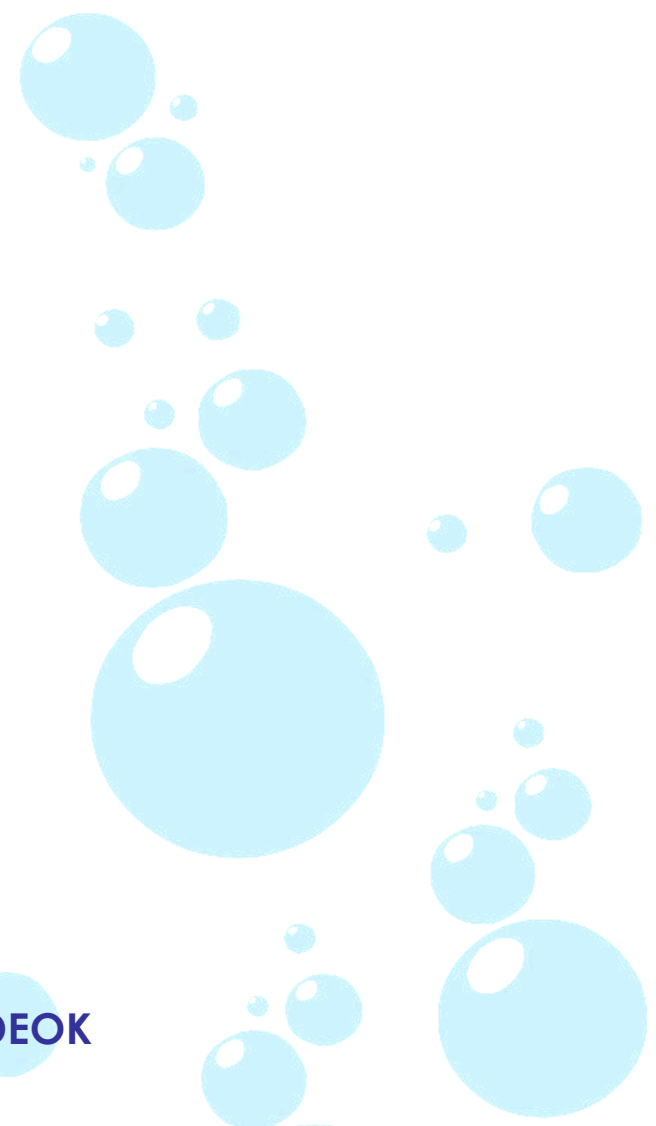


Atlanpole Blue Cluster

Emerging from the Atlantic Ocean



27th IASP 2010 DAEDEOK



Atlanpole, land of innovation

1987 : **Creation** of Atlanpole as Nantes/
St-Nazaire **technopole/science park**

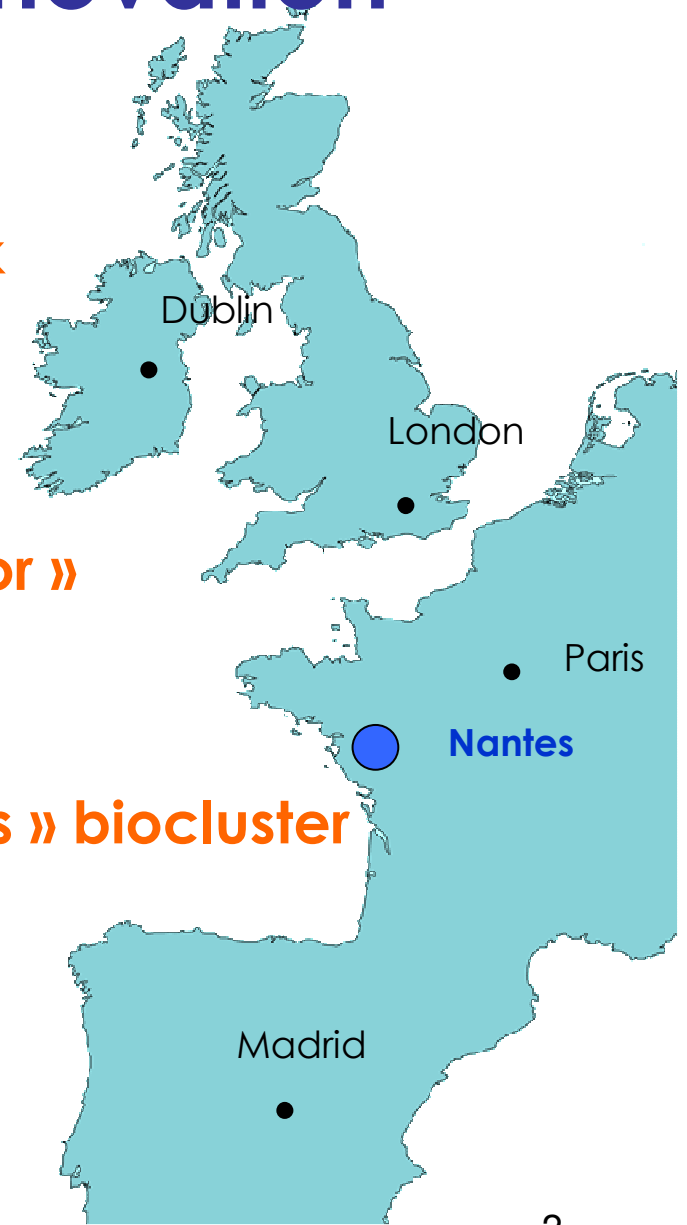
1997 : Accredited as a « European Business
Innovation Center » (**BIC**)

1999 : Recognized as a « **Business Incubator** »

2001 : ISO 9001 **certification**

2005 : Setting up of « **Atlanpole Biotherapies** » **biocluster**

2008 : Creation of **Atlanpole Blue Cluster**”



Atlanpole today

The network

- 305 innovating companies
- 67 research and higher education organizations (IFREMER, Universities...)

Objectives

- Innovation engineering
- Cross fertilization and networking
- Territorial marketing and business relocation
- Access to international markets
- Promotion of inward investments

Results (during 2009)

- 14 companies created
- 26 collaborative research projects built

Conserving, Producing, adding value to marine ecoresources

Atlantpole Blue Cluster: a dynamic network between academic and industrial skills (more than 100 members), in the field of biomarine resources

Biomarine resources: renewable feed stocks for sustainable solutions

- ✓ In a backdrop of global imbalances (energy, environment,...)
- ✓ to control and limit the emissions of greenhouse gases
- ✓ to develop substitutes to fossil carbon
- ✓ To preserve biodiversity

Atlanpole Blue Cluster : the biomarine resources

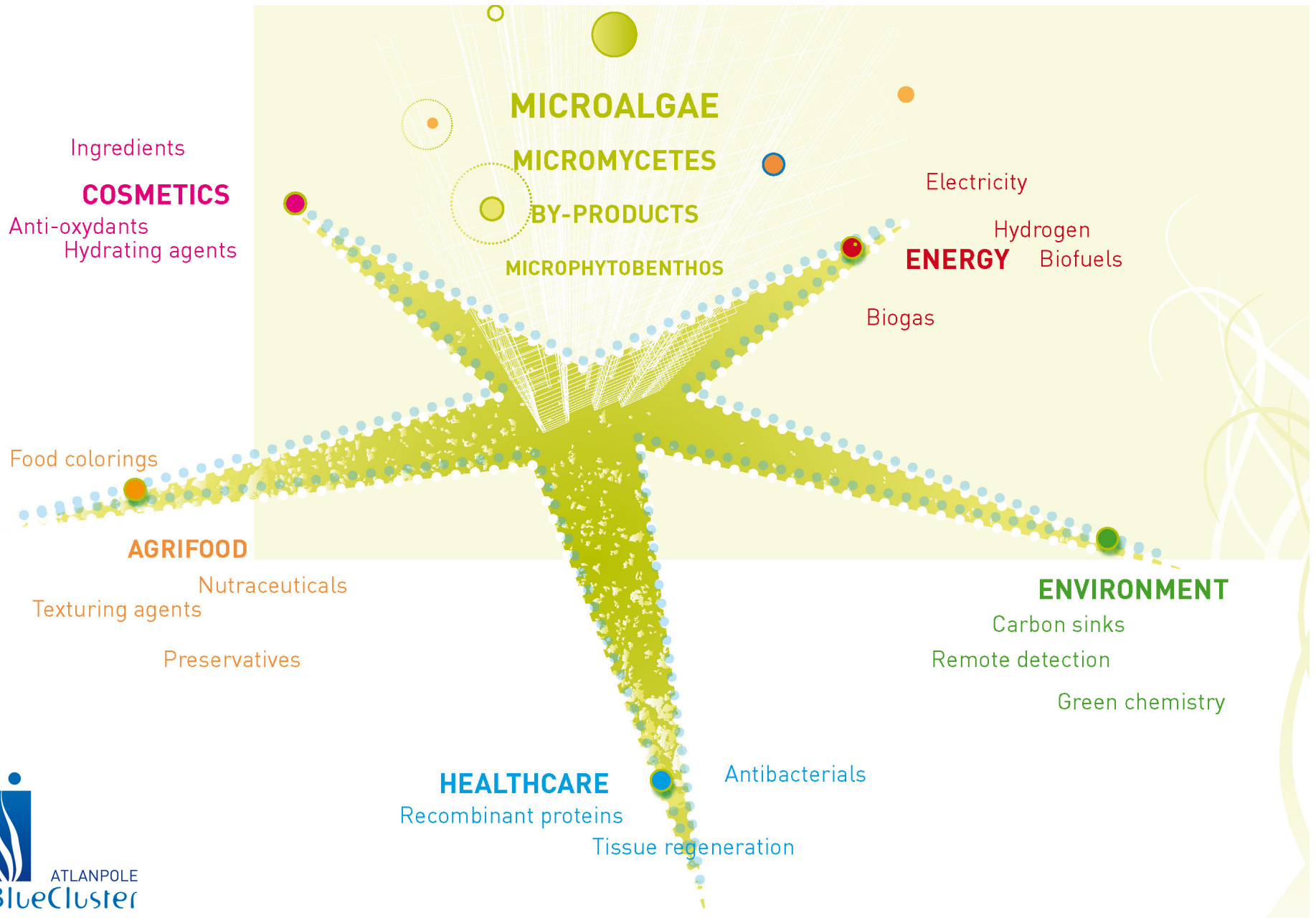
- Microalgae:

A vast group of photosynthetic microorganisms with an extraordinary potential of biomass production. Source of a wide range of commercially interesting byproducts: oils, sugars, functional bioactive compounds

- Fishery by-products:

Represents approximately 20 million tons per year
High potential for production of value-added food ingredients (lipids, proteins)

5 target markets



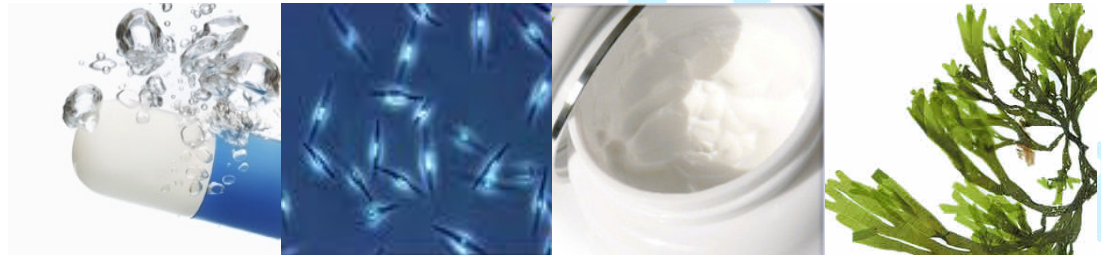
Strenghts of Atlanpole Blue Cluster

- **A dynamic network**, source of synergies between academic research labs and small businesses
- **Stakeholders** covering the entire value chain with sustainable development approach: cultivating, harvesting and processing marine bioresources
- **Availability** of fishery by-products by proximity of fishing ports and aquaculture activity
- **Unique academic skills** in microalgae (Ifremer – University of Nantes)

A unique academic background

33 research laboratories involving 1500 researchers

- **Ifremer**, the French Sea Research Institute Physiology and biotechnology microalgae national lab and fishery by-products national department.



- **The University of Nantes** « Process Engineering Lab » is among the best in Europe and has been given national label recognition by the French National Research Institute (CNRS).

Innovating companies

48 SMEs representing 500 employments

2 examples:



Marine biotechnology society specialized in recombining proteins from microalgae for pharmaceutical, cosmetic and nutraceutical needs



Exploitation of microalgae for cosmetic ingredients and nutraceutical substances: biomass production, processing, commercialization, consultancy

Atlanpole Blue Cluster

Key success factors – 1

Atlanpole has **responsability** to keep on coordinating, putting collective goals and **promoting** the cluster

Cross-fertilization and incubation:

- Optimization of tech transfer and academic spin offs
- Detection and promotion of collaborative projects
- Raising public and private funds to finance these projects and help companies

Atlanpole Blue Cluster

Key success factors – 2

Strategic projects:

- **Institute of microalgae**

Constitute a collection of characterized microalgae to meet business needs

- **Microalgae biomass culture platform**

In partnership with global energy leaders, an industrial-scale platform for cultivating, harvesting and processing microalgae biomass for biofuel application, with opportunities to target other markets

Atlantpole Blue Cluster

Key success factors – 3

International cooperation & Promotion

- International business development support
- Organization of BioMarine Business Convention in March 2011



As a conclusion

Launching a new cluster needs:

- **Bringing new ideas**
- **Putting complementary skills together**
- **Fostering the network**
- **Coaching individual and collective projects**
- **Raising public and private funds,...**
- **So many actions that can (should?) be driven by a technopole**