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de l'Union européenne

2009



Roger FOUGERES

Vice President - Rhône Alpes Region

Higher Education and Research

Conference Research Infrastructures and the Regional Dimension of ERA
Prague
Congress Center
24 - 25 March
2009

Outline

1. Rhône-Alpes features and Regional Policy
 2. Rhône-Alpes & RIs
 3. Academic and Economical impact

Rhône-Alpes

6 millions inhabitants: 2nd French Region , 6th in Europe

GDP 173 billion €: 2nd French Region , 7th in Europe

15 Clusters, of which 3 at world level

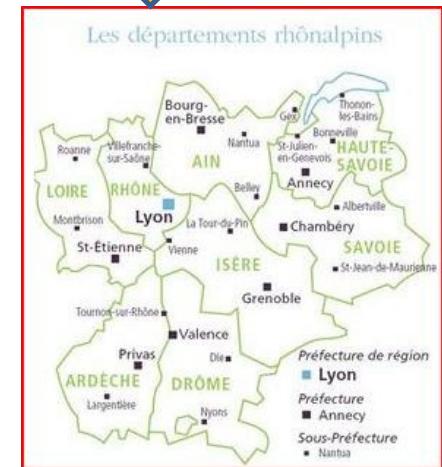
2nd French University :

230.000 students

600 Labs

19.000 Research scientists

Unique ERA site for
Large Scale Research Infrastructures (LSRIs)



Régional Policy in Higher Education & Research

SRESR : “Schéma Régional d’Enseignement Supérieur et de Recherche”
implemented in 2005

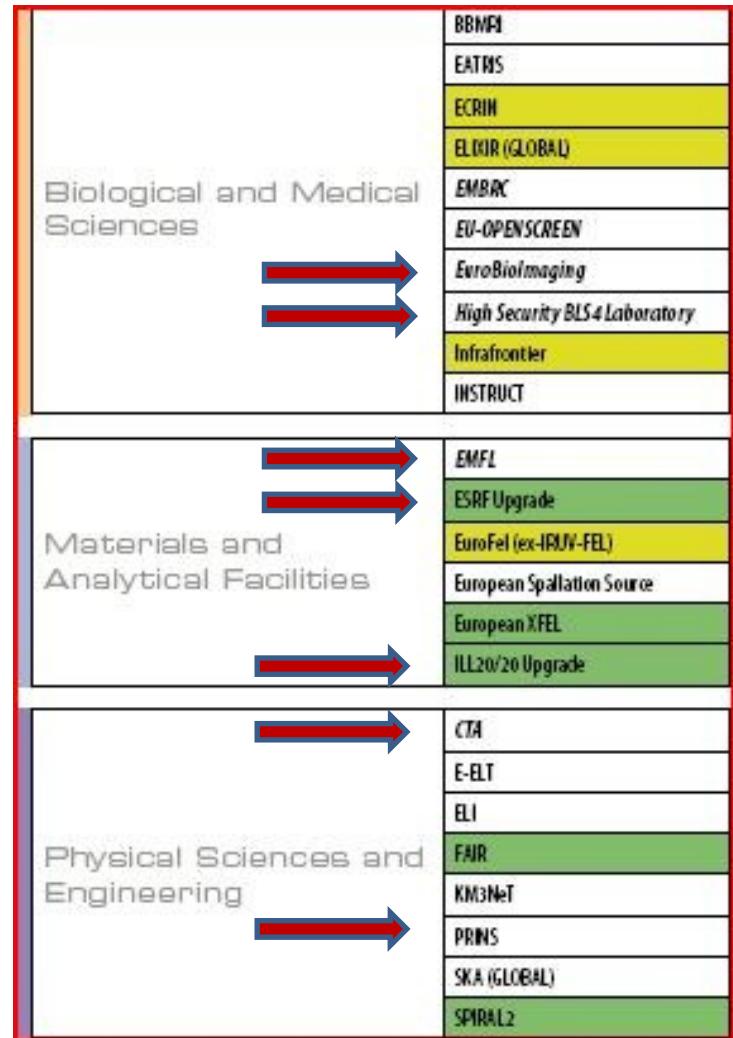
- Promote Knowledge Society
 - Organize the Scientific Communities including effect of LSRIIs
 - Support for Public – Private Research cooperation (“Clusters”)
 - Support Knowledge Transfer towards Economy & Society
 - Research : attractiveness and international “rayonnement”
 - unique role of LSRIIs
 - Contributions to French and EU

Rhône-Aïpes and



Strong implications in several
ESFRI programmes :

- “Material and analytical facilities”
- “Physical sciences and engineering”
- “Biological and Medical Sciences”



Rhône-Alpes and ESFRI

LSRIs

- ILL** : Neutron facility
- ESRF** : Synchrotron X-rays facility
- EMBL** : European Molecular Biology Lab

Network Contributions

MINATEC LNCMI LSM P4 CLEA IN2P3	Micro-Nano Electronics High Magnetic Fields Underground BioSafety level 4 Environment & Analytic CERN & Astrophysics	<i>Grenoble</i> <i>Grenoble</i> <i>Modane (Savoy)</i> <i>Lyon</i> <i>Lyon</i> <i>Annecy - Lyon -</i> <i>Grenoble</i>
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Biosafety level 4 Lab



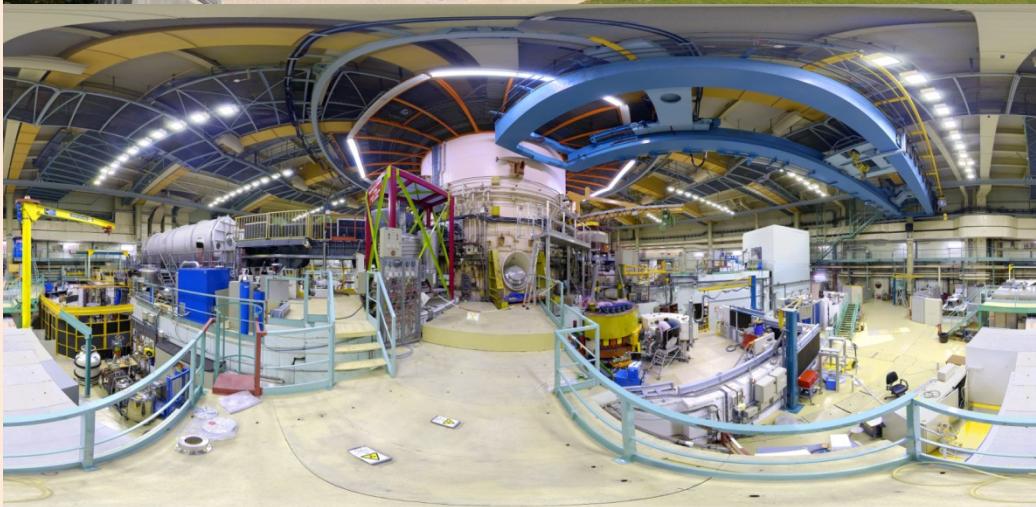
European Strategy Forum
on Research Infrastructures



- Select and promote the development of RIs within the biological and medical sciences
 - European high security BSL4 laboratories integrated in the new roadmap
 - Coordinated by INSERM (H. Raoul)
 - Objectives: To strengthen the EU capacities in the fields of diagnosis and study of highly pathogenic infectious micro-organisms

Panoramic view of experimental ILL area

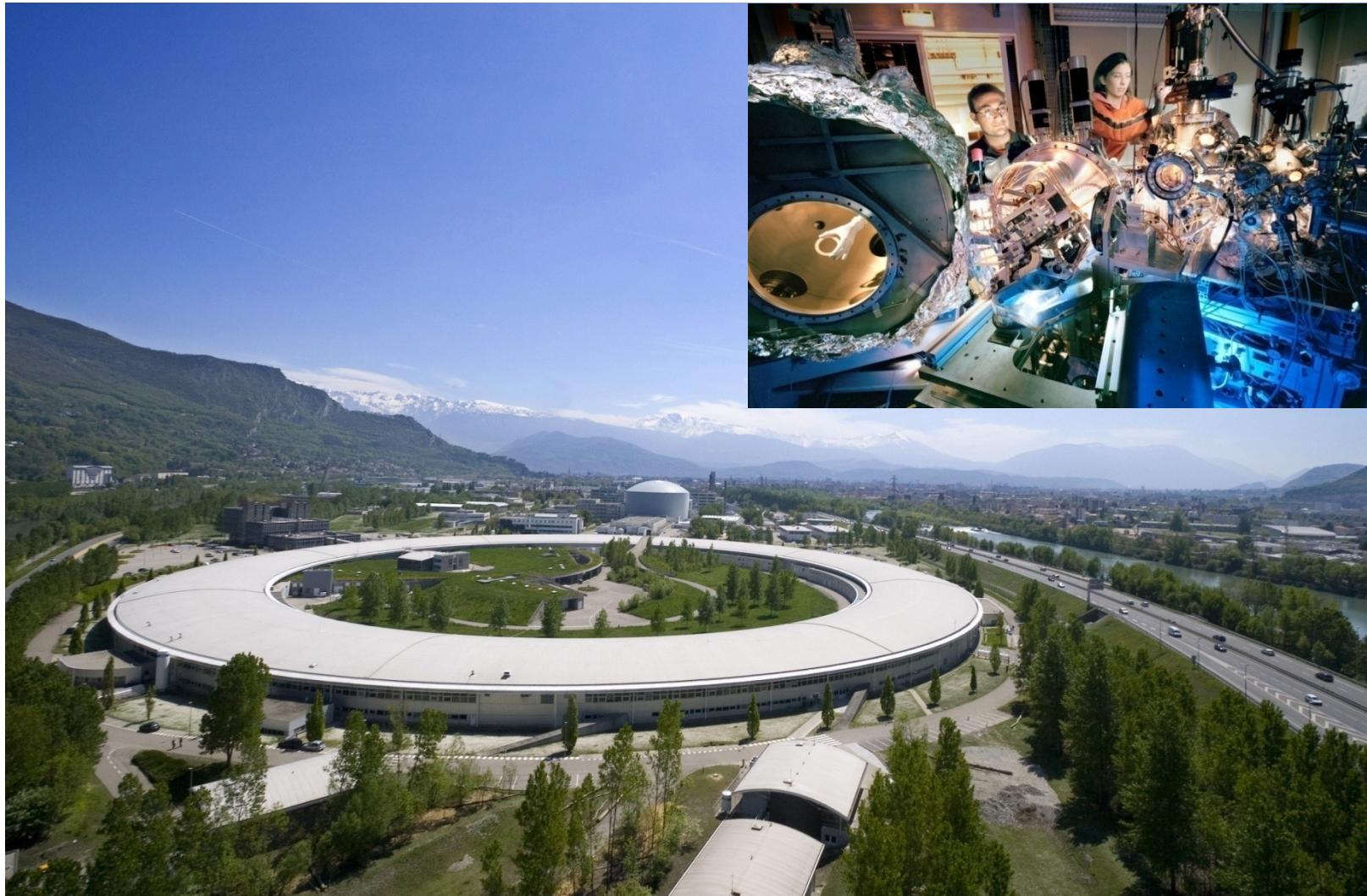
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Région Rhône-Alpes

Panoramic view of ESRF

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Région
Rhône-Alpes

Towards an ESRF-ILL-EMBL European campus

- These 3 RIs develop each forefront instrumentation for their specific experiments
 - They develop **synergies** between them :
 - ❖ **PSB** = Partnership for Structural Biology, created in 2002;
additional partners are CEA, CNRS, and University
 - ❖ **FaME38** = Facilities for Material and Engineering
mechanical properties in a non-destructive way
 - ❖ **PSCM** = Optimised lab for complex materials (polymer, gel, plastics)

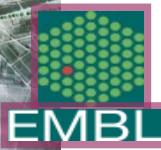
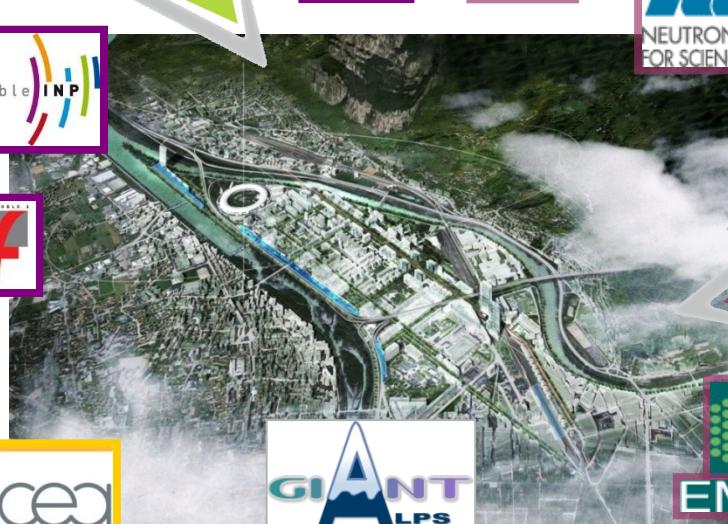
Altogether, they are very attractive : **more than 8000 User visits per year !**

GIANT project partners

Academic partners



Large scale instruments

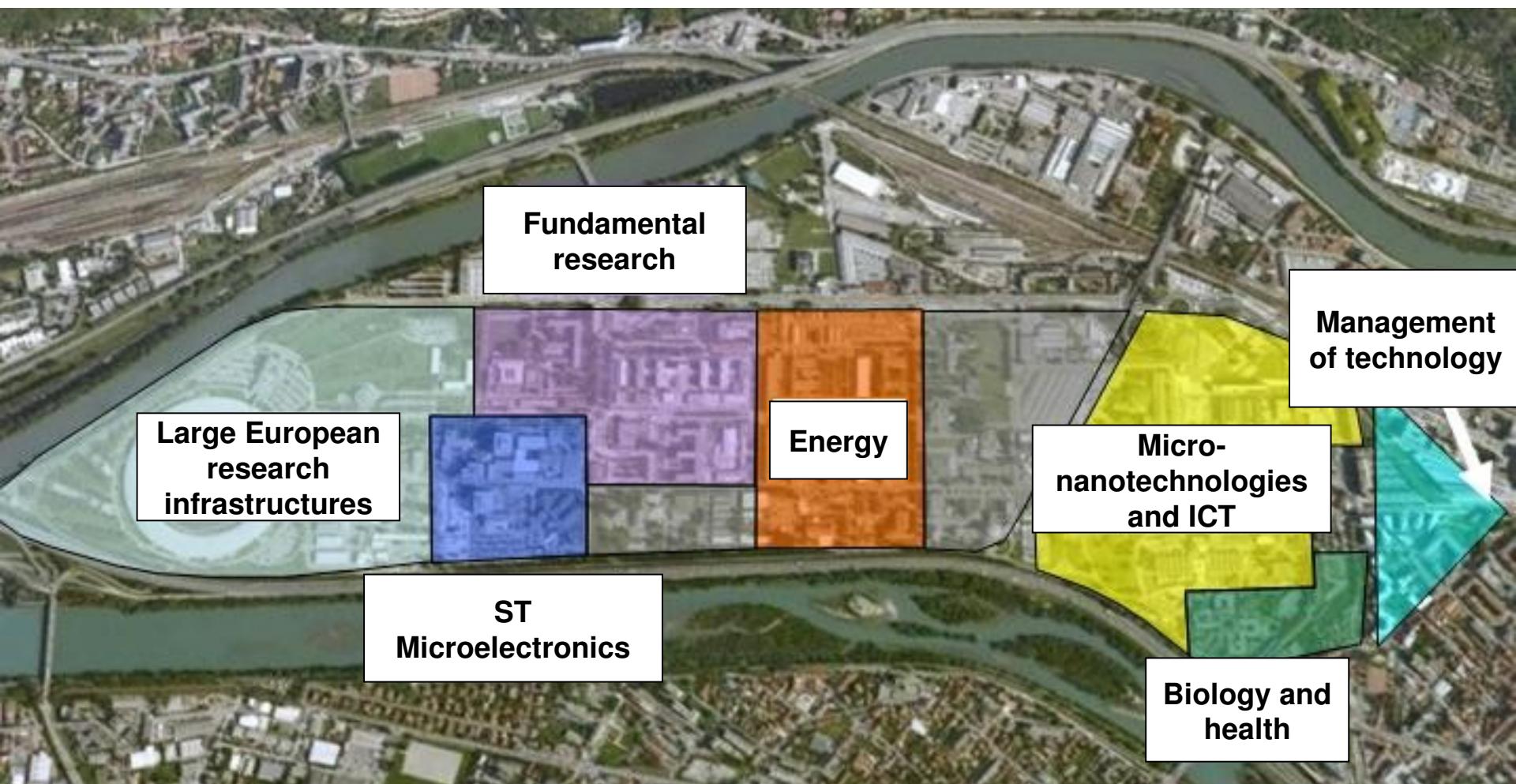


Research organisations



L-EMBL are with MINATEC at the heart of the “GIANT”

GIANT (*Grenoble Innovation Alps NanoTechnologies*) to structure the peninsula site around strong excellence centers : Academic Research, Higher Education and Enterprises



These major Academic involvements in the Rhône-Alpes Region

do have an economic impact
Some figures on ESRF-ILL-EMBL

- ❖ Annual budget : 160 ME
- ❖ Total investments on site, from early '70s : over 4 BE
- ❖ Salaries : 85 ME (1200 persons), *40% reinvested in RA*
- ❖ Induced employment: 2500 persons
- ❖ Purchases : 75 ME *of which 57% in Rhône-Alpes*

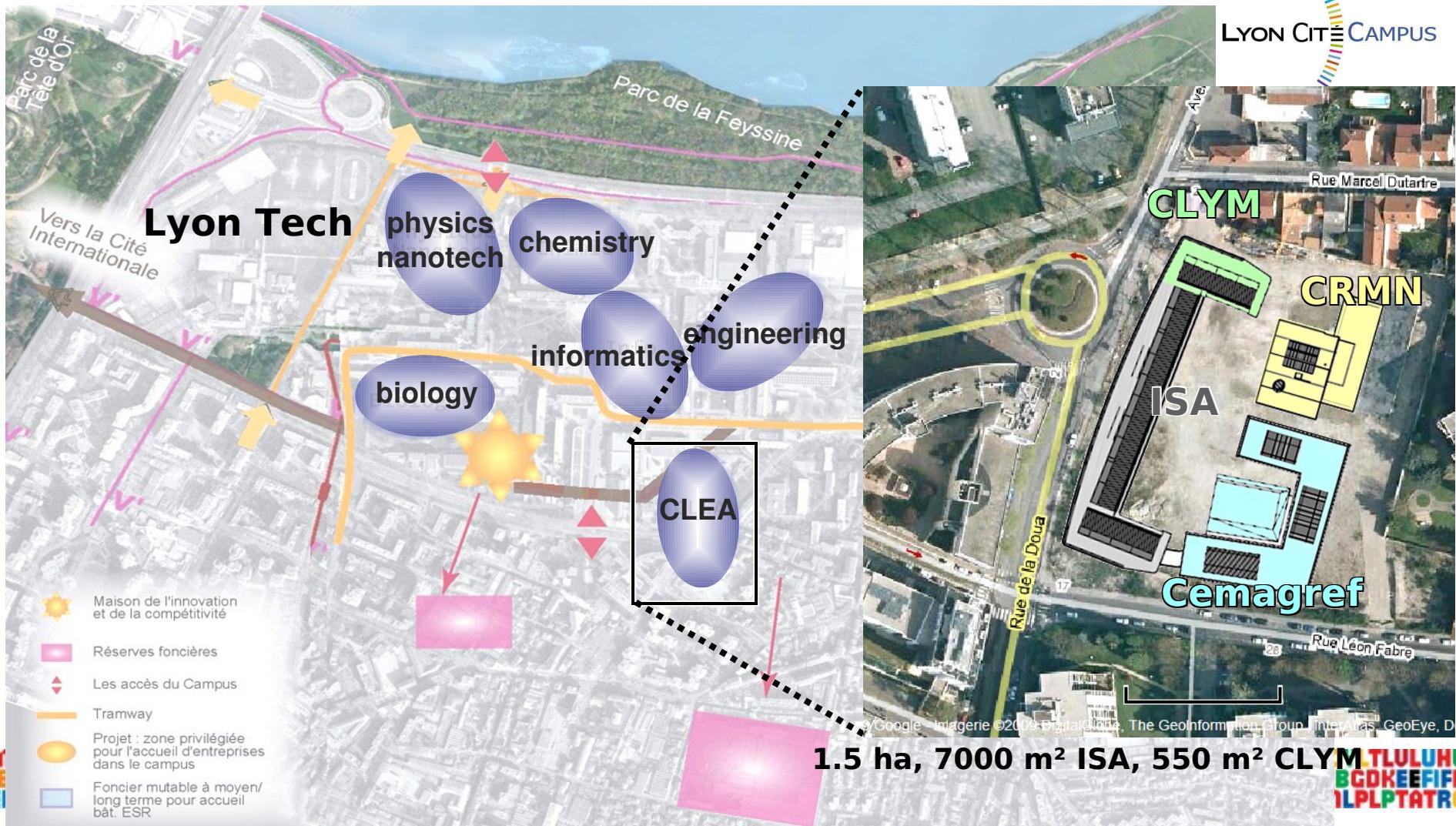
Local high-tech industries benefit from ESRF- ILL-EMBL

Technical fields include :

- Precision mechanical engineering
- Electronics
- Ultra high vacuum manufacturing
- Optical systems (mirrors, monochromators, coatings)
- Software development

Cité Lyonnaise de l'Environnement et de l'Analyse

(Lyon Environment and Analysis City)



Acknowledgments

Michel Belakhovsky

Yves Petroff, Bill Stirling, Manuel Rodriguez, Yannis Karyokatis, Denis Linglin, Fabrice Piquemal, Arnaud Lucotte, Thierry Epicier, Lyndon Emsley, Hervé Raoul, Geert Rikken, Jean-Louis Tholence, Jean-Frédéric Clerc, Stéphane Siebert

Thank you for your attention !