

1. Name and Academic Ranking

Oscar Alberto Alvarez Solano
Associate Professor

2. Education

Doctor in Chemical Engineering. Institut National Polytechnique de Lorraine, France. (2006).
M. Sc Civil Engineering. Universidad de los Andes. Colombia. (2000).
Chemical Engineering. Universidad de América Colombia. (1998).

3. Academic Experience

Associate professor 2010 – Present. Full time.
Assistant Professor 2006-2009. Full time.
Instructor Professor 2000-2002. Full time.

4. Certifications or professional registrations

Colombia, Professional license # 10744

5. Current membership in professional organizations

AIChE, American institute of Chemical Engineers - Member, 2009 - Present
ASEE American Society for Engineering Education
Chemical Engineering Professional Council – Member

6. Honors and awards

Winner – iNNpulsas Colombia, Genetrix consulting group. Title: A study on the potential of the biotechnology industry in Colombia. Design of a “pro-cluster” strategy for the configuration of a national Bio-region.

Named as outstanding professor of the School of Engineering for the years 2007, 2008 and 2009.

7. Service Activities

National or International Panels and committees:

Chemical Engineering, Universidad de los Andes, Director. 2010 - Present

Chemical Engineering, Universidad de los Andes, Research Group Committee -GDPP (Grupo de Diseño de Productos y Procesos). Member 2007 – present

Engineering Faculty, Chemical Engineering, Universidad de los Andes, Engineering Faculty Council, 2010 – Present

Chemical Engineering, Universidad de los Andes, Strategic Planning Committee, 2006 – Present

Scientific Meeting organization:

Reviewer: Journal of Colloid and Interface Science (2016)

Reviewer: AIChE Journal (2015)

Reviewer: Revista Instituto Colombiano del Petróleo (ICP) ECOPETROL S.A (2015)

Reviewer: Journal of Colloid and Interface Science (2013)

Reviewer: Revista Ingeniería de la Universidad de los Andes (2012)

Reviewer: Revista Facultad de Ingeniería de Antioquia (2012)

8. Main Publications - Last Five Years

- Aguilera S, Nuñez V, Achenie L, Alvarez O, Torres R, Gonzalez A. (2016) Peptides design based on transmembrane Escherichia coli's OmpA protein through molecular dynamics simulations in water–dodecane interfaces. *Journal of Molecular Graphics and Modelling* (ISSN 1093-3263) 68 (N/A), pp. 216-223.
- Pradilla D, Vargas W, Alvarez O. (2014) The application of a multi-scale approach to the manufacture of concentrated and highly concentrated emulsions. *Chemical Engineering Research and Design* (ISSN 0263-8762) 95 (N/A), pp. 162-172.
- Alvarez M, Macias A, Núñez V, Garces N, Castro H, Alvarez O, Gonzalez A. (2013) Molecular dynamics approach to investigate the coupling of the hydrophilic–lipophilic balance with the configuration distribution function in biosurfactant-based emulsions. *Journal of Molecular Modeling* (ISSN 1610-2940) 19 (N/A), pp. 5539-5543
- Vasquez D, Ortiz D, Alvarez O, Briceño J, Cabrales P. (2013) Hemorheological implications of perfluorocarbon based oxygen carrier interaction with colloid plasma expanders and blood. *Biotechnology Progress* (ISSN 1520-6033) 29 (N/A), pp. 796-807.
- Herrera A, Moreno V, Oliveira A, Hotza D, Alvarez O, Escobar J. (2012) Manufacture and Characterization of Alumina Ceramic Foams for Porous Burners. *Materials Science Forum* (ISSN 1662-9752) 727-728 (1), pp. 663-668.
- Gomez S, Alvarez O, Escobar J, Rodrigues J, Rambo C, Hotza D. (2012) Relationship between Rheological Behaviour and Final Structure of Al₂O₃ and YSZ Foams Produced by Replica. *Research Letters in Materials Science* (ISSN 1687-6822) 1 (N/A), pp. 1-13.
- Vasquez D, Merchan A, Guzmán M, Castro C, Alvarez O, Briceño J. (2012) Effects of a perfluorocarbon emulsion on the physicochemical properties of blood in the presence of hydroxyethyl starch (HES) in a normovolemic hemodilution (in vitro). *Asaio Journal* (ISSN 1058-2916) 58 (N/A), pp. 9-9.

9. Professional Development Activities

- Pneumatic Conveying of Bulk Solids Course, American Institute of Chemical Engineers Houston, TX, USA, 2016
- Dispersions in Liquids: Suspensions, Emulsions, and Foams Course of American Chemical Society Houston, TX, USA, 2016
- MIT VMS Immersion Program, Massachusetts Institute of Technology – MIT, MA, USA, 2014
- Taller Quicklook - Technology Assessment Marketing, Connect Bogotá Región, The University of Texas at Austin, Bogotá, Colombia, 2014