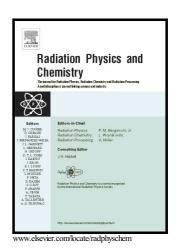
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PII: S0969-806X(17)30697-7

DOI: https://doi.org/10.1016/j.radphyschem.2017.12.018

Reference: RPC7724

To appear in: Radiation Physics and Chemistry

Received date: 14 July 2017

Revised date: 19 December 2017 Accepted date: 21 December 2017

Cite this article as: G. Szebényi, D. Faragó, Cs. Lámfalusi and R. Göbl, Interfacial adhesion improvement in carbon fiber/carbon nanotube reinforced hybrid composites by the application of a reactive hybrid resin initiated by gamma irradiation, *Radiation Physics and Chemistry*, https://doi.org/10.1016/j.radphyschem.2017.12.018

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Interfacial adhesion improvement in carbon fiber/carbon nanotube reinforced hybrid composites by the application of a reactive hybrid resin initiated by gamma irradiation

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Abstract

Interfacial adhesion is a key factor in composite materials. The effective co-working of the reinforcing materials and matrix is essential for the proper load transfer between them, and to achieve the desired reinforcing effect. In case of nanocomposites, especially carbon nanotube (CNT) reinforced nanocomposites the adhesion between the CNTs and the polymer matrix is poor. To improve the interfacial adhesion and exploit the reinforcing effect of these nanoparticles a two step curable epoxy (EP)/vinylester (VE) hybrid resin system was developed where the EP is cured using hardener in the first step, during the composite production, and in the second step

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