Big Science

R&D solutions and technological services to enable the creation of installations to develop basic science programs

The aim of TECNALIA in the Big Science is to offer solutions and services to different sectorial players in order to provide technological and applied research, by collaborating on specifications for equipments, systems and installations. Providing special services, being a necessary partner to enable the creation of installations and instruments to develop Basic Science programs.

BIG SCIENCE SEGMENTS

- Particle Physics
- Astrophysics and Space Science
- Energy and ICTS
- Biology and Life Sciences
- LCIS Engineering and Infrastructures
- Fusion Science

REFERENCES

Particle Physics:
- ESS-BILBAO: Special Welding Facilities
- CERN: Essays on LHC Structures
- ESS BILBAO: Development of Ion Sources: Technical Support
- ESA: Tribolab
- ESA: Technology Transfer Programme Office (TTPO)
- EXTREMAT: Materials for Extreme Conditions

Fusion Science:
- ITER: Characterization of materials
- ITER: Test Blanket Systems
- ITER: Fire Wall Pannel

Energy and ICTS:
- On-site HV Cable Testing
- Platform for electrical equipment testing
- Neutron Absorbers Materials

LCIs Engineering and Infrastructures:
- GTC: New Adhesives for Cryogenic conditions
- IAC: Feasibility Study and Business Model
- ITER: Fire Wall Pannel

KNOWLEDGE AREAS

- Construction and environment
- Energy Efficiency
- Advanced materials and processes
- Codac (Control, data access & communication) and RH (Remote Handling)
- Testing and certification
OUR PRESENCE IN THE SYMPOSIUM ON FUSION TECHNOLOGY - SOFT EVENT 2014

POSTER 1. Novel approach for joining Ceramic Matrix Composites for very high temperature applications: Cristina Jiménez (1), Jorge Bárbara (2), Miguel Lagos (3), Konstantina Mergia (4) (1), (2), (3) TECNALIA, Spain (4) National Centre for Scientific Research ‘Demokritos’, Greece

POSTER 2. Fusion reactor handling operations with cable-driven parallel robots: Jean-Baptiste Izard (1) (1) TECNALIA, Montpellier, France

POSTER 3. Creep irradiation testing of copper alloy for the ITER First Wall Panels: Samuli Heikkinen (3), Vladimir Barabash (4), Steven Van Dyck (1), Russell Eaton (4), Andreu Goussanov (1), Raphael Mitteau (4), Torsten Pfalz (2), Francesco Zacchia (3), Christoph Pohl (2) (1) Fusion for Energy, Barcelona, Spain (2) TECNALIA, San Sebastián, Spain (3) ITER Organization, Saint-Paul-lez-Durance, France