Curriculum Vitae

Dr. Alberto Coletti

Alberto Coletti was born in xxxx, xxxx on xxxxxx

He received a Doctor degree in Electrical Engineering from University of Rome “La Sapienza” in 1973.

Academic Years 2016-2019 - Teaching “Power Supply Systems” in the framework of the Level II Masters in Fusion Energy-Science and Engineering at University of Rome “Tor Vergata” (coordinator prof. Francesco Romanelli

February 2012 up to February 2013 - Expert Contract with ITER International Fusion Energy Organization for the design review of the following components of the ITER Power Supply System:

- Switching Network Unit (SNU),
- Fast Discharge Unit (FDU),
- DC busbars & Instrumentation
- Reactive Power Compensation & Harmonic Filtering System (RPC&HF),
- AC/DC Converter for Toroidal and Poloidal Field (TC&PF) Coils

June 2011 up to December 2012 - Expert Contract with Fusion for Energy (F4E) for the following activities related to the Power Supply System of EU-JA Broader Approach Project JT60-SA:

- TF&PF Coils Power Supplies Specifications,
- PF Coil Power Supplies simulation model,
- Support in the Assessment of the Final Design of the JT60SA Power Supply subsystems

June 1975 up to May 31st, 2011 - Employed in “Comitato Nazionale per l’Energia Nucleare” (CNEN), presently “Ente per le Nuove Tecnologie, l’Energia e l’Ambiente” (ENEA).

February 1st, 2009 up to May 31st, 2011 - F4E Technical Responsible Officer for design, integration and control strategy of the Power Supply system of the JT-60SA project (combined project of the JA-EU Satellite Tokamak Programme).

November 1989 up January 31st, 2009 - Head of Electrical Division of ENEA Fusion Department (Approx 80 people including 40 professional). The division performed development, design and construction of apparatus in the fields of electrical systems, power electronics, real time data acquisition&control systems and additional heating devices (till 1994). The following activities can be underlined among the others:

1. coordination of the design, construction and testing of JT60-SA power supplies in the framework of the EU-JA Broader Approach Projects;
2. coordination of development, construction and testing for the In-Vessel-Viewing System (IVVS) for ITER for the 3D, sub-millimetric inspection of the machine interior when activated. Presently, it is the ITER reference design;
3. coordination of design activities of the electrical systems for the ITER building at Cadarache;
4. coordination of design, construction and testing of the basic module of the power amplifier to supply ITER PFC&TFC coils.

May 1995 up to January 31st,2009 - Member of the ENEA's Committee for Patent and Intellectual Property. This committee has the scope to analyse and endorse all the patent proposals developed inside ENEA (approx. 50 per year).

June, 28th 2007 up to January 31st,2009 - Member of the Executive Committee of the European Joint Undertaking for ITER and the Development of Fusion Energy (F4E)

November 2001 up to December 2006 - ENEA Member of the Administrative and Finance Advisory Committee (AFAC) of the European Fusion Development Agreement (EFDA).

January 2002 up to December 2004 - Responsible of the ex-fences site adaptation works at Cadarache (F) and Vandellos (E), proposed by Europe as possible sites for ITER. During this activity he functionally coordinated a French-Italian-Spanish team.

June 2002 up to January 2003 - EU Member of the Assessment of Specific Sites ad-hoc group (JASS). This group was composed by EU, JA, RU, USA and Ca expert and performed a technical and socio-economical analysis of the ITER candidate sites to check their compliance with the ITER Site Assumptions.

February 1994 up to October 1999 - One of the 3 members of the Management Council of ENEA Frascati Labs. This council had the scope to procure the management of all the common technical/economical/administrative activities needed to guarantee the operation of the entire Frascati labs (approx. 500 people).

July 1979 up to November 1989 - Head of the Electrical Apparatus Laboratory of the CNEN Fusion Department (Approx. 20 people). In this period he has been responsible of the design, construction and commissioning of Power Supply System of Frascati Torus Up-grade (FTU) machine. The system includes a 250 MVA Flywheel Generator and thyristor power amplifier of about 770 MW power.

June 1975 up to November 1979 - Engaged as electrical engineer during construction, commissioning and operation of the Frascati Torus (FT) tokamak.

June – August 1975 - Employed as Electrical Engineer at "ITALCONSUL Lavori" Company – Roma. Engaged in the design of electrical distribution lines in Libya

Publications

He is author/co-author of about 50 publications / contributions to conferences in the following fields:

- FT machine : design, operation and experimental results
- FTU Electrical Power Supply System : design, construction, commissioning and experimental results
- FTU LH Additional Heating System : design, construction, commissioning and experimental results
- IGNITOR Machine : Design of Electrical Power Supply System
- IVVS for ITER : development, design, construction and experimental results
- ITER Power Supply System : design of the general system and the power amplifier reference module
- ITER Site Adaptation : with relation to both Cadarache and Vandellos Site
- JT-60SA Superconducting Magnet Power Supply System.

July 28th, 2021 Alberto Coletti