



CURRICULUM VITAE

Full name : **George Mantanis**
Birth date : 18 Sept. 1966
Birth place : Mytilene, Lesvos island, Greece
Family status : Married, with two children
Citizenship : Greek
Profession : Professor, TEI of Larissa
Home address : Stamouli Str. 27-29, Karditsa, 43100, Greece
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EDUCATION

-  Diploma (Dipl. of Science). Department of Forestry and Natural Environment
Aristotelian University, Thessaloniki, Greece (11 Sept. 1989).
-  Ph.D. (Doctor of Philosophy). Department of Forestry, University of
Wisconsin - Madison, Madison, Wisconsin, USA (21 May 1994).

THESES

Mantanis, G. I. (1989). *Improvement of Particleboard Properties with a High Temperature Press Treatment*. Diploma thesis, Department of Forestry & Natural Environment, Aristotelian Univ., Thessaloniki, Greece (supervisor: Prof. Athanassios Grigoriou)

Mantanis G. I. (1994). [*Swelling of Lignocellulosic Materials in Water and Organic Liquids.*](#)

Ph.D. thesis, Department of Forestry, University of Wisconsin-Madison, Madison,

Wisconsin, USA (supervisor: Prof. Raoumond A. Young)

PROFESSIONAL EXPERIENCE

- Professor, Technological Education Institute of Larissa, [Department of Wood & Furniture Tech. and Design](#), Lab of Wood Technology, Karditsa, Greece.

(Oct. 2002 - present)

- Research Scientist, [Marlit Ltd.](#) - Industrial producer of special chemicals used in the wood panels industry, A.C.M. Wood Chemicals Plc, Gefyra, Thessaloniki, Greece.

(Sept. 1998 – Oct. 2001)

- Research Scientist, [Adhesives Research Institute Ltd.](#), A.C.M. Wood Chemicals Plc., Thessaloniki, Greece.

(Jan. 1998 - Sept. 1998)

- Wood Technologist, [Forest Research Institute](#), N.AG.RE.F, Thessaloniki, Greece.

(Aug. 1996 - Oct. 1997)

- Research Assistant, [Dept. of Forestry](#), Univ. of Wisconsin-Madison, WI, USA.

(Jan. 1991 - May 1994)

RESEARCH INTERESTS

 *Physical and chemical properties of wood*

 *Wood adhesion and adhesives*

 *Modification of wood*

QUALIFICATIONS

PC: Functional systems : *Windows, Excel, Word, Internet, Powerpoint*

Statistical packages : *MINITAB*

Languages: Greek (native), English (fluent).

REFERRED PUBLICATIONS & PRESENTATIONS

- (1) Mantanis G. I., Young R. A. and R. M. Rowell (1994). Swelling of Wood. Part I. Swelling in Water. *Wood Science and Technology* 28: 119-134.
- (2) Mantanis G. I., Young R. A. and R. M. Rowell (1994). Swelling of Wood. Part II. Swelling in Organic Liquids. *Holzforschung* 48 (6): 480-490.
- (3) Mantanis G. I., Young R. A. and R. M. Rowell (1995). Swelling of Wood. Part III. Effect of Temperature and Extractives on Rate and Maximum Swelling. *Holzforschung* 49 (3): 239-248.
- (4) Mantanis G. I., Young R. A. and R. M. Rowell (1995). Swelling of Compressed Cellulose Fiber Webs in Organic Liquids. *Cellulose* 2: 1-22.
- (5) Mantanis G. I., Young R. A. and R. M. Rowell (1995). Swelling of Wood. Part IV. A Statistical Model for Prediction of Maximum Swelling of Wood in Organic Liquids. *Wood and Fiber Science* 27 (1): 22-24.
- (6) Mantanis G. I. and R. A. Young (1997). Wetting of Wood. *Wood Science and Technology* 31: 339-353.
- (7) Mantanis G. I. and A. E. Karalivanos (1997). Control and Certification of the European Wooden Pallet: Current Status in Greece. *Proc. of the 1st Conf. of Standardisation and Related Activities: A Means of Balkan Countries Collaboration*, pp. 156-162, May 8-10, 1997, Technology Park, Thessaloniki, Greece.
- (8) Mantanis G. I. and P. K. Koukos (1997). Agricultural lignocellulosic residues in Greece : Estimation and prospects for rational utilization. *Proc. of the 3rd Int. Conf. for Development of Forestry, Wood Science & Technology*, pp. 374-379, Sept. 28-30, 1997, Belgrade, Yugoslavia.
- (9) Alexandropoulos, D., Nakos, P. and G. Mantanis (1998). European approach to particleboard and MDF adhesives. *1998 Resin & Blending Seminar Proceedings*,

Composite Panel Association (CPA), pp. 137-146, Dec. 10-11, 1998, Charlotte, N. Carolina, USA.

- (10) Mantanis G., Nakos P., Berns J. and L. Rigal (2000). Turning agricultural straw residues into value-added composite products: A new environmentally friendly technology. *Proc. of the 5th Int. Conference on Environmental Pollution*, pp. 840-848, Aug. 28-31, 2000, Aristotelian University of Thessaloniki, Thessaloniki, Greece.
- (11) Mantanis G. I. and J. Berns (2001). Strawboard bonded with urea-formaldehyde resins. *Proc. of the 35th Int. Particleboard/Composite Materials Symposium*, April 2-5, 2001, Washington State University, Pullman, Washington, USA.
- (12) Roffael E., Athanassiadou E. and G. Mantanis (2002). Recycling of particle- and fibreboards using the extruder technique. *Proc. of the 2nd Conf. of Umweltschutz in der Holzwerkstoffindustrie*, March 21-22, 2002, Goettingen, Germany.
- (13) Ntalos G., Papadopoulos A., Karastergiou S., Mantanis G. and J. Kakaras (2003). Dimension stability and decay resistance against *Coniophora puteana* of scots pine sapwood due to reaction with propionic anhydride. *Proc. of International Conference – 75th anniversary of the Forest Research Institute of Bulgarian Academy*, Sept. 9-11, 2003, Sofia, Bulgaria.
- (14) Mantanis G. I., E. Athanassiadou, P. Nakos and A. Coutinho (2004). A new chemical process for recycling waste fibreboards. *Proc. of the 38th Int. Particleboard/Composite Materials Symposium*, pp. 119-122, April 5-8, 2004, Washington State University, Pullman, Washington, USA.
- (15) Mantanis G. et al. (2004). A new recycling process for waste panels. In: *Proc. of European COST E31 Conference: "Management of recovered wood"*. Ed. C. Gallis, 22-24 April 2004, Thessaloniki, Greece, pp. 204-210.
- (16) Athanassiadou E., Roffael E. and G. Mantanis (2005). Medium density fibreboards from recycled fibres. *Proc. of 2nd Conference: «Towards a higher technical, economical*

and environmental standard». COST Action E31 “Management of Recovered Wood”, Sept. 29-30, 2005, CTBA, Bordeaux, France.

- (17) Mantanis G., Vouli E., Gonitsioti C. and G. Ntalos (2007). Formaldehyde in indoor air of new apartments in Greece. *Proc. of the COST Action E49 Conference “Measurement and Control of VOC Emissions from Wood-Based Panels”*, 28-30 November 2007, WKI, Braunschweig, Germany.
- (18) Ntalos G. and G. Mantanis (2007). Proceedings of the International Workshop COST Action E34 “*Practical solutions for furniture and structural bonding*”, 22-23 March 2007, Larnaka, Cyprus.
- (19) Karastergiou S., Mantanis G. and K. Skoularakos (2008). Green gluing of oak wood (*Quercus conferta*) with a one-component polyurethane adhesive. *Wood Material Science and Engineering* 2008; 3-4: 79-82.
- (20) Mantanis G.I. and A. Papadopoulos (2010). The sorption of water vapour of wood treated with a nanotechnology compound. *Wood Science and Technology* 44 (3): 515-522.
- (21) Mantanis G.I., Adamopoulos S. and E. Rammou (2010). Physical and mechanical properties of *Pinus leucodermis* wood. *Wood Material Science & Engineering* 2010; 5 (1): 50-52.
- (22) Mantanis G.I. and A. Papadopoulos (2010). Reducing the thickness swelling of wood-based panels by applying a nanotechnology compound. *European Journal of Wood & Wood Products* 68: 237-239.
- (23) Mantanis G. and D. Birbilis (2010). Physical and mechanical properties of athel wood (*Tamarix aphylla*). *SDU Forestry Faculty Journal* 2010; A(2): 82-87.
- (24) Sahin T. and G. Mantanis (2011). Nano-based surface treatment effects on swelling, water sorption and hardness of wood. *Maderas. Ciencia y tecnologia* 13;1.
- (25) Sahin T. and G. Mantanis (2011). Colour changes in wood surfaces modified by a nanoparticulate based treatment. *Wood Research* (in press).

- (26) Mantanis G., Karastergiou S. & I. Barboutis (2011). Finger jointing of green Black pine wood (*Pinus nigra L.*). *European J. of Wood & Wood Products* 69 (1): 155-157.
- (27) Skarvelis M. and G. Mantanis (2011). Physical and mechanical properties of beech wood harvested in the Greek public forests. *Wood Research* (in press).
- (28) Chinou I., Gortzi O., Graikou K. and G. Mantanis (2011). Chemical composition and biological activity of the essential oil of *Pinus leucodermis* wood. *Molecules* (submitted).

INTERNATIONAL PATENTS

- (1) Mantanis G., Nakos P., Labat G. and L. Rigal (2000). *Method for extracting and recycling waste chemically treated wood*. WO 00/74909 A1, World Intellectual Property Organisation, 14/12/2000.
- (2) Mantanis G. (2002). *Aqueous fire retardant*. WO 02/102926 A1, World Intellectual Property Organisation, 27/12/2002.

RECOGNITION OF WORK


CITATIONS (ACCORDING TO SCIENCE CITATION INDEX)

Total citations made for the work of Dr. George Mantanis: **two-hundred sixty six (266)**

***h* index: 7**

www.teilar.gr/~mantanis/research.files/H1.htm

PRESENTATIONS IN WORKSHOPS

-  Kakaras I. and G. Mantanis (2007). Repair and conservation of old wooden constructions and furniture at TEI Larissa - Greece: Education and activities. Poster presentation. *Workshop COST Action IE0601 "Wood Science for Conservation of Cultural Heritage"*, 8/9 June 2007, Royal Museum for Central Africa, Tervuren, Belgium.

- ✚ Mantanis G. (2007). Green gluing of wood: a new technology – useful for the conservation of wooden cultural heritage objects? Poster presentation. *Workshop COST Action IE0601 “Wood Science for Conservation of Cultural Heritage”*, 8/9 June 2007, Royal Museum for Central Africa, Tervuren, Belgium.
- ✚ Mantanis G. and M. Skarvelis (2006). Forestry & Quality control of wood products: Status-quo in Greece. International Workshop «*Status-quo in Quality Control*». COST Action E53 “Quality Control of Wood and Wood Products”, Nov. 8-10, 2006, Univ. of West Hungary, Sopron, Hungary.

REFERRED WORKS IN GREEK JOURNALS-SYMPOSIA

- (3) Mantanis G. I. (1998). Production of briquettes from wood residues. *Geotechnical Scientific Matters* 9 (1): 56-59 (in Greek).
- (5) Mantanis G. I. and J. L. Philippou (1998). Changes during the thermal decomposition of wood. A review article. *Forestry Research J.* 12: 73-81 (in Greek).
- (6) Mantanis G., Ntalos G. and S. Karastergiou (2003). Coloured medium density fibreboard: A new value added product. Its perspectives in Greece. *Proceedings of 11th Panhellenic Society of Forestry*, 1-3 Oct. 2003, Ancient Olymbia, Greece (in Greek).
- (7) Ntalos G., Alkistis K., Karastergiou S. and G. Mantanis (2003). Levels of noise within the facilities of Greek wood industries. *Proceedings of 11th Panhellenic Society of Forestry*, 1-3 Oct. 2003, Ancient Olymbia, Greece (in Greek).
- (8) Mantanis G., Ntalos G. and G. Anastasis (2005). Consequences of wood dust on the health of furniture – wood industry workers. *Geotechnical Scientific Matters* 16 (2): 74-80 (in Greek).
- (9) Mantanis G., Anastasis G. and J. Kakaras (2005). Formaldehyde: the main indoor air pollutant in new houses. *Geotechnical Scientific Matters* (in Greek).

PARTICIPATION IN EU RESEARCH PROJECTS

- *Novel Closed-loop Technology for Panel Recycling*
CEC funded project - FAIR PL96-1486 (1998-2000).
- *Non-Toxic Aminoplastic Adhesive for MDF and New Application for Panel Products of Improved Weather and Biological Resistance*
CEC funded project - FAIR PL96-1604 (1998-2000).
- *Innovative Technology for Panel Manufacture from Fiberised Agriwaste*
CEC funded project - INNOVATION IN20551I (1998-2001)
- Participation in several research, technical & trouble-shooting projects:
<http://users.teilar.gr/~mantanis/research.htm>

PARTICIPATION IN COST Actions

- ✚ Member in the Action: COST E31 *Management of Recovered Wood* http://www.ctib-techn.be/coste31/frames/f_e31.htm
- ✚ Member in the Action: COST E34 - WG2: *Green Gluing of Wood* <http://www1.uni-hamburg.de/cost/e34/>
- ✚ National Representative in COST FP0904 *Thermo- Hydro- Mechanical- Wood Behaviour and Processing* <http://www.cost-fp0904.ahb.bfh.ch/cost/en/home>
- ✚ National Representative in COST FP1006 *Bringing new functions to wood through surface modification* http://www.cost.esf.org/domains_actions/fps/Actions/fp1006

OTHER SCIENTIFIC ACTIVITIES IN GREECE

- *Technical articles (in Greek)* <http://users.teilar.gr/~mantanis/articles.htm>
- *Small projects-cases (in Greek)* <http://users.teilar.gr/~mantanis/anagnwrisi-xylou.htm>
- *Articles-in-public (in Greek)* <http://users.teilar.gr/~mantanis/theseis.htm>