

## PERSONAL INFORMATION

Alessandro Bonito Oliva



## WORK EXPERIENCE

From August 2013 to present

## Magnets Head of Unit - ITER Department

Reporting to the technical director.

Full Responsibility for the European contribution to ITER regarding superconducting conductors and magnets and pre-compression rings, managing a budget of about 800 M€ and leading a team of about 40 F4E people and more than 30 externals. The team is composed by technical, commercial, legal, quality and planning staff. Managed with the team more than 20 large industrial contracts and more than 30 smaller Industrial and research contracts.

Main duty is the technical, commercial and project management of:

- Development and Production of 10 ITER Toroidal Field coils.
- Development and Production of 5 ITER Poloidal Field coils.
- Development and Production of EU share of conductors for TF and PF magnets
- Development and Production of 9 Pre-compression rings for ITER.

Results so far:

- Cost to complete well within the initial budget
- Delivered so far:
  - 3 TF coils
  - 1 PF coil (PF6), a second PF coil (PF5) completed and to be delivered in the next few months
  - All 9 PCRs
  - All TF and PF conductors produced by EU

**Business:** Fusion for Energy, Josep Pla 2, Barcelona, Spain

January 2008 to August 2013

## TF coils group leader- ITER department

Reporting to the Magnets Head of Unit

Full responsibility (technical and commercial) for the development and production of 10 ITER Toroidal Field coils.

Managing a budget of about 500 M€ and more than 5 large industrial contracts and 10 small industrial and research contract. Managed a team of about 12 people.

**Business:** Fusion for Energy, Josep Pla 2, Barcelona, Spain

From January 2007 to December 2007

### Series Connected Hybrid – Project Manager

#### Main duties:

- Reporting to the Technical Director
- Managed a team of about 20 people (from different nationality, e.g. China, Korea, US, France, Germany, Russia, etc).
- Responsible for the design, development and construction of the first-of-its-kind NHMFL Hybrid Project, a 10M US\$ project and of Hybrid Split Magnet for Nuclear diffraction for HMI, Berlin, a 5M US\$ contract.

**Organization:** National High Magnetic Field Laboratory, Tallahassee, Florida, USA

**Business:** Research Organization

From September 1997 to January 2007

### Strategic Projects Manager

- Reporting to the Technical Director
- Managed a team of more than 14 people (from different nationality, e.g. China, Libano, UK, Italy, France, Nederland, Russia, Germany)
- Responsible of different projects strategic for the company. Main projects were:
  - 40-T Hybrid System: a £ 5M high technology project related to the development and construction of a large 40T-Tesla Hybrid magnet system for the "Grenoble High Magnetic Field Laboratory" (France).
  - A Zero-Quench 800-MHz NMR system
  - A very large 12-T Split pair.

**Organization:** Oxford Instruments, Tubney Woods, Abingdon, Oxon OX13 5QX UK

**Business:** Industry

From June 1986 to September 1997

### Technical Manager

Reporting to group leader. During these years I have worked on several large projects. The most relevant in terms of magnets and fusion technology are below reported.

#### ITER TF Model Coil (1995-97)

The model coil was successfully tested at KFK, Karlsruhe.

The ITER TF Model Coil has been built by a consortium of 4 European Companies. I was responsible for the Ansaldo's scope of supply. I have been working on this project as Technical Manager for Ansaldo.

#### US 45-T Hybrid Magnet (1993-95)

For this project I have worked full time in US at the National High Magnetic Field Laboratory. This is the largest Hybrid Magnet ever manufactured. It utilized Nb<sub>3</sub>Sn Cable-in-Conduit-conductor. The magnet has been successfully tested. My activity was related to the design and technological development of the superconducting magnet.

#### 12-T ENEA COIL (1990-93)

This is the first superconducting coil ever made with Nb<sub>3</sub>Sn Cable-in-Conduit-Conductor utilizing the wind-and-react technology. I have been working on this project as Technical Manager.

#### NET 40-KA Electrical Joint prototype

This was again for the NET project. The design I developed for that joint is not very different from the present design for the ITER magnets electrical joints. The joint prototype was successfully tested in US.

**Organization:** Ansaldo Energia, Via N.Lorenzi 8, Genova, Italy

**Business:** Industry

## EDUCATION AND TRAINING

- 2003 **Master In Business & Administration (MBA)** t  
Open University, Oxford, UK  
Subjects covered: Project Management, People Management, Financial Control, Marketing Strategy, Innovation and Change Management
- 1986 **Doctor in Physics cum Laude**  
University Federico II, Naples, Italy  
Subjects covered: Low temperature physics, Statistic Mechanics, Solid State Physics, Fundaments of Theoretical Physics

## PUBLICATIONS AND CONFERENCES

More than 60 peer-reviewed publications in international conferences.

Participation as "Invited Speaker" at:

- II International Workshop on Cable-In-Conduit-Conductor Technology, September 1994, Victoria Canada
- 16th Magnet Technology Conference, September 1999, Jacksonville, USA
- Applied Superconductivity Conference 2004", September 2004, Jacksonville, Florida
- 17th Magnet Technology Conference, September 2001, CERN, Geneva, Switzerland
- 20<sup>th</sup> Magnet Technology Conference, 2007 August, Chicago, USA
- 22<sup>nd</sup> Magnet Technology Conference, September 2011, Marseille, France
- 23<sup>rd</sup> Magnet Technology Conference, September 2013, Boston, USA
- 24<sup>th</sup> Magnet Technology Conference, October 2015, Seoul, Korea

Participation as "Plenary Speaker" at:

- 26<sup>th</sup> Magnet Technology Conference, October 2019, Vancouver, Canada

Several time part of the technical board for Applied Superconducting Conference and Magnet Technology Conference.

Member of several design and manufacturing review panels related to ITER Central Solenoid, ITER Feeders and associated components, JT60, DEMO project.