



第6届国际热工程中传递现象学术会议 在汉城举行

第6届国际热工程中传递现象学术会议(ISPTP-6)于1993年5月9~13日在汉城举行。本届会议的主题是热工程中热流体的传递现象(包括质量、动量、热和能传递)的理论基础与应用的各个方面。热工程广泛应用于科学研究和生产技术过程,如生物技术、化工和冶金过程、制造技术、航空航天、材料加工以及动力系统等。会议共发表论文306篇,其中,会议特邀的指导性论文(Lead Papers)4篇,主题论文(Keynote Papers)19篇,而有关聚合物加工过程中两相流体流动及传热研究的论文数占有一定的比例。

(梁基照)

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Summary Permeabilities of poly [1-(trimethylsilyl)1-propyne](PTMSP) to gases is higher than those of any other nonporous synthetic polymers whether they are glassy or rubbery at ambient temperature. PTMSP is in the glassy polymer state. The high gas permeability of PMSP results primary from substantial gas solubility and diffusivity, which appears to be due to, in turn, to a large excess free volume in the unrelaxed (Langmuir) domains of this glassy polymer. The biggest problem with PMSP is the deterioration of its high permeability with the passage of time or thermal hysteresis. Now, a lot of efforts is being devoted to solving this problem by the addition of less volatile materials, fluorination, bromination, copolymerization with other monomer, or blend with other polymers.

Key words Poly [1-(trimethylsilyl)1-propyne], Membrane, Gas separation, Oxygen enrichment

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Polymer Compatibility

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Summary The theories of compatibility of polymers, which consist of thermodynamics analysis, determination and improvement methods of compatibility etc., are presented in this chapter.

Key words Polymer blends, Compatibility, Compatibilizer