# Dr JAVIER RIOYO RUMAYOR

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Australian citizenship

### **PROFILE**

- Chartered Professional Engineer (MIEAust CPEng NER RPEQ) with cross-functional expertise in industrial and municipal wastewater treatment plants, laboratory analysis, water research and new business development.
- Motivated leader with good written, oral and interpersonal communication skills.

# **ACADEMIC QUALIFICATIONS**

- Doctor of Philosophy (PhD). University of Southern Queensland, Toowoomba Campus, Australia.
   2015-2019. Thesis title: Integrated treatment of brackish groundwater.
- Advanced Diploma of Marketing. Australian Pacific College, Sydney, Australia. 2014
- Advanced Diploma of Management. Australian Pacific College, Sydney, Australia. 2013
- MSc Environmental Impact Assessment. INIECO, Spain. 2002.
- MSc Environmental Management. INIECO, Spain. 2001.
- MSc Industrial Production and Quality. IDE-CESEM, Spain. 1999.
- Industrial Engineer (Industrial Chemistry). Universidad de Cantabria, Santander, Spain. 1999.

### **SCIENTIFIC PUBLICATIONS (First Author)**

- A review of strategies for RO brine minimization in inland desalination plants, Desalination and Water Treatment, 90 (2017) 110-113.
- Research on 'high-pH precipitation treatment' for RO concentrate minimization and salt recovery in a municipal groundwater desalination facility, Desalination, 439 (2018) 168-178.
- 'High-pH softening pretreatment' for boron removal in inland desalination systems, Separation and Purification technology, 205 (2018) 308-316.
- The effect of 'High-pH pretreatment' on RO concentrate minimization in a groundwater desalination facility using batch air gap membrane distillation, Separation and Purification technology, 227 (2019) 115699.
- Lithium Extraction from Spodumene by the Traditional Sulfuric Acid Process: A Review, Mineral Processing and Extractive Metallurgy Review (2020).

#### PROFESSIONAL AFFILIATIONS

- Chartered Professional Engineer (MIEAust CPEng NER RPEQ).
- Engineers Without Borders Australia.

### **AWARDS**

- Australian Research Training Program (RTP) scholarship. 2016.
- USQ Unit-Specific Publication Excellence Award 2019.

#### **VOLUNTEERING**

Peer Reviewer. Evaluating article submissions to scientific journals.

### **WORK HISTORY**

# April 2020 - Present.

Position: Country Manager and Environmental Consultant (Water Engineering Company). CONDORCHEM ENVITECH. Brisbane, QLD, Australia.

Condorchem Envitech is an Environmental Engineering company specialized in executing turnkey projects worldwide. The core business is wastewater treatment, effluent minimization and zero liquid discharge (ZLD) through evaporation and crystallization processes.

# Responsibilities:

- Responsible for developing and overseeing the implementation of a commercial strategy for diversifying the project portfolio in Australia, capturing emerging opportunities, new clients, etc.
- Providing technical advice to optimize the performance of industrial wastewater treatment plants.

# March 2015 - February 2020.

Position: Technical Officer & Teaching assistant. Faculty of Health, Engineering and Science. Civil Engineering & Surveying. UNIVERSITY OF SOUTHERN QUEENSLAND. Toowoomba, QLD, Australia.

The University of Southern Queensland is a regional university based in Toowoomba, Queensland, Australia.

### Responsibilities:

- Assist academic staff in setting up laboratory equipment, conducting practical classes and preparing teaching materials for university students.
- Teaching Assistant: Public Health Engineering and Hydraulics I courses.
- PhD dissertation title: Integrated Treatment of Brackish Groundwater. Researching feasible strategies for reverse osmosis concentrate minimization and salt recovery in inland desalination plants in Australia.

### **Achievements:**

Got four research papers published in high impact-factor international scientific journals.

#### November 2013 - March 2015.

Position: Site Engineer. Sancrox Traffic Arrangement Project (Pacific Highway Upgrade). FERROVIAL AGROMAN AUSTRALIA. Port Macquarie, NSW, Australia.

Ferrovial is the world's leading private investor in transportation infrastructures, with a workforce of approximately 70,000 employees and operations in more than 15 countries.

# Responsibilities:

- Assisting Project Manager and managing project environmental document control. Undertaking site inductions, technical inspections, monitoring activities, etc.
- Reviewing bids, preparing comparatives, and administering the award of contracts and contract amendments.

### **Achievements:**

 Working together with FAA Work Health & Safety Advisor and external consultants to complete the Project Construction Environmental Management Plan and sub-plans in accordance with all relevant requirements.

# **January 2013 – August 2013.**

Position: Country Manager and Environmental Consultant (Water Engineering Company). CONDORCHEM ENVITECH. Sydney, NSW, Australia.

Condorchem Envitech is an Environmental Engineering company specialized in executing turnkey projects worldwide. The core business is wastewater treatment, effluent minimization and zero liquid discharge (ZLD) through evaporation and crystallization processes.

### Responsibilities:

- Responsible for developing and overseeing the implementation of a commercial strategy for diversifying the project portfolio in Australia, capturing emerging opportunities, new clients, etc.
- Providing technical advice to optimize the performance of industrial wastewater treatment plants.

#### **Achievements:**

• Working successfully on agreements with Australian engineering companies.

# September 2011 – September 2012.

Position: Quality Assurance and Environmental Manager. MARE S.A. Santander, Cantabria, Spain.

MARE S.A is a public company associated with the local environmental authorities in the region of Cantabria (Spain). MARE is responsible for managing all the sewage treatment plants located in Cantabria.

### Responsibilities:

 Responsible for overseeing the environmental performance of all sewage treatment plants in Cantabria.

#### **Achievements:**

• Achieved a certification to qualify "MARE water laboratory" in accordance with ISO 9001:2008 standard.

### May 2006 - September 2011.

Position: Wastewater Treatment Plants Manager for the region of Cantabria, Spain. MARE, S.A. Santander, Cantabria, Spain.

### Responsibilities:

- Co-ordinating and managing all the sewage treatment plants located in Cantabria,
- Responsible for a budget of 19 million Euros per year to operate all sewage treatment plants in Cantabria.

#### **Achievements:**

 Coordinated research study, construction and initial operation of a new Membrane Bioreactor Treatment Plant (800 cubic meters per day) for treating leachates generated in "Meruelo Urban Solid Waste Landfill", achieving a reduction in the costs of treating leachates of approximately one million Euros per year.

### January 2002 - April 2006.

Position: Owner & General Manager. CENTRO TECNOLOGICO LAS MARISMAS S.L. Guarnizo, Cantabria, Spain.

Centro Tecnológico Las Marismas S.L is my own environmental consultancy and chemical laboratory located in Cantabria (Spain). The company offered global environmental assessments for companies and councils located in the north of Spain from 2001 to 2006.

### Responsibilities:

Establishing own environmental consultancy and water research laboratory.

#### **Achievements:**

- Employed a chemical engineer and a laboratory analyst to develop projects.
- Certified company with an ISO 9001 standard and accredited it with the Spanish Government as an
  official drinking and wastewater chemical laboratory.

### September 1999 - July 2001.

Position: Chemical laboratory manager. TECNICAS DE DESCONTAMINACION S.A. Guarnizo, Cantabria, Spain.

Técnicas de Descontaminación is a private company located in Cantabria (Spain). The company collects and treats industrial wastewater, waste oil and solid waste.

### Responsibilities:

 Researching and analysing treatments for industrial wastewater, waste oil and solid waste received in the company, reporting directly to the General Manager of the company.

### **Achievements:**

- Took part in attaining compulsory licences to start and operate the plant.
- Developed a chemical laboratory for the company.

### **KEY PROFESSIONAL ACHIEVEMENTS**

- **Co-ordinated successful** research study, construction and initial operation of the new treatment plant for treating leachates (wastewater) generated in "Meruelo Urban Solid Waste landfill", between 2009 and 2010.
- Successfully developed own environmental consultancy and water research laboratory certified in conformance with ISO 9001, from 2002 to 2006.

# **REFERENCES**

- Dr Vasantha Aravinthan. Position: Senior Lecturer in Environmental Engineering. University of Southern Queensland E-mail: <u>Vasanthadevi.Aravinthan@usq.edu.au</u>
- Dr Susette Eberhard. Position: Senior Technical Officer. University of Southern Queensland E-mail: <a href="mailto:Susette.Eberhard@usq.edu.au">Susette.Eberhard@usq.edu.au</a>
- Dr M<sup>a</sup> Carmen Ruiz Puente. Position: Associate Professor at University of Cantabria. Email: <u>ruizpm@unican.es</u>