



Charles Mussche

225W apt 5W, 20th Street, New York
10011 NY

Mobile: +1 (347) 972-0953

Charles.Mussche@gmail.com

Educational Qualification

- **2011-2012** Master in Renewable Energy, Cum Laude
Ecole Des Mines, Mines ParisTech – Kassel University
- **2001-2007** Master of Bioscience Engineering, Cum Laude
University of Ghent - Universidad de Sevilla (Erasmus exchange program)
- **2000-2001** Spanish–Genetics–Advanced Mathematics
AFS exchange program at Instituto Tecnológico de Costa Rica

Work Experience

- **Columbia University, WTER, Earth Engineering Center (Nov 2013-now)**
Function: Consultant WTER
Building new global website along with updating the current website with relevant news items, creating more visibility through social media. Y-O-Y visibility up by more than 50%.
Growing the network of academic institutions on a global level.
- **Columbia University, WTER, Earth Engineering Center (May 2013 – now)**
Function: Senior Research Associate
Write reports and recommendations for governmental and private organizations such as Nepalese and Indian governments, NYSERDA, American Chemistry Council, EIA, IRG, etc. on topics related to renewable energy, waste-to-energy and sustainable waste management.
Helping and guiding these students in research and thesis progression.
Analysis and market studies for universities/companies and new technologies related to Waste-to-Energy projects.
Pre-feasibility assessment for the construction of Waste-to-Energy facilities.
Publication of several research papers such as ‘Current and potential recovery of energy and fuel from non-recycled plastics (NRP) in the United States’, ‘WTE in the US, China and Japan’.
- **PerPetum Energy, Drogen, Belgium (June 2012 - Dec 2012)**
An internship as part of the second Master’s degree at an industrial solar-energy project developer.
Function: Autonomy Auditing
New business development in Bio, Wind, Solar and Hybrid Systems: On-site waste, heat and electricity assessments, biogas plant feasibility assessments and investment payback (IRR, ROE), PV coupled electrolysis feasibility studies.
Energy autonomy audits to reduce external energy needs and valorize waste streams.
Energy efficiency audits.
Final Paper was a study for the construction of a biogas plant resulting in a 74% reduction in electricity needs, a 35% reduction in heating requirements and an investment payback of 5 years for 2 adjacent company lots.

- **BRS, Brussels, Belgium (Nov 2009 – June 2011)**
Sales of bio-consumables and technical laboratory equipment to optimize workflows and costs.
Function: Sales Engineer
Expanding existing customer base for technical lab equipment sales - exceeded annual revenue goal of EUR 200,000 by 8%
Responsible for bio-consumables growth - from non-existing up to EUR 10,000
Developed Marketing Campaigns, Conducted Product Training, Analyzed markets for new products and apparel
- **SBAE-Industries, Waarschoot, Belgium (Nov 2008 – Aug 2009)**
Start up Biotech company specialized in the production of microalgae for various markets (aquaculture, cosmetics, bio fuels)
Function: Technical Commercial Representative Europe
Responsible for business development for the European market
Productizing and launch of new products: GreenStim (Green Water Technique) and Rotifer Feed
Mapping and analyzing market potential for GreenStim (EUR 3,000,000) and Rotifer Feed (EUR 5,000,000)
Won EUR 200,000 contract with biggest European aquaculture company (Kiliç)
Comparison study of similar existing products on market: Overall performance – Pricing
- **Invitrogen, Merelbeke, Belgium (Jan 2008 – Nov 2008)**
A global life science technology company producing research tools for drug discovery, protein expression, gene silencing, cloning, nucleic acid purification & amplification and cell culture media
Function: Inside Sales Account Manager Benelux Region
Expanding existing accounts within the Benelux Area - Realized 4.5% growth on annual revenue of EUR 6,400,000
Won Contract for biggest Q2 and Q3 deals of the Benelux Area, EUR 70,000 and EUR 40,000 respectively
Developed Regional and Customer Oriented Marketing campaigns

Additional Information

IT: CSS-Dreamweaver, Perl, Bio-Perl, Matlab – Simulink, Microsoft Office

Languages: Excellent communication skills in Dutch (Native), English, French, Spanish. Notions of German

Other: Strong interpersonal communication skills, competitive and flexible, enjoy endurance sports