

## References

1. Kim SB, Yi NH, Kim HY, Kim JH, Song YCh. Material and structural performance evaluation of recycled PET fiber reinforced concrete. *Cement & Concrete Comp.*; 2010; 32: 232–240.
2. Broda J, Brachaczek W. Influence of Polypropylene Fibre Geometry on the Mechanical Properties of Cement Mortars. *FIBRES & TEXTILES in Eastern Europe* 2015; 23, 2(110): 123-129.
3. Tighiouart B, Benmokrane B, Gao D. Investigation of bond in concrete member with fiber reinforced polymer (FRP) bars. *Construction and Building Mat.*; 1998; 12: 453-462.
4. Zollo RF. Fiber-reinforced concrete: an overview after 30 years of development. *Cement and Concrete Comp.* 1997; 19: 107-122.
5. Lane JM, Hourston DJ Surface treatments of polyolefins. *Progress in Organic Coatings*; 1993; 21: 269-284.
6. Wang W, Wang L, Shi Q, et al. Progress of the Surface Modification of PP Fiber Used in Concrete. *Polymer-Plastics Techn and Eng*; 2006; 45: 29-34.
7. Naik TR, Singh SS, Huber CO, Brodersen BS. Use of post-consumer waste plastics in cement-based composites. *Cement and Concrete Res.* 1996; 26: 1489-1492.
8. Koh SK, Cho JS, Kim KH, Ha S, Beag YW. Altering a polymer surface chemical structure by an ion-assisted reaction. *J Adhesion Sci and Techn*; 2002; 16: 129-142.
9. Berto TD. Method for making a plastic aggregate, United States Patent 603057.2; 2000.
10. Wun HC, Li VC. Fiber cement interface tailoring with plasma treatment. *Cement and Concrete Comp.* 1999; 21: 205–212.
11. Sadrumontazi A, Fasihi A, Haghi AK. Effect of PP fibers on mechanical and physical properties of mortars containing nano-SiO<sub>2</sub>. Proceedings of 3rd International Conference on Concrete & Development, Building and Housing Research Center, Tehran, Iran, 2009, 1163-1172.
12. Ujhelyiová A, Horbanová L, Michlík P, Vencelová P. Effect of Nanoadditive on the thermo-mechanical and Mechanical Properties of Filled PP Fibers. *Book of Proceedings, 6<sup>th</sup> International Textile, Clothing & Design Conference*, Dubrovnik, Croatia, 2012, 122-127.
13. Wu W, Wagner MH, Xu Z. Surface treatment mechanism of nano-SiO<sub>2</sub> and the properties of PP/nano-SiO<sub>2</sub> composite Materials. *Colloid Polym Sci.* 2003; 281: 550–555.
14. Wang D, Feng Y, Han L, Tian Y. Effect of Wet Surface Treated Nano-SiO<sub>2</sub> on Mechanical Properties of PP Composite. *J Wuhan University of Technology-Mater. Sci. Ed.* 2008; 23: 354-357.
15. Cai LF, Mai YL, Rong MZ, Ruan WH, Zhang MQ. Interfacial effects in nano-silica/PP composites fabricated by in-situ chemical blowing. *eXPRESS Polymer Letters*; 2007; 1: 2–7.
16. Marcinčin A, Ujhelyiová A, Marcinčin K, Alexy P. Nucleation of the beta-Modification of Isotactic Polypropylene. *J. Thermal Analysis*; 1996; 46: 581-595.
17. Fabia J, Janicki J, Ślusarczyk C, Rom M, Graczyk T, Gawłowski A. Study of Structure of Polypropylene Microfibres Modified with Multi-Walled Carbon Nanotubes. *FIBRES & TEXTILES in Eastern Europe* 2015; 23, 3(111): 38-44.
18. Ujhelyiová A, Strecká Z, Bolhová E, Dulíková M, Bugaj P. Polypropylene fibres modified polyvinyl alcohol and nanoadditive. Structure and properties. *FIBRES & TEXTILES in Eastern Europe*; 2007; 15, 5-6 (64-65): 37-40.

19. Škrovanová L, Borsig E, Streller R, et al. Polypropylene plus boehmite nanocomposite fibers. *Journal of Polymer Engineering*; 2012; 32: 445-451.
20. Paukszta D, Borysiak S. The Influence of Processing and the Polymorphism of Lignocellulosic Fillers on the Structure and Properties of Composite Materials - A Review. *Materials*; 2013; 6: 2747-2767.
21. Paukszta D, Zielinska-Mackowiak J. Crystallisation of polypropylene matrix in composites filled with wooden parts of rapeseed straw. *J Therm Anal Calorim*; 2012; 109: 611–618.
22. Borysiak S, Klapiszewski L, Bula K, Jesionowski T. Nucleation ability of advanced functional silica/lignin hybrid fillers in polypropylene composites. *J Therm Anal Calorim*; 2016; 126: 251–262.
23. Odalanowska M, Borysiak S. Analysis of the Nucleation Activity of Wood Fillers for Green Polymer Composites. *FIBRES & TEXTILES in Eastern Europe*; 2018; 26: 2(128): 66-72. DOI: 10.5604/01.3001.0011.5741
24. Naffakh M, Martín Z, Marco C, Gómez MA, Jiménez I. Isothermal crystallization kinetics of isotactic PP with inorganic fullerene-like WS<sub>2</sub> nanoparticles. *Thermochimica Acta*, 2008; 472: 11-16.
25. Papageorgiou GZ, Achilias DS, Bikiaris DN, Karayannidis GP. Crystallization kinetics and nucleation activity of filler in PP/surface-treated SiO<sub>2</sub> nanocomposites. *Thermochimica Acta*, 2005; 427: 117-128.
26. Zhang QX, Yu ZZ, Xie XL, Mai YW. Crystallization and impact energy of PP/CaCO<sub>3</sub> nanocomposites with nonionic modifier. *Polymer* 2004; 45: 5985-5994.
27. Chan ChM, Wu J, Li JX, Cheung YK. PP/calcium carbonate nanocomposites. *Polymer* 2002; 43: 2981-2992.
28. Yiping H, Guangmei Ch, Zhen Y, Hongwu L, Yong W. Non-isothermal crystallization behaviour of PP with nucleating agents and nano-calcium carbonate. *European Polymer J.* 2005; 41: 2753-2760.
29. Yuan Q, Awate S, Misra RDK. Nonisothermal crystallization behaviour of PP-clay nanocomposite. *European Polymer J.* 2006; 42: 1994-2003.
30. Marcinčin A, Hricová M, Ujhelyiová A, Brejka O, Michlík P, Dulíková M, Strecká Z, Chmela S. Effect of Inorganic (Nano)fillers on the UV Barrier Properties, Photo and Thermal Degradation of PP Fibers. *FIBERS & TEXTILES in Eastern Europe* 2009; 17, 6 (77): 29-35.
31. Chuah KP, Gan SN, Chee KK. Determination of Avrami exponent by differential scanning calorimetry for non-isothermal crystallization of polymers. *Polymer* 1998; 40: 253-259.
32. Cho K, Li F, Choi J. Crystallization and melting behaviour of PP and maleated PP blends. *Polymer* 1999; 40: 1719-1729.
33. Di Lorenzo ML, Silvestre C. Non-isothermal crystallization of polymers. *Prog. Polym. Sci.* 1999; 24: 917-950.
34. Avrami MJ. *J. Chem. Phys.* 1941; 9: 177.
35. Ozawa T. Kinetics of non-isothermal crystallization. *Polymer* 1971; 12: 150-158.
36. Dobрева A, Gutzow I. Activity of substrates in the catalyzed nucleation of glass-forming melts. I. Theory. *J. Non-Cryst. Solids* 1993; 162: 1-12.
37. Dobрева A, Gutzow I. Activity of substrates in the catalyzed nucleation of glass-forming melts. II. Experimental evidence. *J. Non-Cryst. Solids* 1993; 162: 13-25.
38. Mandelkern L. Crystallization of polymers. McGraw-Hill, New York, N.Y., 1994; 306
39. Sharples A. Overall kinetics of crystallization, In: Sharples, A., ed. Introduction to polymer crystallization. London, Edward Arnold, 1996; 44-59.

