JUAN JACOBO PAREDES HELLER

Advanced Structures and Composites Center (AEWC) 5793 AEWC Building, University of Maine, Orono, Me 04469-5793 (207) 299-3478 (tel); (207) 581-2074 (fax)

Email: juan.paredes@umit.maine.edu

Citizenship: Honduras and Germany; Visa Status: Student **Languages:** Spanish (100%) and English (85%).

Education

- Ph.D. Candidate in Forest Resources; Sept 2005- ; University of Maine; Orono, ME; "The Influence of Hot Water Extraction on Physical, Mechanical, and Adhesion Properties of OSB" (Advisor: Prof. Stephen Shaler)
- M.S. Wood Science; May 2002; University of Bio-Bio, Concepción, Chile; "Lumber Defect Detection of *Pinus Radiata* by Artificial Vision" (Advisor: Prof. Mario Ramos).
- B.S. Forestry Engineer; November 1998; José C. Valle University, Comayagua, Honduras; "Quality Control in Forestry Utilization of *Pinus oocarpa*".
- Das. Dasónomo; December 1989; ESNACIFOR University, Siguatepeque, Honduras.
- <u>Short courses attended:</u> Administration of Forestry Management Plans; Forestry Maps; Industrial Supervision Techniques; Communication; Management and Operation of Boilers; Conversion and Planning of Forestry Industries; Design of Forestry Experiments; Computer Programs; Pedagogy of Superior Education (In Germany); Forestry Road; and Automatization of the Industrial Production.

Positions Held

Research Assistent, September 2005- present, University of Maine, Orono, ME.

- Asistant College Professor, July 1996 August 2005, ESNACIFOR University, Siguatepeque, Honduras. I taught the following courses: Introduction to Wood Technological, Wood Preservation and Drying, Forestry Administration, and Sawmills. And I aslo maneged the manufacturing of doors and furniture (2,000 doors per year).
- General Manager, May 1995 June 1996, Sawmill Morazán, Santa Cruz de Yojoa, Honduras. <u>Work overview</u>: Supervision and transaction of legal state permits of forestry utilization, quality control, staff administration (80 workers), and forestry utilization and wood process.
- Manager of Production & Exportation, August 1993 April 1995, Sawmill Búfalo, Villanueva, Honduras. Trading of wood products in Honduras. Work overview: Supervision and transaction of legal state permits of forestry utilization, quality control, staff administration (450 workers), Forestry utilization and wood process.
- Forestry Utilization, July 1992 July 1991, Sawmill Noriega, Olancho, Honduras. <u>Work overview:</u> Supervision and transaction of legal state permits of forestry utilization, forestry utilization and wood process.
- Manager of Forest Farm, June 1991– July 1990, Tela Rail Road Company, Santa Cruz de Yojoa, Honduras. Work overview: Supervision and transaction of legal state permits of forestry utilization.
- Forestry Industries Control, December 1989 May 1991, AFE- COHDEFOR, Santa Barbara, Honduras. Work overview: Transaction of legal state permits of forestry utilization.

Professional and Honorary Membership

Society of Wood Science & Technology (SWST); Forest Products Society (FPS); Technical Association of the Pulp and Paper Industry (TAPPI); and Colegio de Profesionales Forestales de Honduras (COLPROFORH).

Publication and presentations

- **PAREDES JJ**, R. MILLS, SHALER SM, GARDNER DJ, and van HEININGEN A (2009) Surface characterization of Red Maple strands after hot water extraction. Wood Fiber Sci 41(1):38-50.
- **PAREDES JJ**, and SHALER S (2009) Volatic organic compound (VOC) emissions and performance of OSB from extracted southern yellow pine. Presented at 63st international convention of Forest Product Society, 21-23 June, 2009, Boise, ID, USA. pp 5.

- HOWELL C, **PAREDES JJ**, and JELLISON J (2009) Decay Resistance Properties of hot water extracted strandboard. Wood Fiber Sci 41(2):1-8.
- **PAREDES JJ**, JARA R, van HEININGEN A, and SHALER S (2008) Influence of hemicellulose extraction on physical and mechanical behavior of OSB. Forest Prod J 58(12):56-62.
- **PAREDES JJ**, Shaler S (2008) Oriented strand board (OSB) from hot water extracted wood. Proceedings of 3rd Conference ECOWOOD, 10-12 September 2008, Porto, Portugal. pp 175-184.
- **PAREDES JJ**, and SHALER SM (2008) OSB properties after hot water extraction. Presented at 4st Eastern CANUSA Forest Science Conference, 17-18 October, 2008, University of Maine, Orono, ME, USA. pp 51.
- HOWELL C, **PAREDES JJ**, SHALER S, and JELLISON J (2008) Decay Resistance Properties of Hemicellulose-Extracted Oriented Strand Board. International research group on wood protection. IRG/WP 08-10644.
- **PAREDES JJ**, VAN HEININGEN A, and SHALER S (2007) Influence of hemicellulose extraction on physical and mechanical behavior of OSB. Presented at 61st international convention of Forest Product Society, 10-13 June, 2007, Knoxville, TN, USA. pp 13.
- JARA R, **PAREDES J J**, VAN HEININGEN A, and SHALER S (2006) Influence of hemicellulose extraction on suitability for oriented strand board (OSB) production extraction study. Presented at first conference on biorefinery, Univ. de Concepcion, Concepcion, Chile.
- SANTOS X, **PAREDES J. J.** (2004) Comparison of wood mechanics of six wood species for manufacturing of matches. El Tatascan journal.
- ALVARADO E, **PAREDES J. J.** (2004) Comparison of physics properties of six wood species for manufacturing of matches. El Tatascan journal.
- AVILA Y, **PAREDES J. J.** (2004) Comparison of drying properties of six wood species for manufacturing of matches. El Tatascan journal.
- **PAREDES J. J.** (2002) Evaluation of the operation cost of air drying and solar drying combined for Pinus oocarpa lumber. El Tatascan.
- PINEL C, PAREDES J. J. (2005) Design and construction of mathematical models to estimate the variation of apparent density for Pinus oocarpa. El Tatascan journal.
- **PAREDES J. J.**, RAMOS M y AGUILERA C. Deteccion de nudos en Pinus radiata Don using artificial vision. VIII EMBRAMEM Uberlandia, Brazil. July, 24-26, 2002.
- **PAREDES J. J.** (2001) Deteccion de nudos en madera aserrada de Pinus radiata D. Don por artificial vision. *Maderas, Cienc. tecnol.*, vol.3, no.1-2, p.94-94.
- PAREDES J. J. (1997) Classification of wood, manual sawing, and use of chainsaw. Teaching guidance.
- **PAREDES JJ**, HOWELL C, SHALER SM, AND RICE (2009) Sorption isotherms responces of aspen and hemlock OSB strands using hot water extraction (submitted to Wood and Fiber Science).
- **PAREDES JJ**, SHALER SM, COLE B, AND EDGAR R (2009) Volatic organic compound (VOC) emissions and performance of OSB from extracted southern yellow pine (written paper).
- **PAREDES JJ**, JAKES J, HOWELL C, AND SHALER SM (2009) Influence of hot water extraction on cell wall and OSB strand mechanics (written paper).

Personal references

- Prof. Stephen Shaler, Ph.D. (Ph.D. advisor); Department of Forest Management, University of Maine, Orono, Me. Ph: (207) 581-2886. Email: shaler@maine.edu
- Prof. Douglas Gardner, Ph.D. (Ph.D. committee member); Department of Forest Management. University of Maine, Orono, Me. Ph: (207) 581-2846. Email: douglas.gardner@umit.maine.edu
- Prof. Barbara Cole, Ph.D. (Ph.D. committee member); Department of Chemistry, University of Maine, Orono, Me. Ph: (207) 581-1188. Email: cole@maine.edu
- Prof. Mario Ramos, Ph.D. (MSc advisor); Department of Wood Science and Technology, University of Bio-Bio, Chile. Ph: 56-41-273-1682. Email: mramos@ubiobio.cl