



Seminario Científico-Industrial

ITER Monitoring & Control Instrumentation and Diagnostics

19th of November 2015



Generalitat
de Catalunya



Ajuntament
de Barcelona



Unió Europea
Fons europeu
de desenvolupament regional
Una manera de fer Europa



GOBIERNO
DE ESPAÑA

MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



PROGRAM

09:15 – 09:30

Welcome

G. Domakowski, b_TEC / Induciencia

09:30 – 10:15

Overview of ITER Diagnostics Procurements and ongoing R&D in EU

Benoit Brichard, F4E

10:15 – 11:00

Status of ITER HCLL and HCPB Test Blanket System Instrumentation

Patrick Calderoni, F4E

11:00 – 11:15

Coffee break

11:15 – 12:00

Overview of R&D on ITER I&CD in Spain

Eric. R. Hodgson, Ciemat

12:00 – 12:45

Active concentration sensor developments for tritium balance dynamic control strategies in ITER

J. Abellà, IQS

12:45 – 13:30

Development of active optical fibres TM structural sensors for fusion applications

Nieves Murillo, TECNALIA

13:30 – 15:00

Break

15:00 – 15:45

Overview ITER Port Plug Diagnostic Design and Integration activities

Julio Guirao, NATEC

15:45 – 16:30

ITER Port Plug Diagnostic Design and Integration contract

Amaya Martinez, IDOM

16:30 – 17:15

Industrial opportunities and CDTI support

Ana Belén del Cerro, CDTI

CAMPUS DIAGONAL-BESÒS

Presentation 2011-2016

Consorci
Campus
Diagonal-Besòs



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

Campus d'Excel·lència Internacional

Instruments dedicated to the promotion of the project are:



It brings together the public administrations that own the land of the Campus. It transfers the land to the institutions to develop the Campus, and to promote the residence for students and researchers, and Barcelona KEY project.



It promotes the development and management of the Campus Diagonal-Besòs. Its Board is made up by the UPC, chaired by its Rector, the Generalitat de Catalunya, the local administrations gathered at the Consorci del Campus and the UB.



La UPC al Campus Diagonal-Besòs



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

Campus d'Excel·lència Internacional

Materials Technology

Biomaterials,
Biomechanics and Tissue
Engineering

Structural Integrity and
Materials Reliability
Centre

Conformation Processes
of Metallic Materials

Polymer and Composite
Technology

Chemical Technology

Innovation,
Modernization and
Materials Engineering

Center for Process and
Environmental
Engineering

Center for Technological
Risk Studies

Industrial and Advanced
Polymers and
Technological
Biopolymers

Macromolecular
Chemistry Group

Group on Techniques for
Separating and Treating
Industrial Waste

Energy

Nuclear Engineering
Research Group

Microton Research Group

Center for
Nanoengineering of
Nanostructured Materials
with Energy and
Environmental
Applications

Research Group on
studies in Energy and
Radiation

Group of Characterization
of Materials

Biomedical Technology

Biomedical Signals and
Systems Research Group

3.500 students



450 professors and
researches

September 2016

Construction process




Construction process





Contents Campus Diagonal-Besòs




 Soil ceded by the Barcelona City Council to place the F4E building

 Soil ceded to the UPC. 1st phase (operational on September 2016)

 Soil ceded to the UPC

 Soil intended for the Barcelona KEY program

 Soil ceded for the residence hall for students and researchers

Construction process of building A: main use on teaching



**Construction process of building C: main use on energy research.
It will also host the IREC.**



Construction process of building I: main use on Research on Chemical, Materials and Biomedical Technology



Building H: residence hall for students and researchers



- Buildable lot of 6.500 m² (extendable)
- Different kind of accommodation for students, researchers and visiting professors
- Approximate 200-300 rooms according to the project
- Surface rights to be awarded through government concession for the construction and subsequent management of the building as residence hall for students, researchers and visiting professors
- Maximum exploitation period of 50 years



Architectural project to define the agreement to the public tender

Building L: headquarters of Fusion for Energy (F4E)



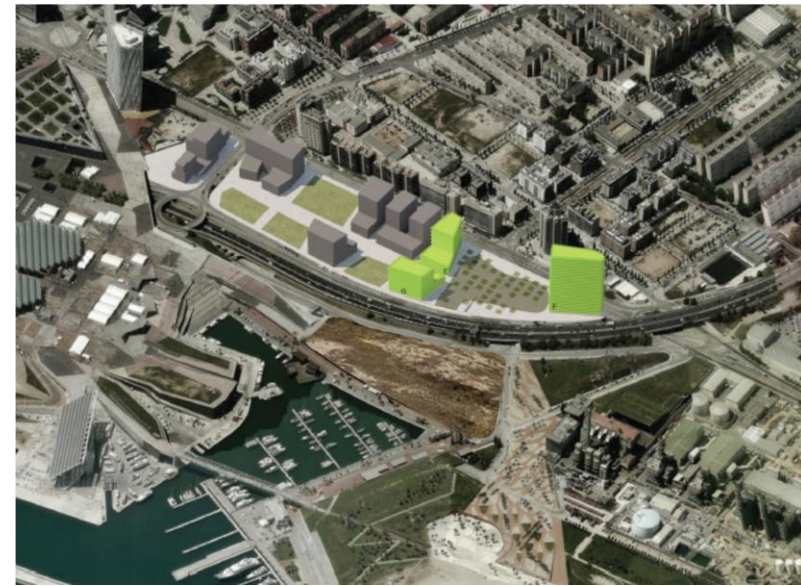
- The only European agency in Catalonia, which will be placed at the Campus Diagonal-Besòs, located in Barcelona until 2042 as per agreement of the European Union
- F4E has a budget of approximately 7.500 M€ for the project development and 400 people employed
- Its presence creates synergies with research groups of the UPC and research centres placed at the Campus



Buildings E, F and G: Barcelona KEY Program



- The Barcelona **K**nowledge **E**conomy **Y**ard (BCN-KEY) is expected to be placed at the Campus Diagonal-Besòs (plots E, F and G). The Program aims to attract teaching and research projects of the highest international level
- The Program represents a key element for enhancing the capacity of Catalonia and the Metropolitan Area to attract and retain talent and to strengthen the country's ability to export knowledge and at the same time turn the territory into a new investment boost with high added value for the local and regional economy



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