19. Formhals A. Process and apparatus for preparing artificial threads. Patent 1975504, USA, 1934.
20. Doshi J, Reneker DH. Electrospinning process and application of electrospun fibers. *J. Electrostat.* 1995; 35: 151-160.
21. McCann JT, Li D, Xia YN. Electrospinning of nanofibers with core-sheath, hollow, or porous structures. *J. Mater. Chem.* 2005; 15: 735-738.
22. Picciani PHS, Soares BG, Medeiros ES, Souza Junior FG, Wood DF, Orts WJ, Mattoso LHC. Electrospinning of Polyaniline/Poly(Lactic Acid) Ultrathin fibers: process and statistical modeling using a non-gaussian approach. *Macromol. Theor. Simul.* 2009; 18: 528-536.
23. Costa RGF, Ribeiro C, Mattoso LHC. Morphological and photocatalytic properties of PVA/TiO2 nanocomposite fibers produced by electrospinning. *J. Nanosci. Nanotechn.* 2010; 10: 5144-5152.
24. de Oliveira HP, Albuquerque Jr JJF, Nogueiras C, Rieumont J. Physical chemistry behavior of enteric polymer in drug release systems. *Int. J. Pharm.* 2009; 366: 185-189.
25. de Oliveira HP, Tavares GF, Nogueiras C, Rieumont J. Physico-chemical analysis of metronidazole encapsulation processes in Eudragit copolymers and their blending with amphiphilic block copolymers. *Int. J. Pharm.* 2009; 380: 55-61.
26. Zeleny J. The electrical discharge from liquid points, and a hydrostatic method of measuring the electric intensity at their surfaces. *Phys. Rev.* 1914; 3: 69-91.
27. Zeleny J. Instability of electrified liquid surfaces. *Phys. Rev.* 1917; 10:1-6.
28. Zeleny J. Electrical discharges from pointed conductors. *Phys. Rev.*1920; 16: 102-125.
29. Taylor G. Electrically driven jets. *Proc. R. Soc. Lond. A.* 1969; 313: 453-475.
30. Drozin VG. The electrical dispersion of liquids as aerosols. *J. Colloid. Sci.* 1955; 10: 158-164.
31. Baumgarten PK. Electrostatic spinning of acrylic microfibers. *J. Colloid. Interf. Sci.* 1971; 36: 71-79.
32. Gañán AM. Cone-Jet Analytical Extension of Taylor's Electrostatic Solution and the Asymptotic Universal Scaling Laws in Electrospraying. *Phys. Rev. Lett.* 1997; 79: 217-220.
33. Gañán AM. The surface charge in electrospraying: its nature and its universalscaling laws. *J. Aerosol. Sci.* 1999; 30: 863-872.
34. Hohman MM, Shin YM, Rutledge GC, Brenner MP. Electrospinning and electrically forced jets. I. Stability theory. *Phys. Fluids.* 2001; 13: 2201-2220.
35. Hohman MM, Shin YM, Rutledge GC, Brenner MP. Electrospinning and electrically forced jets. II. Applications. *Phys Fluids* 2001; 13: 2221-2236.
36. Wan YQ, Guo Q, Pan N. Thermo-electro-hydrodynamic model for electrospinning process. *Int. J. Nonlinear Sci. Num. Simul.* 2004; 5: 5-8.
37. Yarin AL, Koombhongse S, Reneker DH. Taylor cone and jetting from liquid droplets in electrospinning of nanofibers. *J. Appl. Phys.* 2001; 90: 4836-4846.
38. Yarin AL, Koombhongse S, Reneker DH. Bending instability in electrospinning of nanofibers. *J. Appl. Phys.* 2001; 89: 3018-3026.
39. Yarin AL, Chase GG, Liu W, Doiphode SV, Reneker DH. Liquid drop growth on a fiber. *Aiche. J.* 2006; 52: 217-227.
40. Han T, Reneker DH, Yarin AL. Pendulum-like motion of straight electrified jets. *Polymer* 2008; 49: 2160-2169.
41. Han T, Yarin AL, Reneker DH. Viscoelastic electrospinning jets: initial stresses and elongation rheometry. *Polymer* 2008;49:1651-1658.
42. Reneker DH, Yarin AL, Fong H, Koombhongse S. Bending instability of electrically charged liquid jets of polymer solutions in electrospinning. *J. Appl. Phys.* 2000; 87: 4531-4547.
43. Reneker DH, Yarin AL. Electrospinning jets and polymer nanofibers. *Polymer* 2008; 49: 2387-2425.
44. Gans DM, Harkins WD. The drop weight method for the determination of surface tension. The effect of an inclination of the tip upon the drop weight. *J. Am. Chem. Soc.* 1930; 52(6): 2287–228.
45. Bailey KC. Determination of Surface Tension by the Drop-Weight Method. *Nature* 1936; 137: 323-323.
46. Araújo ES, Nascimento MLF, de Oliveira HP. Influence of Triton X-100 on PVA fibres production by electrospinning technique. *Fibres & Textiles in Eastern Europe* 2013; 21: 39-43.
47. Collins TJ. ImageJ for microscopy. *Biotechniques* 2007; 43: 25-30.
48. Barboriak DP, Padua AO, York GE, MacFall JR. Creation of DICOM-aware applications using ImageJ. *J. Digit. Imaging.* 2005;18: 91-99.
49. Rajwa B, Mcnally HA, Varadharajan P, Sturgis J, Robinson JP. AFM/CLSM data visualization and comparison using an open-source toolkit. *Microsc. Res. Techniq.* 2004; 64: 176-184.
50. Eliceiri KW, Rueden C. Tools for visualizing multidimensional images from living specimens. *Photochem. Photobiol.* 2005; 81: 1116-1122.
51. DeHoff RT, Rhines FN (Eds.). *Quantitative Microscopy*. New York: McGraw-Hill, 1968.
52. Kolmogorov AN. Sulla determinazione empirica di una legge di distribuzione. *Inst. Ital. Atti. Giorn.* 1933; 4: 83-91.
53. Gosset WS. The probable error of a mean. *Biometrika* 1908; 6: 1-25.
54. Fisher RA. Applications of "Student's" distribution. *Metron* 1925; 5: 90-104.
55. Tan SH, Inai R, Kotaki M, Ramakrishna S. Systematic parameter study for ultrafine fiber fabrication via electrospinning process. *Polymer* 2005; 46: 6128-6134.

Received 23.10.2014 Reviewed 19.06.2015