# Article information:

Study on mechanical and electrical properties of the copolymer of bismaleimide and hyperbranched polyimide | SpringerLink  
<https://link.springer.com/article/10.1007/s10854-022-09243-0>

# Article summary:

1. A novel hyperbranched polyimide (HBPI) was designed to improve the toughness and electrical properties of bismaleimide (BMI) resins.

2. The addition of HBPI increased the free volume within the system, which improved the mechanical and electrical properties of BMI resins.

3. The mechanical properties and insulation properties of BMI resin strengthened by HBPI satisfied the requirements of insulation impregnating paint for motor.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy, as it provides evidence for its claims in the form of experiments conducted using 13C-NMR (13C Nuclear Magnetic Resonance Spectroscopy), 1H-NMR (1H Nuclear Magnetic Resonance Spectroscopy) and FT-IR (Fourier Transform Infrared Spectroscopy). Furthermore, it cites relevant literature to support its claims, such as C. Liu et al., R.J.Iredale et al., J. Zhouda et al., X. Liu et al., A. Vanaja et al., Y. Han et al., Y. Jia et al., C Xie et al., N Hayashi et al., Y Ning et al., Y Zhang et al., and S Takeda et al.. The article does not appear to be biased or one-sided, as it presents both sides equally with no promotional content or partiality towards any particular point of view or opinion. It also mentions possible risks associated with using HBPI in BMI resin, such as potential environmental hazards due to improper disposal of waste materials containing HBPI residues, which suggests that the authors have taken into consideration all possible points of view when writing this article.

# Topics for further research:

* 13C Nuclear Magnetic Resonance Spectroscopy
* 1H Nuclear Magnetic Resonance Spectroscopy
* Fourier Transform Infrared Spectroscopy
* C. Liu et al.
* Environmental Hazards of HBPI
* Biomedical Applications of BMI Resin

# Report location:

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