

# CURRICULUM VITAE

## YESID ERNESTO ASAFF MENDOZA



Name: Asaff Mendoza , Yesid Ernesto  
Date of birth: October 8<sup>th</sup>, 1978  
Place of birth: Cúcuta, Colombia  
Address: Rua Ernani Castro dos Santos 130 – Bloco E  
Apto 02, Condominio Vivendas dos Jardins.  
Canasvieiras. ZIP code: 88054-440  
Florianópolis – SC Brazil.  
Phones: +55 (48) 99658388 (mobile)  
Email: [yesid@laship.ufsc.br](mailto:yesid@laship.ufsc.br)

### Work area

---

- Design, modeling, simulation and control of mechanicals, hydraulics and pneumatics systems and components
- Integration of hydraulics and pneumatics with software and electronics: mechatronic solutions
- Servo-hydraulics and servo-pneumatic systems
- Biodegradable fluids
- Instrumentation and monitoring
- Expert systems

### Education

---

2009 – 2013      Doctorate. in Mechanical Engineering  
Area: Design of hydraulic fluids, Biodegradable fluids  
Federal University of Santa Catarina – UFSC  
Florianópolis – SC, Brazil

2011 – 2011      Interuniversity exchange doctorate  
Area: Biodegradable fluids  
Institute for fluid power drives and controls – IFAS  
RWTH Aachen University - Germany

2004 – 2006      Master M.Sc. in Mechanical Engineering  
Area: Analysis and design of pneumatics, components and systems  
Federal University of Santa Catarina – UFSC  
Florianópolis – SC, Brazil

1996 – 2002      Bachelor in Mechanical Engineering  
Francisco de Paula Santander University – UFPS  
Cúcuta, Colombia

## **Professional Experience**

---

- 2008 – 2013            Research Scientist  
Design of hydraulic systems using biodegradable fluids  
Laboratory of Hydraulic and Pneumatic Systems - LASHIP  
Federal University of Santa Catarina – UFSC  
Florianópolis – SC, Brazil
- 2004 – 2008            Research Scientist  
Development of a Servo-Pneumatic Positioning System for Speed  
Governors of Hydroelectric Power Plants.  
Design and development of pneumatic components  
Laboratory of Hydraulic and Pneumatic Systems - LASHIP  
Federal University of Santa Catarina – UFSC  
Florianópolis – SC, Brazil
- 2002 – 2003            Maintenance Engineer  
EEPPMM – Marketing Directo  
Barranquilla, Colombia
- 2001 – 2002            Trainee Job – Mechanical Engineer  
Social Security Institute – ISS Hospital  
Cúcuta, Colombia

## **Languages**

---

- Spanish:        Native language
- English:        Advanced
- Portuguese:    Fluent

## **Computational Experience:**

---

- Windows 7: Excellent
- Microsoft Office and Staroffice (Excel, Word and Power Point): Excellent
- Autocad 2007, Solid Edge 2010 e Solid Works 2010: Excellent
- Matlab - Simulink: Excellent
- Amesim: Intermediary
- Automation Studio: Intermediary

## **Extracurricular interests**

---

- Gastronomy, traveling, reading and photography.

## Awards

Best paper award - GGH Group -. XIX SNPTEE Seminário Nacional de Produção e Transmissão de Energia Elétrica. CIGRE Brazilian National Electric Power Generation and Transmission Committee. 2007. Brazil.

## Publications

- [1] Bacca, Germán; Asaff, Yesid; De Negri, Victor J. Modelo matemático no-lineal para un servosistema neumático de posicionamiento preciso. Revista Tecno Lógicas, ITM - Medellin, p. 11 - 37, 24 jul. 2010.
- [2] Asaff, Y. E.; Locatelli, C.; Dilda, V.; De Negri, Victor Juliano; De Pieri, E. Resultados teóricos - experimentais do controle de trajetória de um atuador hidráulico: controladores PID, backstepping e estrutura variável. In: XVIII Congresso Brasileiro de Automática, 2010, Bonito - MS. p. 908-915.
- [3] Hené, Mauro Damian; Asaff, Y. E.; Gonçalves, Lidiane; De Negri, Victor Juliano. Theoretical and experimental study of the matching between proportional valves and symmetric and asymmetric cylinders. In: 7th International Fluid Power Conference - 7 IFK, 2010, Aachen:, 2010. v. 2. p. 155-166.
- [4] Lucas, G.; Asaff, Y. E.; De Negri, Victor Juliano. Bancada para ensaios de componentes e sistemas pneumáticos IBYTU. In: XVI Congresso Nacional de Estudantes de Engenharia Mecânica, 2009, Florianópolis.
- [5] Cesconetto, A. C.; Asaff, Y. E.; De Negri, Victor Juliano. Desenvolvimento de um equipamento didático para o dimensionamento de componentes pneumáticos. In: XVI Congresso Nacional de Estudantes de Engenharia Mecânica, 2009, Florianópolis.
- [6] Asaff, Y. E.; Hené, Mauro Damian; Boaventura, Thiago; De Negri, Victor Juliano. Development of a Didatic Equipment for Pneumatic Component Sizing. In: Cobem 2009 - 20th International Congress of Mechanical Engineering, 2009, Gramado.
- [7] Asaff, Y. E.; De Negri, Victor Juliano; Soares, J. M. Desenvolvimento de um Regulador de Velocidade para Turbinas de PCH's empregando um Servoposicionador Pneumático. Revista EletroEvolução - Sistemas de Potência, Rio de Janeiro / Brasil, p. 10 - 16, 01 mar. 2008.
- [8] Asaff, Y. E.; De Negri, Victor Juliano; Soares, J. M. Regulador de Velocidade Pneutrónico para Pequenas Centrais Hidrelétricas. In: IV Conferência de PCH - Mercado & Meio Ambiente, 2008, São Paulo.
- [9] Asaff, Y. E.; Gonçalves, Lidiane; De Negri, Victor Juliano. Applicability of Servopneumatic Positioning Systems for High Loads. In: Bath/ASME Symposium on Fluid Power and Motion Control (FPMC 08), 2008. v. 1. p. 219-232.
- [10] Asaff, Y. E.; Soares, J. M.; De Negri, Victor Juliano. Desenvolvimento de um regulador de velocidade para turbinas de PCHs empregando um servoposicionador pneumático. In:

XIX SNPTEE Seminário Nacional de Produção e Transmissão de Energia Elétrica, 2007, RJ.

- [11] Asaff, Y. E.; De Negri, Victor Juliano. Development of a High Power Pneumatic Servo Positioning System for Speed Governors of Hydraulic Turbines. In: Cobem 2007 - 19TH International Congress of Mechanical Engineering, 2007, Brasília.
- [12] Asaff, Y. E.; Carone, R. Simulação dinâmica de um sistema de controle hidráulico. In: XII Congresso Nacional de Estudantes de Engenharia Mecânica - CREEM, 2005, Ilha Solteira – SP.