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Title: Professor

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Involvement in the COST Action:

Research interest

Wood adhesives (development of new eco-friendly binding systems, improvement of surface adhesion), Wood-based panels (interaction between coatings, overlays or veneers and WBP, formaldehyde emission); High-pressure laminates (incorporation of nanomaterials for innovative functionalities); Wood machining/finishing (monitoring and control of wood machining processes, objective and subjective evaluation of finished surfaces, interaction between wood and finishing products); WPC (compatibility between bio-sourced fibers with thermoplastics)

Specialized technique available in my lab

- Lab equipment for
 - Manufacture of wood-based panels and testing
 - ABES (Automated bonding evaluation system)
 - Synthesis of resins
 - HPLC, GPC/SEC and NIR spectroscopy for resins analysis
 - Contact angles measurement
 - Surface quality evaluation (gloss, color, roughness, vision system for surface and edge quality assessment)
 - Formaldehyde testing methods (EN 120, EN 717-1, EN 717-2 and JIS 1460)
 - Artificial weathering (Xenon test)

Additional comment

The IPViseu and LEPAE (Faculty of Engineering/ University of Porto) team focuses its research in cooperation with industry on innovative adhesive systems for wood based panels with ultra low formaldehyde emission, new on-line synthesis monitoring methods for resin production and new experimental methodology and modeling for wood-based panels bonding quality prediction. It is also specialized in environmentally compatible wood-based panels design by machinability and surface quality.

Please indicate your availability and willingness to engage yourself in a study or measurements for other members of the Cost Action FP1006 as part of a collaborative study/project and possibly a common peer review paper.

YES

No