

September 5, 2011

University of Washington
Department of Pathology
Department of Applied Mathematics
Dr. Kristin Swanson

Dear Madam:

I am writing for the interest to apply as a researcher in your group. I am a Electronic Engineer graduate of the Simón Bolívar University, Caracas, Venezuela; with a Master degree in Environmental Technologies by the University of Navarra, San Sebastian, Spain, and expecting to finish my PhD at the same University at the end of this year.

I bring with me several years as junior researcher in the Environmental Engineering Area at CEIT, where I had the possibility to work in some research projects related to different topics: mathematical modeling, programming and control of biological processes (specifically related to sludge digestion technologies).

My strong computer skills (programming, simulations), and project management are but some of the things that make me an asset to your group.

Attached is my resume for your perusal. Should you require any further information, I can be reached at +34.620.925303.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Zambrano', is placed over a light gray rectangular background.

Jesús Zambrano

Jesús Alberto Zambrano

Personalia	Name: ZAMBRANO BALLESTERO, Jesús Alberto Address: C/Zemoriya 29, Gros. San Sebastian, Spain. Date/place of birth: January 24, 1982, Caracas. Nationality: Venezuelan Phone: (+34) 620 925 303 e-mail: jazambranob@gmail.com
Current employment	CEIT - Centro de Estudios e Investigaciones Técnicas de Gipuzkoa (Centre of Studies and Technical Investigations of Guipúzcoa). Address: Paseo de Manuel Lardizabal 15, San Sebastian, Guipúzcoa, 20018 (Spain). Phone: (+34) 943 212 800. Web-page: www.ceit.es <ul style="list-style-type: none">PhD student and junior researcher at the Environmental Engineering Unit.
Education	Simón Bolívar University , Caracas (Venezuela) <ul style="list-style-type: none">Electronics Engineering, 2003<ul style="list-style-type: none">Dissertation Topic: <i>Study of Symmetry Coupled Striplines Using Finite Differences and Spatial Compression</i> TECNUN - University of Navarra , San Sebastian, Guipúzcoa, (Spain) <ul style="list-style-type: none">Diploma of Advanced Studies and Investigating Sufficiency in Environmental Technologies, 2009PhD student in Industrial Engineering, Dept. Environmental Engineering. Title: "Autothermal Thermophilic Aerobic Digestion: Design of controllers and benchmarking validation", supervisor: Dr. Ion Irizar. Exam: Nov./2011 (aprox.)
Teaching Experience	Universidad Simón Bolívar , Caracas, (Venezuela) <ul style="list-style-type: none">Teaching Assistant, Department of Mathematics. April/2000 – June/2003 TECNUN - University of Navarra , San Sebastian, Guipúzcoa, (Spain) <ul style="list-style-type: none">Teaching Assistant, Department of Mathematics. Feb./2009 - present
Journal Articles	<ol style="list-style-type: none">O. Sucre and J. A. Zambrano, <i>Cálculo de las impedancias características de líneas Stripline acopladas utilizando el método de diferencias finitas y compresión especial (computing characteristic impedances of couple striplines using finite differences method and spatial compression)</i>, Proc. IV Congreso Nacional de Ingeniería Eléctrica, Vol. 2, pp. 642-647, Venezuela, Sept. 2004.J. A. Zambrano, <i>First approach in Automatic Control for sludge treatment systems. A case of study: ATAD technology</i>, Dissertation for Diploma of Advanced Studies and Investigating Sufficiency, University of Navarra, Spain, July 2009.J. A. Zambrano, M. Gil-Martínez, M. García-Sanz and I. Irizar, <i>Benchmarking of control strategies for ATAD technology: a first approach to the automatic control of sludge treatment systems</i>, Water Science & Technology 60(2), pp. 409 - 417, 2009.I. Irizar, J. A. Zambrano, D. Montoya, M. de Gracia and R. García. <i>Online monitoring of OUR, Kla and OTE indicators: practical implementation in full-scale industrial WWTPs</i>. Water Science & Technology 60(2), pp. 459 -

466, 2009.

5. J. A. Zambrano and I. Irizar. *New methodology for robust tuning of bending-points detection algorithm in ATAD process considering uncertainty*. Water Science & Technology (in preparation).

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- Conference Presentations
1. O. Sucre and J. A. Zambrano, *Cálculo de las impedancias características de líneas Stripline acopladas utilizando el método de diferencias finitas y compresión espacial*, IV Congreso Nacional de Ingeniería Eléctrica, Caracas, Venezuela, 2004.
 2. J. A. Zambrano, M. Gil-Martínez, M. García-Sanz and I. Irizar, *Benchmarking of control strategies for ATAD technology: a first approach to the automatic control of sludge treatment systems*, Proceedings of the 10th IWA Conference on Instrumentation Control and Automation (ICA), Cairns, Australia, 2009.

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- Scholarships and Awards
- Scholarship, Simón Bolívar University (Venezuela), 1999 - 2003.
 - Acknowledgment, part of the 30 active engineering students with higher scores, Simón Bolívar University (Venezuela), Sep. – Dec. 2002.
 - Doctoral Scholarship, University of Navarra (Spain), 2007 - 2009.

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- Research interests
- Process control of environmental systems.
 - Mathematical modelling and simulation of processes for the treatment and management of water, wastewater and solid wastes in urban and industrial systems.

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- Contact details
- Dr. Eduardo Ayesa. CEIT, Head of Department at Environmental Engineering (+34.943.212800 (ext. 2215), eayesa@ceit.es).
 - Dr. Ion Irizar. CEIT, Senior Researcher at Environmental Engineering. (+34.943.212800 (ext. 2327), iirizar@ceit.es).
 - Dr. Antonio Salterain. CEIT, Senior Researcher at Environmental Engineering. (+34.943.212800 (ext. 2257), asalterain@ceit.es).
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