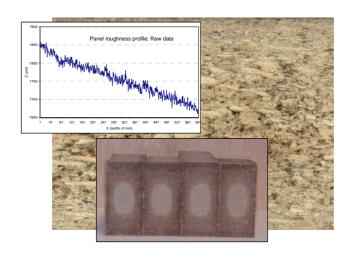


COST E49
Processes and Performance of Wood-Based Panels



Adding Value through Physical Functionality

Edited by

Prof. Dr. M.Hakkı ALMA and Prof. Dr. Hulya KALAYCIOGLU









PROCESSES AND PERFORMANCE OF WOOD-BASED PANELS

ADDING VALUE THROUGH PHYSICAL FUNCTIONALITY

Workshop Proceedings

Edited by

Prof. Dr. M. Hakkı ALMA and Prof.Dr. Hülya KALAYCIOĞLU

COST Action E49 "Process and Performance of Wood- Based Panels"

In cooperation with

Department of Forest Industry Engineering

Kahramanmaras Sütçü Imam University, Karadeniz Technical University







Istanbul, Turkey, 28th and 29th April, 2009

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Technical editor: M. Hakkı ALMA, Hülya KALAYCIOĞLU

PREFACE

The European wood- based panels (WBP) industry has developed considerably over the few decades and is of significant economic importance to the European Union (EU). The WBP industry adds value to Europe's forests, processes wood wastes into new, useful products and provides direct and indirect employment to thousands across the EU. In recognition of this and of the growing competition outside of Europe, the COST Action E49 will help to ensure that both the panels manufacturing sector and the equipment suppliers in the EU will stay ahead of the increasing competition from abroad.

The aim of COST E49 "Processes and Performance of Wood- Based Panels" is to help the European wood- based panels sector to meet future demands and competition from other materials and markets through the scientific-based advance of wood- based panels and their production processes towards higher technical, economic and environmental standards. The objectives and work programme of E49 are shared between three Working Groups (WG): WGI – Process optimization and process innovation; WG2- Fundamentals and modeling and WG3 – Performance in use and new products.

The Workshop which is being held within the COST Action E49 is focused on Adding Value through Physical Functionality for wood based composites. Today's society is characterized by increased mobility and demand for new solutions, and raw materials. The materials used should be low in weight, stable and with adequate mechanical and physical properties.

The aim of the workshop is review the state of art in the field of Adding Value through Physical Functionality for wood based panels, its production, properties and usage.

The Workshop has been organized by the Department of Forest Industrial Engineering, Faculty of Forestry, University of Sutcu Imam and Department of Forest Industrial Engineering, Faculty of Forestry, Karadeniz Technical University. Support and help also provided by the scientific committee, reviewers and by the COST E49 Management Committee. The organizer and the editor would like to thank to all that help at organizing this Workshop, reviewers, speakers and also session moderators.

I hope that you enjoyed the Workshop and that you will find these papers useful in your future work

Prof. Dr. M. Hakkı ALMA and Hülya KALAYCIOĞLU

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