

研究简报

## 均苯四甲酸与对羟基吡啶超分子聚合物的制备

王毓江, 唐黎明, 陈亮

先进材料教育部重点实验室清华大学化工系; 先进材料教育部重点实验室清华大学化工系 北京

收稿日期 2005-8-25 修回日期 2005-9-30 网络版发布日期 接受日期

摘要

关键词 [超分子聚合物](#) [氢键](#) [结构](#) [超分子性能](#)

分类号

### SYNTHESIS OF SUPRAMOLECULAR POLYMER DRIVED FROM 1,2,4,5-BENZENE TETRACARBOXYLIC ACID AND 4-HYDROXY PYRIDINE

WANG Yujiang, TANG Liming, CHEN Liang

*Advanced Materials Laboratory; Department of Chemical Engineering; Tsinghua University; Beijing 100084*

**Abstract** A new kind of supramolecular building unit (defined as SBU) having two phenolic hydroxyl groups (proton donors) and two aromatic carbonyl groups (proton acceptors) was synthesized from 1,2,4,5-benzene tetracarboxylic acid and 4-hydroxy pyridine by a simple procedure. Based on  $^1\text{H-NMR}$ , IR, EA and XRD analyses, the structure of SBU was defined. Under suitable conditions, supramolecular gels and fibers were formed from the building unit through multiple hydrogen bonds between the donors and the acceptors. These supramolecular structures demonstrated strong temperature dependant features.

**Key words** [Supramolecular polymer](#) [Hydrogen bond](#) [Structure](#) [Supramolecular property](#)

DOI:

通讯作者 唐黎明

#### 扩展功能

##### 本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(526KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

##### 服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

##### 相关信息

- ▶ [本刊中 包含“超分子聚合物”的相关文章](#)
- ▶ 本文作者相关文章

- [王毓江](#)
- [唐黎明](#)
- [陈亮](#)