References

- 1. Schwarz ER. Textiles and the microscope. McGraw-Hill, 1934.
- Schwarz ER. Certain aspects of yarn structure. *Textile Research Journal* 1951; 21: 125-136.
- 3. Gracie PS. Twist geometry and twist limits in yarns and cords. *Journal of the Textile Institute* 1960; 51 (7): 271-288.
- 4. Iyer KB and Phatarfod RM. Some aspects of yarn structure. *Journal of the Textile Institute* 1965; 56 (5): 225-247.
- 5. Hearle JWS and Merchant VB. Relation between specific volume, count and twist of spun nylon yarns. *Textile Research Journal* 1963; 33 (6): 417-424.
- Hearle JWS, Grosberg P and Backer S. *Structural mechanics of fibres, yarns and fabrics*. Wiley-Interscience, 1969.
- 7. Sokolov GV. Theory of twisting of fibrous materials (in Russian), Light Industry, 1977.
- 8. Neckář B and Ježek H. Influence exerted by the spinning system and the fibre properties on staple fibre yarns (in German). *Melliand Textilberichte* 1985; 66 (7): 481-485.
- Binkevičius A. Predicting of physical and mechanical properties of union yarns (in Russian), Ph. D Thesis, Kaunas Polytechnic Institute, Kaunas, 1985.
- 10. Zemlekov VI and Popov LN. Packing of cross-section of multifilament yarn during axial tension (in Russian). *Technology of Textile Industry* 1988; 3: 11-14.
- Neckář TB. Relation between compression and filling up of fibrous configurations (in Czech). *Textil* 1989; 44 (10): 366-370.
- 12. Iyer PB, Sreenivasan S, Patel GS, Iyer KRK and Patil NB. Effect of yarn geometry and fiber properties on tensile behavior of cotton yarns swollen and stretched in aqueous zinc-chloride. *Journal of Applied Polymer Science* 1991; 42 (11): 2915-2922.
- 13. Van Langenhove L. Simulating the mechanical properties of a yarn based on the properties and arrangement of its fibers. Part I: The finite element model. *Textile Research Journal* 1997; 67: 263-268.
- 14. Neckář TB. Yarn fineness, diameter and twist. *Fibres & Textiles in Eastern Europe* 1998;6 (4): 20-23.
- 15. Morris PJ, Merkin JH and Rennell RW. Modelling of yarn properties from fibre properties. *Journal of the Textile Institute* 1999; 90 (3): 322-335.
- 16. Zimliki DA, Kennedy JM and Hirt DE. Determining mechanical properties of yarns and two-ply cords from single-filament data. Part I: Model development and predictions. *Textile Research Journal* 2000; 70: 991-1004.

- 17. Petrulis D and Petrulyte S. Properties of close packing of filaments in yarn. *Fibres & Textiles in Eastern Europe* 2003; 11 40 (1): 16-20.
- Porwal PK, Beyerlein IJ and Phoenix SL. Statistical strength of twisted fiber bundles with load sharing controlled by friction length scales. *Journal of Mechanics of Materials and Structures* 2007; 2 (4) 773-791.
- Chattopadhyay R. Advances in textile yarn production. In *Technical textile yarns*. *Industrial and medical applications*. Editors R. Alagirusamy, A. Das. Woodhead Publishing Limited. 2010, pp. 3-55.
- 20. Li Y-L, Kinloch LA and Windle AH. Direct spinning of carbon nanotube fibers from chemical vapor deposition synthesis. *Science* 2004; 304 (5668): 276-278.
- 21. Zhang M., Atkinson KR and Baughman RH. Multifunctional carbon nanotube yarns by downsizing: an ancient technology. *Science* 2004; 306 (5700): 1358-1361.
- 22. He J, Zhou Y, Qi K, Wang L, Li P and Ciu S. Continuous twisted nanofiber yarns fabricated by double conjugate electrospinning. *Fibers and Polymers* 2013; 14 (11): 1857-1863.