

## **1. Name and Academic Ranking**

Jorge Mario Gómez Ramírez  
Associate Professor

## **2. Education**

Doctor Génie des Procédés. Université de Pau et des pays de l'Adour, France. (2006).  
MBA. Universidad de los Andes. Colombia. (1997).  
M. Sc. Chemical Engineering. Universidad Nacional de Colombia-Sede Bogotá. (1996).  
Chemical Engineering. Universidad Nacional de Colombia-Sede Manizales. (1989).

## **3. Academic Experience**

Associate Professor 2010- Present. Full Time  
Assistant Professor 2002-2010. Full Time  
Instructor Professor 1999-2002. Full Time

## **4. Non-academic Experience**

B.G Consultores. Leader of Projects. January 1996-January 1999 Constructora El Campín Ltda. December 1994-December 1995  
Colombiana de Emulsificantes S.A. Process Design Engineer. July 1992-December 1994  
Fundación Universidad De América. Adjunct Professor. January 1992-June 1994  
Pintura Victoria. Process Design Engineer. May 1989-May 1991

## **5. Certifications or professional registrations**

Colombia. Professional Card # 2160

## **6. Current membership in professional organizations**

AIChE, American Institute of Chemical Engineers - Member, 1999 -present  
ASEE American Society for Engineering Education  
Chemical Engineering Professional Council – Member

## **7. Honors and awards**

Agreement 66 of the Universidad de los Andes. Financing of doctoral formation. July 2002.  
The winners of 2006-07 Grant Program Excellence in Simulation, INVENSYS SIMSCI-ESSCOR-de 2007.  
Nominated to the National Engineering Award 2010.

## **8. Service Activities**

### National or International Panels and committees:

Chemical Engineering, Universidad de los Andes, Research Group Committee -GDPP (Grupo de Diseño de Productos y Procesos). Member 2004 – present  
Chemical Engineering, Universidad de los Andes, Member of the Academic Committee, 2014 – Present  
Chemical Engineering, Universidad de los Andes, Strategic Planning Committee, 2002 – Present

### Scientific Meeting organization:

Editor: Revista de Ingeniería y Universidad Pontificia Javeriana Facultad De Ingeniería (2013-Present)

## 9. Main Publications - Last Five Years

- Lozano F, Gomez J. (2016) Framework in PYOMO for the assessment and implementation of (as) NMPC controllers. *Computers and Chemical Engineering* (ISSN 0098-1354) 92 (N/A), pp. 93-111.
- Lozano F, Gomez J. (2015) Economic Oriented NMPC for an Extractive Distillation Column Using an Index Hybrid DAE Model Based on Fundamental Principles. *Industrial and Engineering Chemistry Research* (ISSN 0888-5885) 54 (N/A), pp. 6344-6354.
- Lozano F, Gomez J. (2015) Index Hybrid DAE Model Based on Fundamental Principles for NMPC of a Flash Separation Drum. *Industrial and Engineering Chemistry Research* (ISSN 0888-5885) 54 (N/A), pp. 2145-2155.
- Gomez J, Nova A, Ramos M. (2014) Simultaneous Optimal Design and Operation of a Diabatic Extractive Distillation Column Based on Exergy Analysis. *International Journal Of Exergy* (ISSN 1742-8297) 17 (N/A), pp. 287-312.
- Jerez I, Muñoz F, Gomez J. (2014) Approach to a reliable solution strategy for performing phase equilibrium calculations using MINLP optimization. *Latin American Applied Research* (ISSN 0327-0793) 44 (1), pp. 63-70.
- Ramos M, Gomez J, Reneaume. (2014) Simultaneous Optimal Design and Control of an Extractive Distillation System for the Production of Fuel Grade Ethanol Using a Mathematical Program with Complementarity Constraints. *Industrial and Engineering Chemistry Research* (ISSN 0888-5885) 53 (N/A), pp. 752-764.
- Barreto C, Jessica R, Gomez J, Achenie L, Milona-bulla H, Gonzalez A. (2014) Dynamic flux balance analysis for predicting gene overexpression effects in batch cultures. *Journal of Biological Systems* (ISSN 0218-3390) 22 (N/A), pp. 1-12.
- Ramos M, Garcia P, Gomez J. (2013) Optimal Control of the Extractive Distillation for the Production of Fuel-Grade Ethanol. *Industrial and Engineering Chemistry Research* (ISSN 0888-5885) 52 (1), pp. 8471-8487.
- Gil I, Gomez J, Rodriguez G. (2012) Control of an extractive distillation process to dehydrate ethanol using glycerol as entrainer. *Computers and Chemical Engineering* (ISSN 0098-1354) 39 (N/A), pp. 129-142