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Study on Ionic Liquid Modified Silica/SBR Composites Prepared by Latex Co-coagulation

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Abstract: Using 1-butyl-3-methyl-imiazolium hexafluorophosphate(Bmim. PF_6) modified silica, the modified silica/SBR composites were prepared by latex co-coagulation method, and the curing behavior, physical properties and microstructure of the composites were investigated. The results showed that, the interaction between Bmim. PF_6 and silica resulted from hydrogen bond; compared with unmodified silica/SBR composites, modified silica/SBR composites possessed higher crosslink density, and the dispersion of silica in rubber matrix was improved, while the tensile strength, tear strength and wear resistance were increased.

Key words: ionic liquid; SBR; silica; composite; dispersion

张立群教授获得美国化学学会 Sparks-Thomas 奖

中图分类号: TQ33 文献标志码: D

2011 年 10 月 11—14 日, 美国化学学会橡胶专业委员会 (ACS Rubber Division) 在俄亥俄州克利夫兰市召开了第 180 届学术与技术会议, 会上宣布张立群教授获得 Sparks-Thomas 奖。这一结果登载在该会议的 Show Daily 上。Sparks-Thomas 奖设立于 1986 年, 由埃克森美孚化工资助, 旨在奖励那些在橡胶科学与技术领域做出贡献的青年科学家和工程师, 每年全球提名 1 人, 可空缺, 采用提名和评审相结合的评选方式。张立群教授因在橡胶纳米复合材料、橡胶补强机理以及生物基工程弹性体等方面的领先工作而获此殊荣, 是目前唯一获此奖励的中国学者。张立群教授还将受邀于 2012 年在美国召开的第 181

届 ACS Rubber Division 技术会议上做获奖演讲报告。

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国内外简讯 2 则

△2011 年 9 月 21 日, 由中国石油和化学工业联合会评选的“中国化工行业技术创新示范企业”名单公布。软控股份有限公司顺利通过复审, 被认定为 2011 年度“中国化工行业技术创新示范企业”。

(软控股份有限公司 李令新)

△2011 年 9 月, 软控股份有限公司资源节约型和环境友好型试点企业试点方案通过了国家工信部、财政部和科技部组织的专家评审。

(软控股份有限公司 李令新)