

## PERSONAL INFORMATION

ENRICO DI PIETRO

## JOB APPLIED FOR

**DTT Project Manager – ref: JN-022023-396663**

## WORK EXPERIENCE

**JT-60SA – Unit - Head of Unit and JT-60SA EU Project Manager**

Replace with dates (from - to)

**2012 – to present**

Fusion for Energy (Garching antenna)

- Management of the JT-60SA Unit of F4E, in charge of the implementation of the EU share of the construction, installation, test commissioning and later maintenance/operation/upgrade of the JT-60SA tokamak reactor. JT-60SA Tokamak is located and operated at Quantum Science & Technology (QST) institute at Naka, Ibaraki Prefecture, Japan.  
Management of 8 to 10 direct reports and coordinating the work of several contributing EU laboratories (ENEA (I), CEA (F), KIT (D), CIEMAT (E), SKF-CEN(B)) and industrial contractors.  
Overall hardware value (only EU share): about 250 M€. Authorising officer for F4E contracts.
- Management as EU PM of all relationships with QS,T in terms of negotiations on scope, schedule, technical interfaces, integration, safety and common quality management system (CQMS).  
Management of the relationship with EU Fusion Labs and EUROfusion Consortium, and reporting to EU Commission Directorate ENER (EU project stakeholder and financing entity)

**Business or sector** Research – Thermonuclear Fusion

## WORK EXPERIENCE

**JT-60SA – QA and JT-60SA EU Deputy Project Manager**

Replace with dates (from - to)

**2008 – to 2011**

Fusion for Energy (Garching antenna)

- QA responsible officer: Development of the JT-60SA Common Quality Management System (CQMS), fundamental tool to implement 'One-Team' approach in the international collaboration.  
Clear set of rules covering Governance, Procurement, Interfaces, Schedule, Earned Value, Risk Management etc.
- EU Deputy Project Manager : in delegation of P Barabaschi (EU PM), management of all relationships with QST in terms of negotiations on scope, schedule, technical interfaces, integration, safety and common quality management system (CQMS)

**Business or sector** Research – Thermonuclear Fusion

## WORK EXPERIENCE

**ITER Site Preparation and Buildings**

Replace with dates (from - to)

**2005 – to 2008**

European Commission (seconded to EFDA) then from 2007 F4E

- Management of the Agreement between EU Commission and CEA (ITER France Agency) for
  - a) Site preparatory works for ITER Site in Cadarache (earth movements, drainage, consolidation and grading; supplier areas and temporary roads; regulatory archaeological and environmental survey etc..., definition of heavy loads route from port of entry to site,, expropriations, bridge reinforcements, highway crossings etc. .Architectural competition for ITER Personnel Building etc. Global value of activities about 40 M€ (2005)
  - b) Preparation of ITER Safety Files for preliminary licence application as Installation Nuclear de Base (INF)
- Specification and tendering of a large multi-area ITER engineering support contract for EFDA (to cover preparations of urgent procurements for ITER).
- Revision of ITER Building layout (adaptation to site and definition of tunnels and services) , cost analyses
- Selection of the final Head of the Site and Buildings Group

**Business or sector** Research – Thermonuclear Fusion

#### WORK EXPERIENCE

### Engineering Support Division/Group – Head (Interim)

Replace with dates (from - to)

2007 – to 2008

F4E

- Short activity to propose the mission of a cross-projects Engineering Support Division and recruit the first personnel in Nuclear Analyses, Plasma Control, Welding Technologies, Seismic Analyses. Then a permanent Head of Unit was selected. The activity was of great impact on F4E performance and actually it is still a fundamental function in F4E .

**Business or sector** Research – Thermonuclear Fusion

#### WORK EXPERIENCE

### Engineering Support

Replace with dates (from - to)

2001 – to 2005

European Commission (seconded to EFDA)

- During this period, reporting directly to EFDA Director (Dr. Roberto Andreani and then M Gasparotto) I had several functions:
  - a) Support the EU commission in ITER Negotiations with particular regard to scope sharing and personnel complement needs;
  - b) Liaising with EU Industry in the 'Fusion EU-Industry ' to discuss and get a critical support to scope sharing and procurement approach for ITER;
  - c) Preparation of Barcelona future F4E work site. Activities and purchases actually implemented and paid by CIEMAT (Host) but definition of offices layout and basic IT infrastructures was my responsibility, together with set-up of an Industry Database (on CERN model).

**Business or sector** Research – Thermonuclear Fusion

#### WORK EXPERIENCE

### ITER Engineering Design Activities – Integration Group

Replace with dates (from - to)

2000 – to 2001

European Commission (seconded to ITER)

- Short activity in a function responsible engineer for some mechanical interfaces within ITER EDA in Garching.

**Business or sector** Research – Thermonuclear Fusion

#### WORK EXPERIENCE

### ITER Engineering Design Activities – Neutral Beams Group

Replace with dates (from - to)

1996 – to 2000

European Commission (seconded to ITER)

- In charge of the mechanical design of the Neutral Beam System of ITER. Starting from basic conceptual design, with the support of JAERI(JA), Kurchatov,(RF) CEA(F) and IPP (D) laboratories design and R&D contribution, I managed to put together an integrated design of the system. Large work of integration of NB with the ITER Vacuum Vessel/Cryostat/Building, solving critical high voltage and radiation issues. The design was very well documented in the ITER EDA ' Final 5.3 NB - Design Description Document' and actually the present NB test facility (SPIDER and MITICA),that RFX is putting together in Padua, uses, for many components, a design very similar to the one I contributed to develop.

Business or sector Research – Thermonuclear Fusion

#### WORK EXPERIENCE

### Special Technologies Division – Head

Replace with dates (from - to)

1991 – to 1996

ENEA

- In charge of the management of 20 professionals covering the subjects of Brazing, Welding, Mechanical Tests, Vacuum technologies, Plasma-Wall interaction, Tritium permeation etc.
- Large number of EFDA tasks taken covering many critical fusion technology aspects from insulation coating, bolts anti-seizing treatments, brazing on ceramics, graphite and refractory alloys, measurement of mechanical/thermal properties from cryogenic to 2000 K temperatures, development of high speed infrared array cameras, optics, development of palladium membranes for tritium permeation/separation.
- Design and construction and test of the first Monobloc Divertor prototype (including also all brazing technology and NDE) successfully tested up to 20 MW in JET NB Test Bed (using Ansaldo Nucleare and Metallwerk Plansee as subcontractor)..

Business or sector Research – Thermonuclear Fusion

#### WORK EXPERIENCE

### Special Technologies Division – Coordinator

Replace with dates (from - to)

1989 – to 1991

ENEA

Putting together the Division under Dr Maurizio Gasparotto and Dr Aldo Pizzuto guidance. Great experience of taking a group of talented people suffering from a period of lack of management and goals and recreate enthusiasm and commitment. Starting to liaise with EFDA to identify and bring home feasible EU tasks. Steep increase of ENEA share in the participation to EU Task.

Business or sector Research – Thermonuclear Fusion

#### WORK EXPERIENCE

### Engineering (Deputy) and Maintenance (Head)

Replace with dates (from - to)

1987 – to 1989

Ethicon spa (J&J Group) – Pomezia Plant

- A period of break from research field to look around in industrial environment. Most relevant in this period :
  - a) the overall responsibility of production machinery maintenance and spares with a small group of 8 mechanics/electricians – learnt a lot about production logistics and safety (some dangerous process managed)
  - b) development of a new automated sterilization pilot plant for chirurgical products (core company production) utilising an Ethylene Oxide- Nitrogen mixture – Intensive interaction with Johnson & Johnson Central Engineering

Business or sector Consumers Products

#### WORK EXPERIENCE

### FTU - Junior Engineer - Mechanical Design and Constructions Group

Replace with dates (from - to)

1984 – to 1989

ENEA -

- First employment and great period, FTU starting construction, under the supervision of my group leader Aldo Pizzuto I was immediately involved as FEM analyst in the verification of the FTU vacuum vessel (mechanical and electro dynamical) and in the follow-up at ANSALDO Magneti (Genoa) of the poloidal field coils manufacturing. I was also in charge of all the plant bridge cranes and shielding doors. A lot to learn.

Business or sector Consumers Products

EDUCATION AND TRAINING

Replace with dates (from - to)

1977-1983 Engineering (5years) Degree (110/100 cum laude)

Replace with EQF (or other) level if relevant

University of Rome ( Engineering Faculty) (if relevant, country)

- Analysis, Physics, Mechanical Design, Chemistry, Advanced Mechanics, Fluids dynamics, Technical Physics, Machine mechanical construction and design, Machine thermodynamics design, Controls, Electronics Plant design and optimisation
- Thesis : Design of a motor test facility

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
	No certificate				
German	A2	B1	B1	B1	A1
	No certificate				

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
[Common European Framework of Reference for Languages](#)

Communication skills

- Communication skills developed though
- Personnel management (at Italian and international level)
- Contract management (including solving non-conformities and claims)
- International negotiation (for ITER and JT-60SA projects)

Organisational / managerial skills

leadership : currently responsible for a team of 8-10 direct report plus external expert, large multiyear experience of personnel management and guide in Italian and international/ public/private environment .

project management: a large number of project followed from conception to execution and final commissioning , therefore system engineering, budget, risk/ schedule/interface management are a real things for me.

Job-related skills

Replace with any job-related skills not listed elsewhere. Specify in what context they were acquired. Example:

- Hands on experience of FE (ANSYS /ABACUS/CASTEM) , CAD (CATIA, AUTOCAD) , Montecarlo (Molflow) acquires along the years
- Good Knowledge of standard tool (Excel, Access, MS Project , Primavera) in my current work
- good command of quality assurance and control processes (certification for ISO 9001 quality audit, though expired) acquired in the development of the JT-60SA CQMS

Digital skills

SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem solving
PROFICIENT USER	PROFICIENT USER	PROFICIENT USER	BASIC USER	PROFICIENT USER

Levels: Basic user - Independent user - Proficient user  
[Digital competences - Self-assessment grid](#)

Replace with name of ICT-certificates

Other skills      No specific skills relevant to this selection

Driving licence      driving licence category:  
 B

ADDITIONAL INFORMATION

Publications/  
 Presentations/Conferences      See attached list of Publications – Annex 2

Projects      FTU/ITER/JT-60SA

Memberships      Chartered Engineer (Albo degli Ingegneri Provincia di Roma n. 12982)

ANNEXES