## Alberto LOZANO

#### **Personal Details**

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Date of Birth
i ⊠ alozanoballesteros@hotmail.com
i Madrid, 13 August 1977, Spain.

# **Professional Experience**

 2007-present: « KBC Advanced Technologies », London, UK. *Process Consultant*:

- □ Scheduler Manager in a new refinery within a O&M contract supervising a team of 10 people.
  - Refinery monitoring. Blending optimization. Operations instructions. Scheduling weekly plan.
  - Implementation and development of Forward. Writing working procedures.
  - Implementation in Forward of LP crude data vectors and units submodels.
  - Building and updating CDU, RFCC and CCR LP Utilities in Petro-SIM and data templates.
  - Generation of LP crude assays and sub-models vectors with Petro-SIM LP Utility for LP Princeps.
  - Synthesis of crude assays. Monitoring of crude quality. Update of LP using flash assays.
- □ Fuel Oil Destruction Study. Refinery wide including a syngas model.
- Pre-Configuration study for a new refinery. Cost estimations. Technology screening.
- Petro-SIM on-site training for a European Refinery.
- On-site implementation of refinery and units. Training and coaching of users. Visbreaker and Catalytic Continuous Reformer calibration and modelling.
- HTRI design of heat exchangers within a CDU-VDU FEED project.
- Rigorous tube-by-tube modelling of thermal cracker and visbreaker furnaces. Technical assistance to a chemical additives supplier. Client contact for support and queries.
- Profit Improvement Program. Refinery simulation. Data collection. Profit Opportunities evaluation.
- Feasibility study for two vacuum columns. Rigorous furnace modelling. HTRI heat exchangers simulation. Evaluation of opportunities.
- Modelling of a FCC Gas Plant for a debottlenecking feasibility study.
- Refinery-wide Modelling & Simulation of a refinery, as part of a Euro IV/V Clean Fuels feasibility study.
- Others: Sales support, new product line initiatives, development of best practices for refinery wide modelling, software developing support, and contact with clients and business partners.
- 2005-2007, nineteen months: « Axens, *IFP Group Technologies* », Paris, France.

#### <u>Process Engineer</u>:

- Process design and basic engineering for grass-roots and revamped gasoline desulphurisation units. Preparing Process Data Book and Start-up Instructions.
- Co-ordination of project in liaising with Clients and Engineering contractors
- Process simulation. Heat and Material balances. Design and specification of equipment and piping. Development of PFD &P&ID.
- 2003-2004, nine months: «IFP, Institut Français du Pétrole », Lyon.

#### **Training IFP-School**:

- Modelling & Simulation in Pro II of propylene production unit integrated in a Refining & Petrochemical complex.
- Reactions kinetic modelling.
- Monitoring of the pilot unit.
- Catalytic tests.
- February-July 2003, six months: «IFP, Institut Français du Pétrole », Lyon.

#### ETSII&CPE Final Project:

- □ Adaptation of a CCS FORTRAN simulator program to case study for a Simulated Countercurrent System (CCS) separation unit.
- Modelling & Simulation of the CCS separation based on difference of speed diffusion for isomeric hydrocarbons.
- □ Proposal of an adsorption model in liquid phase and complete saturation for two hydrocarbons and a dissolvent. Validation and boundary of the model.
- Obtaining of yields and evaluation of the feasibility in the implantation of such CCS unit into an isomerisation process for  $C_7$ - $C_8$  linear hydrocarbons.

# **Education**

• 2003-2004	: IFP-School, Ecole de Pétrole et des Moteurs, Paris, France.  MSc degree in Refining, Engineering and Construction, Gas.  Cursus: "Sandwich Training" (alternating periods at school and industry)  Engaged by the IFP, Institut Français du Pétrole. Language: French. Duration: 17 months.
• 2002-2003	: <b>CPE-Lyon,</b> <i>Ecole Supérieur de Chimie Physique Electronique,</i> Lyon, France. <b>Erasmus Student</b> in <b>Chemical Engineering</b> special field <b>Environment.</b> Overal Grade B.
• 1995-2002	: UPM, Universidad Politécnica de Madrid, Spain. ETSII, Escuela Técnica Superior de Ingenieros Industriales. Degree: Industrial Engineer, special field Chemical Engineering. Overal Grade B. Final Project Grade A.

## Other achievements and courses

October 2002-March 2003, five months: « Jeune Ambassadeur de Lyon».
 Programme managed by the Chamber of Commerce of Lyon and the AREI (Association for the Relations and the International Studies. Sponsored by TOTAL (French Oil Company) and its Refinery at Feyzin-Lyon, with the project:

«Cooperation Programme in Safety, Environment and Communication between the Refineries of **Feyzin** and **La Rábida-Huelva** of **CEPSA** (Spanish Oil Company) »

Special Award by the Club de la Comunicación Rhône-Alpes.

- IFP-School Additional courses:
  - **November 2003**: "Communication skills for Life & Business".
  - □ **April 2004** : "How to become a good manager".
- November 2001: *Soluziona-UNION FENOSA* (Spanish Consultancy Firm), Madrid. Intensive course in Environmental Management for ISO 14 001.

## Languages

• *Spanish* : Native Language.

• French : Fluent (4 years in France)

• *English* : Fluent, 39 months living and working in English.

• Vietnamise : Basic.

# Technologies and skills

- Engineering Software: Petro-SIM (Hysys), ProII, HTRI and STX, Forward.
  - o **Petro-SIM(C) EMEA Power User**. Petro-SIM© V4 Beta Brainstorming member, tester and trainer. Leading the company wide task: "Modelling Development in V4".
- *Computer skills*: Matlab, TurboPascal, DIGITAL Visual FORTRAN v 6.6. Microsoft environment and Office package.
- Spanish passport. European driving license.