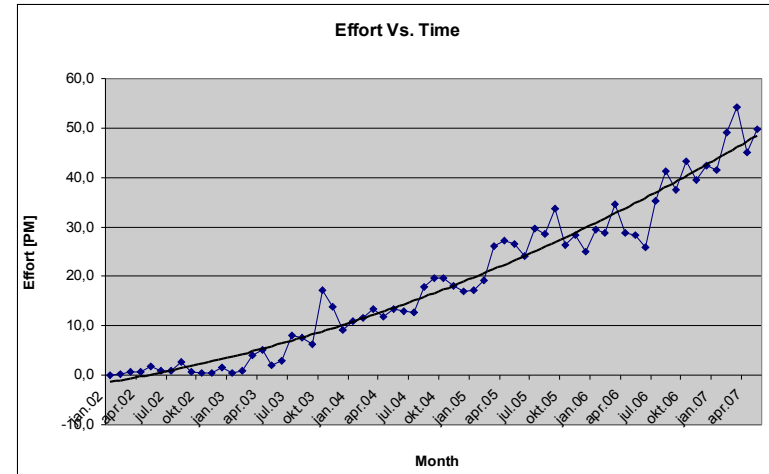
Anže Žagar

anze.zagar@cosylab.com

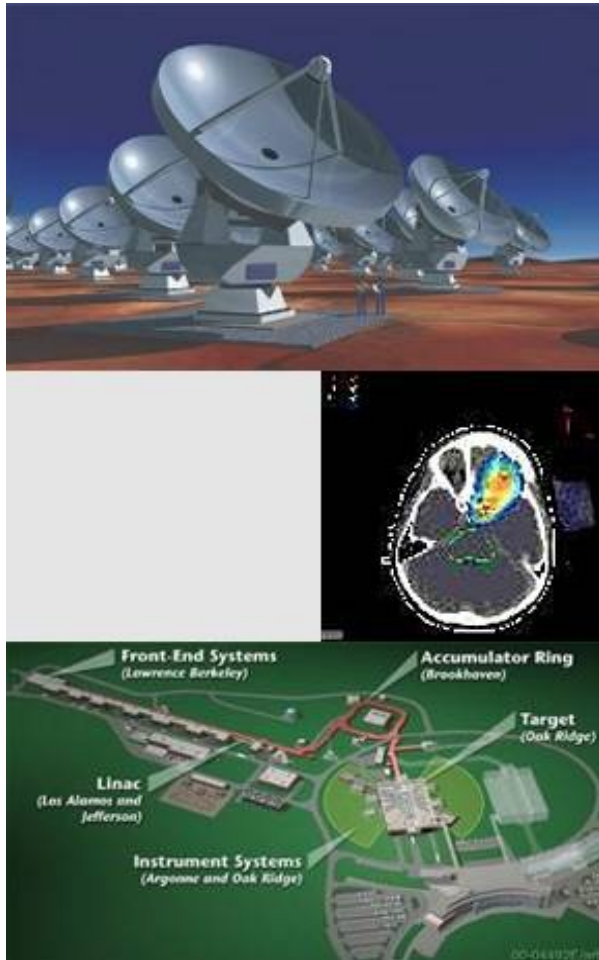


The Company Cosylab

- Stable growth from 2 employees in 2001 to 55 employees in 2007
- 50+ customers on 4 continents: top world laboratories, governments and industry
- Worldwide leader in the field of control systems for nuclear accelerators and radio telescopes
- Develops and commercializes products with highly demanding electronics and software, such as:
 - control systems
 - geographical information systems
 - business intelligence solutions
 - solutions for telecommunications
 - advanced automotive electronics



World Leader for Nuclear Accelerator and Radio Telescope Control Systems



■ ALMA (900 M €)

- World's largest array of radio telescopes (50-64 antennas, each 12m in diameter)
- Located in Atacama desert of the Chilean Andes at 5000m altitude
- Joint project of EU, USA and Japan
- **We developed the core of the control system**

■ MedAustron (130 M €)

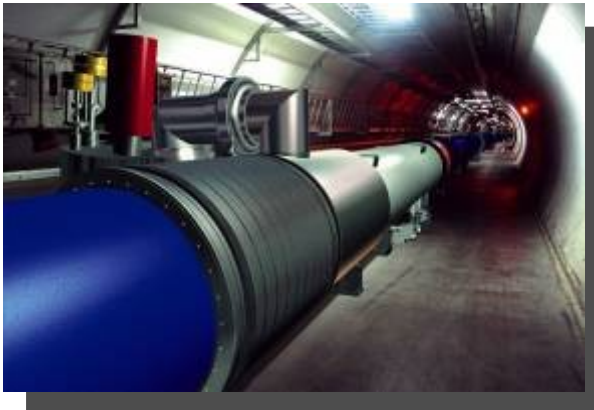
- Heals brain tumor

■ SNS (1300 M US\$)

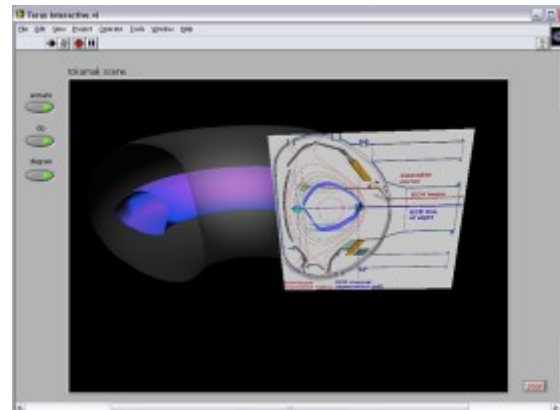
- World's strongest neutron source, located in Oak Ridge, Tennessee, USA
- A partnership of 6 U.S. national institutes

Cosylab Cooperates on 7 of 10 World's Largest International Scientific Projects

- ALMA, SNS, FAIR, LHC, ILC, ITER, XFEL
- What is missing? International Space Station (HFS), James Webb Space Telescope (JWST), Mars Exploration?

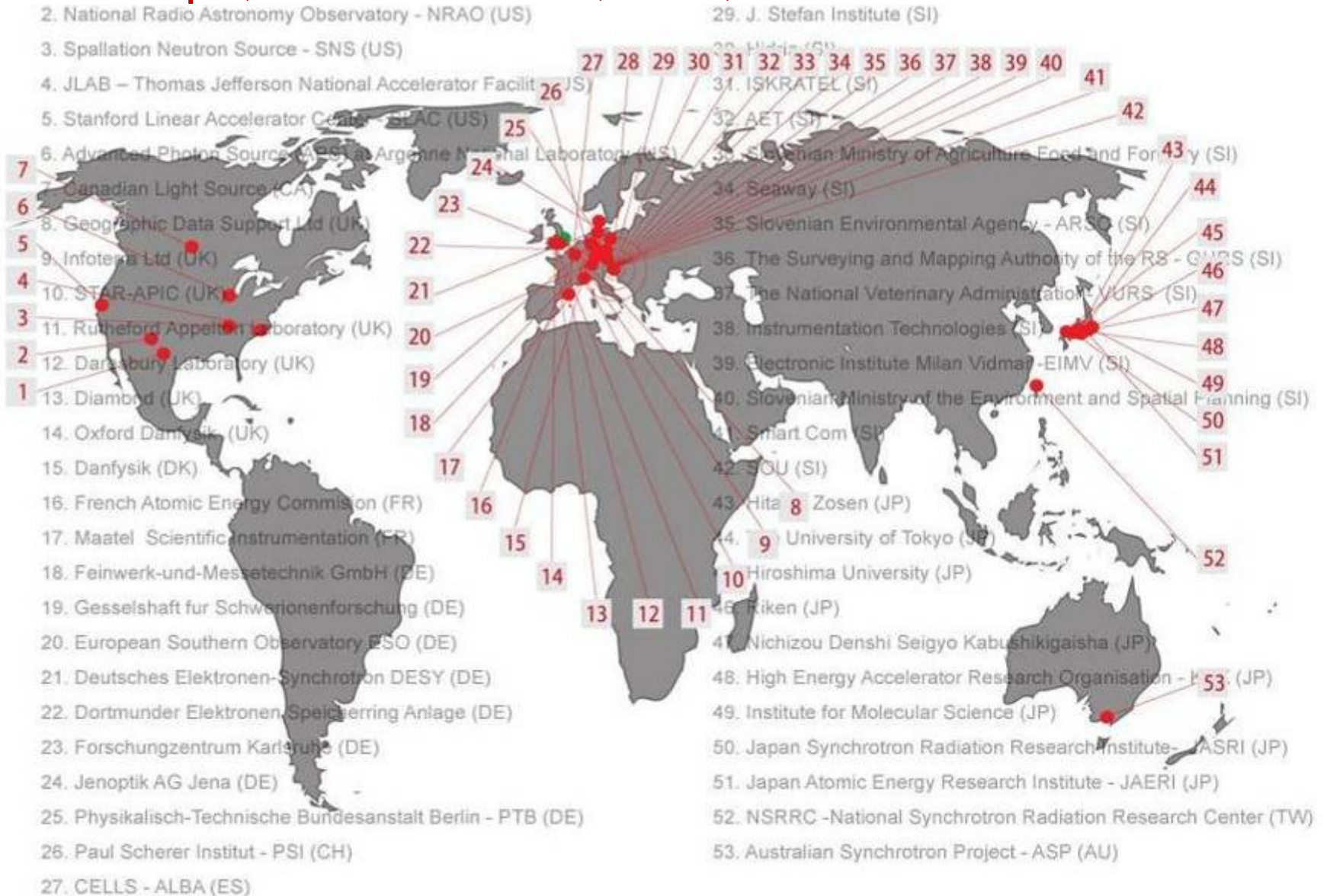


CERN Large Hadron Collider
“the most powerful instrument on earth”



ITER
“one of the most challenging and innovative scientific projects in the world today”

Customers From All Over the World: Europe, North America, Asia, Australia



Students???

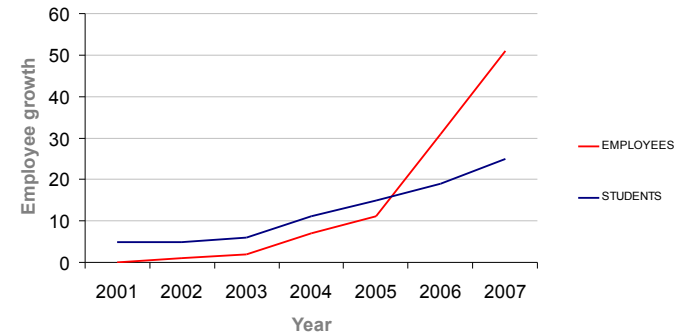


Yes, Students – Professionals

■ How it all started?

- 1996-2001: 1 PhD and 6 students
- 2001: students need employment, Cosylab was founded as a “spin off” from the Josef Stefan Institute

- Proper business plan: globally, there was a niche market



■ Talented high school and university students are still joining

- 2008: 40 full-time employees, mostly started as students
- Over 30 students, who are currently gaining experiences on serious projects
- We provide creative environment and unlimited opportunities
 - Work abroad at top laboratories in the world
 - Attendances of international conferences
 - CosyAcademy: internal specialized education courses

■ We compete with Silicon Valley!

- We are no worse than Americans
- European schools and technical Universities are competitive
- We succeeded with perspective students, just like you!

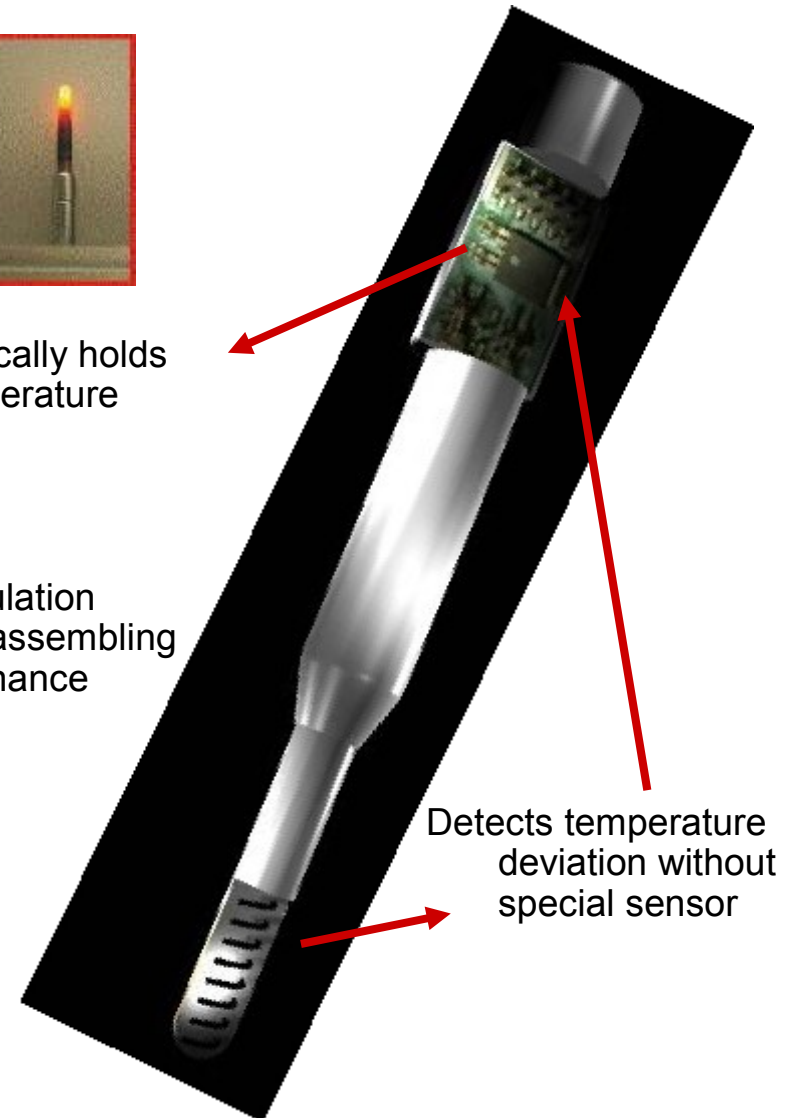
Patents on Diesel Glow Plug With Integrated Electronics and Temperature Regulation



Potential: Only in Europe, 7 million vehicles with diesel engine are produced each year

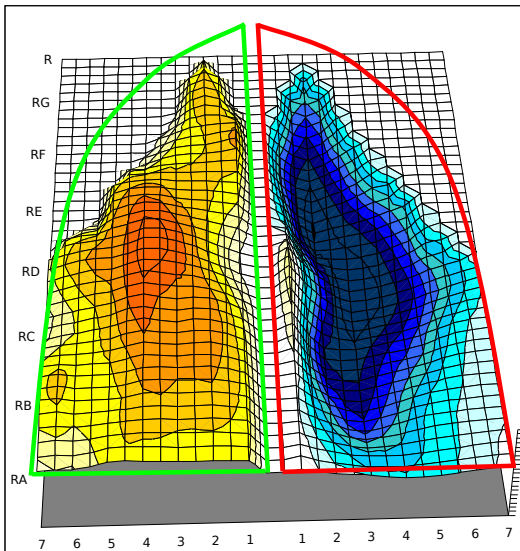
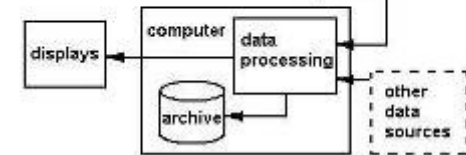
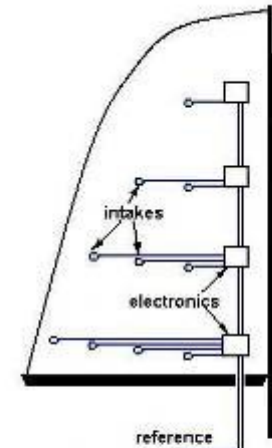
Automatically holds temperature

No external regulation
-simple for assembling
and maintenance



CosySail – For Regatta Yachts From Olympic Classes to America's Cup

- Computer controlled sail optimizer
 - A network of sensitive pressure sensors on both sides of the sail
 - Electronics for telemetry
 - Shows pressure profile over the entire sail in real-time
 - Stores data for later mathematical analysis

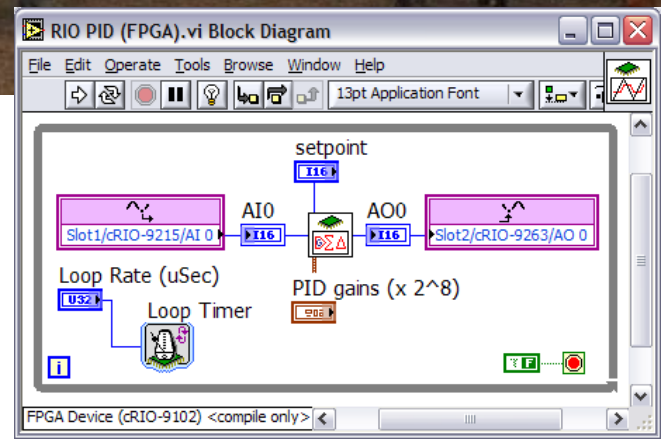


Invited to National Instruments (Microsoft for CS)

Legendary NI founder
Dr. T.

Legendary Slovenian
chocolate Gorenjka

Joc Cosylab T-Shirt Mark



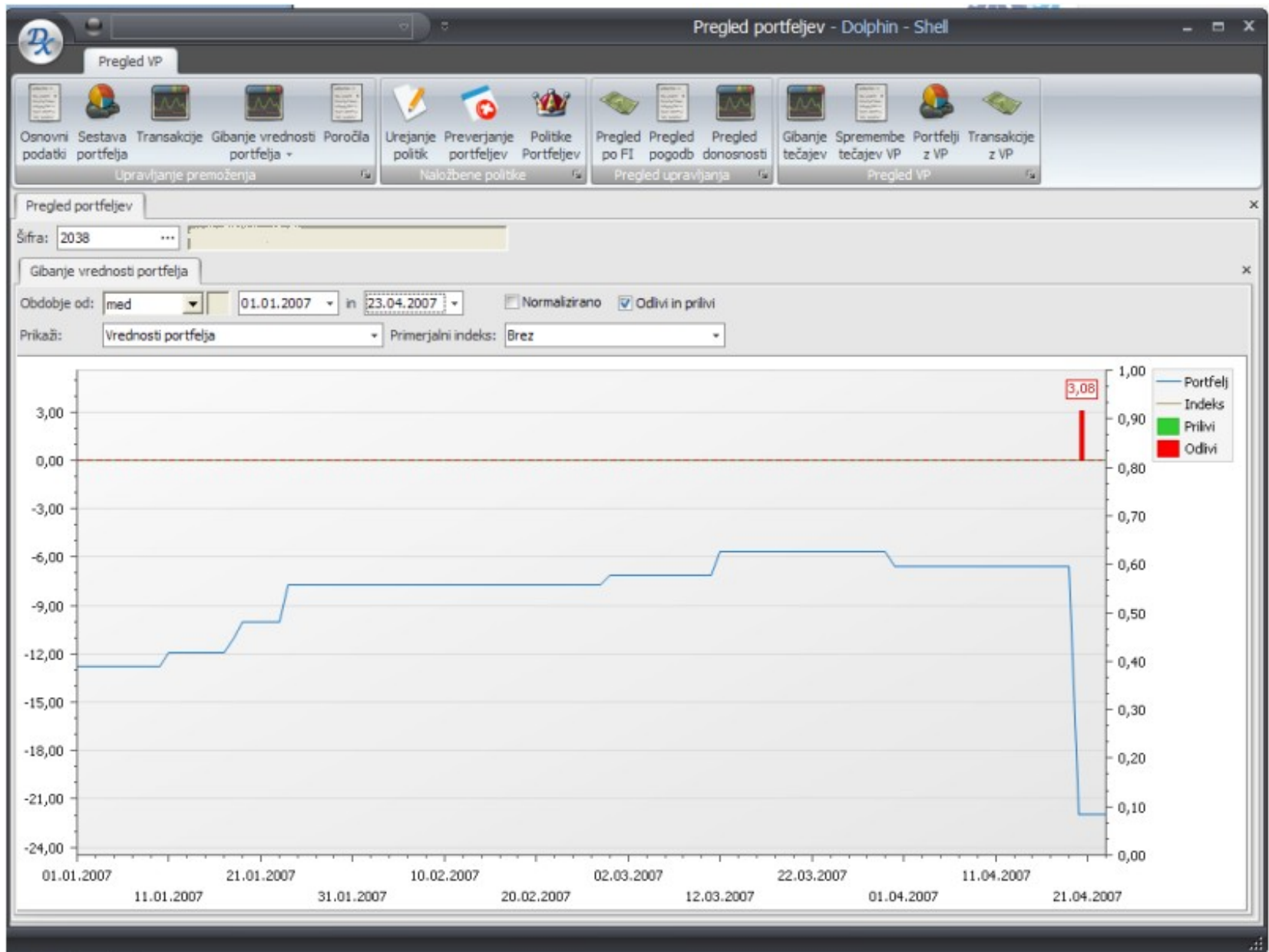
Joint Venture With Sincrotrone Trieste (Italy)

- Kyma, a company to produce undulators for synchrotron radiation light sources (FELs and electron storage rings)



- Public-private partnership, Technology transfer, Cross-border cooperation
- We master not only both the research and business cultures, we know also to join them effectively and get them to cooperate

Applications for Stock Brokerages



Geographic Information Systems (GIS)

The screenshot displays a web-based GIS application running in a Microsoft Internet Explorer browser. The browser window title is "Giselle demo - Microsoft Internet Explorer" and the address bar shows "D:\Giselle\Demo\ShowApplet.html". The application interface includes a "SnapToolBar" and a "Main view" showing a map with yellow and blue overlays. A "Layers" panel on the right lists "QuickBird" and "MultiBand". Below the map is a "Query results" table with columns for "Column" and values. To the right, an "ELS-Self Assessment Demo Application" window is open, featuring a table with columns for "CODE", "Target Points", "Your Points", and "Visual Key". This table lists various codes and their corresponding point counts and visual representations. A smaller map on the right side of the application shows a detailed view of a field with colored overlays and a red boundary.

Query results

Column	
POLY	120
RABA	1100
AREA	64863.551701514
PERIMETER	1172.004
HECTARES	6.486
MAP	K2701
NEW_ID	K2701_120

ELS-Self Assessment Demo Application

CODE	Target Points	Visual Key
0	965	[Red line]
	655	
	310	
CODE	Your Points	Visual Key
B1	188	[Green line]
	105	
	83	
B6	150	[Red circle]
	150	
D2	294	[Purple dashed line]
	294	
E1	200	[Green square]
	29	
	171	
E2	281	[Yellow square]
	281	
P1	1113 (965)	

Selected Item: Option 2
Category: B1

Geographic Information Systems (GIS)

<http://www.geopedia.si>

The image displays two overlapping screenshots of the Geopedia website. The background screenshot shows the main interface with a search bar containing "Ribčev laz 63" and a map of Bohinj Lake. The foreground screenshot is a zoomed-in view of the panoramic photo viewer for "Bohinjsko jezero, vzhodni breg".

Geopedia - Beta - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Back Forward Reload Stop Home <http://www.geopedia.si/> Cosylab Wiki

Iskanje: Išči Naslovi Sloji Karte in Zapisi

Geopedia.si

Karta Sloj Osebn Rezultati

[Nazaj](#)

Panoramske slike

Bohinjsko jezero, vzhodni breg

Slovenija v fotografijah

Cerkev

Slike

Sv. Janez

Občine

Bohinj

Tolmin

Naselja

Stara Fužina

Ribčev Laz

Ime: Bohinjsko jezero, vzhodni breg

Tema: [Polrajina](#)

Prostorska slika:

Za ogled slike v panoramskem načrtu kliknite na sliko, po končanem ogledu pa kliknite na področje zunaj slike.

Vir: [Burger](#)

Avtor: Boštjan Burger

Vir:

500 m

Transferring data from portal.geopedia.si...

Transferring data from www.geopedia.si...

What Do We Have to Offer?

In no particular order:

- free courses
- remote work (from home or university)
- help from experienced mentors
- daily fresh fruit
- laptop
- work abroad (Germany, Switzerland, USA, ...)
- stimulative payment
- interesting and versatile work, full of challenges from all kinds of fields (computer science, physics, mathematics)
- inter-divisional work (control systems/GIS/stock applications/...)
- location close to faculties of mathematics, physics, computer science and electrical engineering of University in Ljubljana
- option to complete compulsory training required by some studies
- opportunity to get a status of young researcher in industry for postgraduate studies
- employment opportunity
- ...

Invitation

- Are you looking for part-time student work, a full-time job or maybe just a summer internship? Would you like to join our team?

- Yes? You are invited to send us:
 - A brief biography
 - Your availability over the summer or any other time of the year
 - Your interests (accelerators, GIS, stock brokerage applications)
 - Are you interested to do a short course in Java and/or EPICS control system?
 - Are you interested in summer internship at DESY institute in Germany next year (about August)?

over e-mail: marjana.frantar@cosylab.com