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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**

G. Szabényi<sup>1,2\*</sup>, D. Faragó<sup>1</sup>, Cs. Lámfalusi<sup>1</sup>, R. Göbl<sup>1</sup>

<sup>1</sup> Department of Polymer Engineering, Faculty of Mechanical Engineering, Budapest University of Technology and Economics, Műegyetem rkp. 3., H-1111 Budapest, Hungary

<sup>2</sup> MTA–BME Research Group for Composite Science and Technology, Műegyetem rkp. 3., H-1111 Budapest, Hungary

\* corresponding author: szabenyi@pt.bme.hu, +36-1-463-1466

E-mail addresses:

Gábor SZABÉNYI – szabenyi@pt.bme.hu

Dénes FARAGÓ – denes.farago@gmail.com

Csaba LÁMFALUSI – csabalamfalusi@gmail.com

Richárd GÖBL – richard.gobl@outlook.com

**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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