



Dr inż. Karol Szymanowski

CONTACT

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EDUCATION

Occupational titles and science degrees	Rok uzyskania	Institution
Engineer full-time studies on Faculty of Wood Technology	2008	Faculty of Wood Technology Warsaw University of Life Sciences - SGGW
Master engineer of Wood technology	2009	
Doctor of forest sciences in field of wood technology	2015	
Numerous courses and training in the use and programming CNC machines		

PROFESIONAL COMPETENCE

Position	Date (year)	Institution
Tutor	2013	Faculty of Wood Technology Warsaw University of Life Sciences - SGGW
Assistant professor	2017	

SELECTED CURRENT FUNCTIONS

- Science Club supervisor
- Member of the Program Board of the Wood Technology Department
- Member of the National Team of the Regional Examination Board in Łomża - Vocational Examinations Department

DIDACTIC

- the lectures: Woodworking machinery, Inner transport devices

SCIENCE

Science research:

- Diagnostics of tool condition and cutting process
- Machinability of wood and wood-based materials
- Innovative tool materials used in the processing of wood and wood-based materials

- The quality of wood materials processing

SELECTED SCIENCE PUBLICATIONS

1. Influence of direction of cutting on cutting forces and quality during milling laminated MDF / **Karol Szymanowski**, Dominik Mizerski, Piotr Podziewski, Jarosław Górski, Mariusz Cyrankowski, Paweł Czarniak. Annals of Warsaw University of Life Sciences - SGGW. Forestry and Wood Technology 2017, nr 97, s. 69-722.
2. Machinability characterization of solid wood with scratching and drilling techniques / Paweł Czarniak, **Karol Szymanowski**, Jacek Wilkowski, Jarosław Górski, Fabrice Dagrain. Wood Research 2019, Vol. 64, nr 4, s. 719-730
3. Use of cutting force and vibro-acoustic signals in tool wear monitoring based on multiple regression technique for compreg milling / Jarosław Górski, Karol Szymanowski, Piotr Podziewski, Katarzyna Śmietańska, Paweł Czarniak, Mariusz Cyrankowski. BioResources 2019, Vol. 14, nr 2, s. 3379-3388
4. Functional assessment of particleboards made of apple and plum orchard pruning / Grzegorz Kowaluk, **Karol Szymanowski**, Piotr Kozłowski, Wojciech Kukula, Conrad Sala, Eduardo Robles, Paweł Czarniak. Waste and Biomass Valorization 2019, s. 1-10
5. Technical note: lifetime improvement and the cutting forces in nitrogen-implanted drills during wood-based material machining / Jacek Wilkowski, Marek Barlak, Zbigniew Werner, Jerzy Zagórski, Paweł Czarniak, Piotr Podziewski, **Karol Szymanowski**. Wood and Fiber Science 2019, Vol. 51, nr 2, s. 1-12
6. The effect of full-cell impregnation of pine wood (*Pinus sylvestris* L.) on changes in electrical resistance and on the accuracy of moisture content measurement using resistance meters/ Aleksandra Konopka, Jacek Barański, Kazimierz Orłowski, **Karol Szymanowski**. BioResources 2018, Vol. 13, nr 1, s. 1360-1371
7. Relative machinability of wood-based boards in the case of drilling - experimental study / Piotr Podziewski, **Karol Szymanowski**, Jarosław Górski, Paweł Czarniak. BioResources 2018, Vol. 13, nr 1, s. 1761-1772
8. Condition of edges of particle board laminated after saws on a panel saw / Grzegorz Wieloch, **Karol Szymanowski**. Trieskové a Beztrieskové Obrábanie Dreva = Chip and Chipless Woodworking Processes 2018, Vol. 11, nr 1, s. 197-204
9. Drilling features of particleboard made of selected fruit trees prunings / Piotr Kozłowski, Wojciech Kukuła, **Karol Szymanowski**, Grzegorz Kowaluk, Paweł Czarniak, Radosław Auriga, Łukasz Kwaśny. Annals of Warsaw University of Life Sciences - SGGW. Forestry and Wood Technology 2017, nr 98, s. 53-58
10. Surface roughness after machining of medium density fiberboards designed for deep milling / Rafał Kutyla, Piotr Podziewski, Patryk Król, **Karol Szymanowski**. Annals of Warsaw University of Life Sciences - SGGW. Forestry and Wood Technology 2017, nr 98, s. 72-75
11. Compreg - machinability during drilling / Piotr Podziewski, Jarosław Górski, **Karol Szymanowski**, Mariusz Cyrankowski, Paweł Czarniak. Annals of Warsaw University of Life Sciences - SGGW. Forestry and Wood Technology 2017, nr 97, s. 140-143
12. Fine particles content in dust created in CNC milling of selected wood composites / Tomasz Rogoziński, Jacek Wilkowski, Jarosław Górski, **Karol Szymanowski**, Piotr Podziewski, Paweł Czarniak. Wood and Fiber Science 2017, Vol. 49, nr 4, s. 461-469
13. Ignition temperature of gas combustion products of selected wood materials / Mariusz Cyrankowski, Waldemar Jaskółowski, Jan Osipiuk, Jarosław Górski, **Karol Szymanowski**, Piotr Podziewski. Annals of Warsaw University of Life Sciences - SGGW. Forestry and Wood Technology 2016, nr 94, s. 101-104
14. Relative machinability indicators of wood plastic composites (WPC) based on recycled material / Paweł Czarniak, Iskander Alimov, Jacek Wilkowski, Jarosław Górski, Piotr Borysiuk, **Karol Szymanowski** Piotr Podziewski, Farkhod Magrupov. Wood - Science - Economy : 1st International Scientific Conference : 5-6 October 2015, Poznań, Poland : proceedings [abstrakty]. - Poznań : Wood Technology Institute : The State Forest Information Centre, [2015]. - S. 69
15. Značenje vibroakustičkih signalov takih kak vibraciâ i Œum v diagnostike iznosa instrumenta vo vremiâ sverleniâ v drevesnostružečnoj laminirovannoj plite / Albina Jegorowa, Jarosław Górski, Radosław Morek, Piotr Podziewski, **Karol Szymanowski**, Paweł Czarniak. Annals of Warsaw University of Life Sciences - SGGW. Forestry and Wood Technology 2015, nr 92, s. 141-145
16. Geometriâ iznosa sverla vo vremiâ obrabotki drevesno-stružečnyh laminirovannyh plit / A'lbina Egorova, Pavel Čarnâk, Âroslav Gurski, Âcek Vi'kovski, Pietr Podzevski, **Karol Szymanovski**. Annals of Warsaw University of Life Sciences - SGGW. Forestry and Wood Technology 2015, nr 89, s. 66-69

17. Effect of feed rate on quality during drilling different types of particleboard / Piotr Podziewski, Jarosław Górski, Radosław Morek, **Karol Szymanowski**, Jacek Wilkowski, Mariusz Cyrankowski, Karolina Szymona. Annals of Warsaw University of Life Sciences - SGGW. Forestry and Wood Technology 2015, nr 92, s. 330-333
18. Effect of feed rate on cutting forces during drilling raw particleboard, laminated particleboard, MFP and OSB / Piotr Podziewski, Jarosław Górski, Radosław Morek, **Karol Szymanowski**, Paweł Czarniak, Jacek Wilkowski. Annals of Warsaw University of Life Sciences - SGGW. Forestry and Wood Technology 2015, nr 90, s. 146-149
19. Quality management in polish industry of solid wood furniture – tools, systems, approach / Natalia Polewska, Katarzyna Śmietańska, Jarosław Górski, Radosław Morek, Jacek Wilkowski, **Karol Szymanowski**. Annals of Warsaw University of Life Sciences - SGGW. Forestry and Wood Technology 2015, nr 92, s. 339-344
20. Dust creation in CNC drilling of wood composites/ Tomasz Rogoziński, Jacek Wilkowski, Jarosław Górski, Paweł Czarniak, Piotr Podziewski, **Karol Szymanowski**. BioResources 2015, Vol. 10, nr 2, s. 3657-3665

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