Micro-composite fibres by electrospinning

To cite this article: D-H Shou and J-H He 2008 J. Phys.: Conf. Ser. 96 012213

View the article online for updates and enhancements.

Related content
- Structural transition, dielectric properties and functionality in epoxy resin—barium titanate nanocomposites
  A C Patsidis and G C Psarras
- Internal charge behaviour of nanocomposites
  J Keith Nelson and John C Fothergill
- Polymer active and passive laser elements made of organjodies
  V I Bezrodn, O V Przhonskaya, E A Tikhonov et al.

Recent citations
- Nonionic surfactants for enhancing electrospinability and for the preparation of electrospun nanofibers
  JiHuan He et al
Micro-composite fibres by electrospinning

Da-Hua Shou, Ji-Huan He
Key Laboratory of Science & Technology of Eco-Textile(Donghua University), Ministry of Education, China
Modern Textile Institute, Donghua University, 1882 Yan-an Xilu Road, Shanghai 200051, China
E-mail: jhhe@dhu.edu.cn

Abstract. This paper reports a new method for producing micro-composite fibers using electrospinning.

The presentation suggests a new method for producing micro-composite fibers using electrospinning. Figure 1 shows the core-shell structured PAN/PVP fibers. The great potential applications of these microcomposites in tissue engineering scaffold, wound dressing, drug releasing system and sound absorption might be caught much attention in the future. Its mathematical model and theoretical analysis worth further studying.

Fig.1 Optical Microscopy images of PAN/PVP composite coaxial micro-fibres

Acknowledgements
This material is based on work supported by the 111 project under the grand No. B07024 and by the Program for New Century Excellent Talents in University under grand No. NCET-05-0417.

1 To whom any correspondence should be addressed.