Dr. Ana Maldonado

Data Strategy & Corporate Solutions | Innovation | Data Science

amaldonado@qualogy.com, http://www.agmaldonado.com
Telephone: +31 683772024

Currently working as the Head of Data Strategy and Corporate Solutions at Qualogy, I design and build the framework to execute our corporate roadmaps together with our teams. I translate problems and client needs into solutions that align with our strategy. With my enthusiasm, creativity and solution oriented mindset, I build relationships and connections to help companies and individuals achieve their goals. I believe on R&D, innovation, the many applications of Data Science and the ways it is transforming companies, governments and our society.

PROFESSIONAL EXPERIENCE

Since Feb 2017

Head of Data Strategy and Corporate Solutions at Qualogy. *Rijswijk (NL)*

- Designed and executed the Qualogy corporate Data Science roadmap.
- Created opportunities and partnerships. Projects hunting.
- Assisted in recruitment and team management
- Served as communicator in conferences and workshops.

2015-2017

Senior R&D scientist at TNO. *Eindhoven & Zeist (NL)*

- Created opportunities, widening our modelling activities and hunting for projects.
- Lead the strategy design and execution for the modelling and statistics cluster at RAPID (TNO).
- Addressed modelling and data mining projects of industrial interest.

2009-2015

Senior scientist at Solvay. Visitor researcher at HCSC. *LOF Bordeaux (FR) and UvA HIMS, Amsterdam (NL)*

- Assisted the GBU clients in their predictive modeling and chemometric needs
- Addressed a wide range of molecular discovery and optimization projects of industrial interest.
- Created opportunities, widening the modelling activities and hunting for projects.

2007- 2009

Post-doctoral researcher. Joint project UvA - Rhodia. "Rational Design and synthesis of new and efficient hydrocyanations catalysts". *UvA HCSC HIMS, Amsterdam (NL)*

- Communicated and addressed the needs from our industrial partners.
- Data curing and analysis. Coding and implementation of custom predictive models.
- Results lead to one patent and three publications.

2002-2007

PhD in Theoretical and Computational Chemistry. ITODYS Laboratory (CNRS, UMR 7086), *University Paris 7-Denis Diderot, Paris (FR)*

- Creation a structural dataset using XML and semantic web technologies
- Designed, coded and implemented the virtual screening tool: MolDiA (Molecular Diversity Analysis).
- Results lead to one patent and four publications.

EDUCATION AND COURSES

Jan 2009 Tutorial: Understanding Molecular Simulations,
UvA, Amsterdam (NL)

Nov 2008 MATLAB based Optimization Techniques, Statistical Methods in MATLAB,
MATLAB Training Center. Euston Conference Center, London (UK)

2002-2007 PhD degree in Theoretical and Computational Chemistry, obtained with honors.
ITODYS Laboratory (CNRS, UMR 7086), University Paris 7-Denis Diderot (FR)

1995-2002 Chemistry degree, (B.Sc and M. Sc), obtained with honors.
University Simon Bolívar (USB), Caracas (VZLA)

SKILLS AND ATTRIBUTES

● **Relational:** Social, collaborative and enthusiastic. Negotiation and conflict resolutions skills, while remaining flexible and solution oriented. High capacity to adapt to changes. Have the capacity to inspire and motivate others (managers, team members, clients).

● **Business:** Strong communication and networking skills. Marketing and sales savvy. Enjoy public speaking and presentations. Proactive and creative when it come to problems (and innovative solutions). Skilled on building relationships and connections. Passionate and curious. Leadership.

● **Scientific:** Highly skilled on translating problems and client needs into technological solutions. Innovation driven while keeping an eye on timelines and budgets. More than 10 years of experience on predictive modeling, descriptor analysis, model construction and validation for different industries.

● **Human:** Support non-governmental organizations which fight for children and women rights and health in the word. Experience as volunteer in different humanitarian projects (Venezuela, Thailand, Netherlands). Hobbies include swimming, traveling, reading, learning new things and baking awesome cakes.

● **Foreign languages:** Spanish, French, English (trilingual) and Dutch (Intermediate). Notions of Chinese and Italian.

PATENTS

1. S. Mastronianni, P. Pringle, A. Maldonado, G. Rothenberg, I. Mikhel. March 24th (2011) Organophosphorus compounds, catalytic systems including said compounds, and hydrocyanation method using said catalytic systems. Patent No.: WO/2011/032835. PCT/EP2010/062755.

2. F. Decampo, G. Mignani, B. Pavageau, A. Maldonado. Avril 20th (2012) Accepteurs quinones pour application photovoltaique. Patent No.: WO/2013/156563A1.

PUBLICATIONS

1. Manuel J. Louwerse, Ana G. Maldonado, Simon Rousseau, Chloe Moreau Masselon, Bernard Roux, Gadi Rothenberg. Revisiting Hansen Solubility Parameters by Including Thermodynamics. ChemPhysChem 18(21): 2999-3006 (2017).

2. Zea Strassberger, Maurice Mooijman, Eelco Ruijter, Albert H. Alberts, Ana G. Maldonado, Romano Orru, Gadi Rothenberg. Finding furfural hydrogenation catalysts via predictive modeling. Adv. Synt. Cat. 352(13): 2201-2210 (2010).

3. Ana. G. Maldonado, Gadi Rothenberg. Predictive modelling in homogeneous catalysis: a tutorial. Chem. Soc. Rev. 39: 1891-1902 (2010).

4. Ana. G. Maldonado, Gadi Rothenberg. Predictive modelling in catalysis – from dream to reality. Chem. Eng. Proc. June (2009).

5. Ana G. Maldonado, Jos A. Hageman, Sergio Mastroianni, Gadi Rothenberg. Backbone Diversity Analysis in Catalyst Design. Adv. Synth. Cat. Adv. Synth. Catal. 351: 387-396 (2009).

6. Carles Bo, Manuel Urbano Cuadrado, Jorge Carbó and Ana G. Maldonado. New Quantum Mechanics-Based Three-Dimensional Molecular Descriptors for Use in QSSR Approaches: Application to Asymmetric Catalysis J. Chem. Inf. Model.47(6): 2228-2234 (2007).

7. Ana G. Maldonado, Jean-Pierre Doucet, Michel Petitjean and Bo-Tao Fan. MolDiA: A Novel Molecular Diversity Analysis Tool. Part 1: Principles and Architecture. J. Chem. Inf. Model.47(6): 2197-2207 (2007).

8. Ana G. Maldonado, Michel Petitjean, Jean-Pierre Doucet, Annick Panaye and Bo Tao Fan. MolDIA: XML based system of molecular diversity analysis towards virtual screening and QSPR. SAR and QSAR in Environmental Research 17(1): 11-23 (2006).

9. Ana G. Maldonado, Michel Petitjean, Jean-Pierre Doucet and Bo Tao Fan. Molecular Similarity and Diversity: Concepts and Applications. Review article, Molecular Diversity, 10(1): 39-79 (2006).

10. Ana G. Maldonado, Using XML for Structuring the Chemical Information: Towards a Chemical Knowledge Representation. Long paper published by MDPI. Online Edition ISBN 3-906980-17-0 (2005).

11. Ana G. Maldonado and J.L.Paz, Study of the solvent stochastic effects in a strongly driven two level system in Four Wave Mixing spectroscopy .Short paper published by the International Society for Optical Engineering (SPIE). Ed. Proceeding SPIE, 4419: 34-37 (2001).

More Information available at: https://nl.linkedin.com/in/anamaldonado
References available upon request