

# EMI Shielding Behavior of Benzotriazole-coated Metal-plated Fabrics

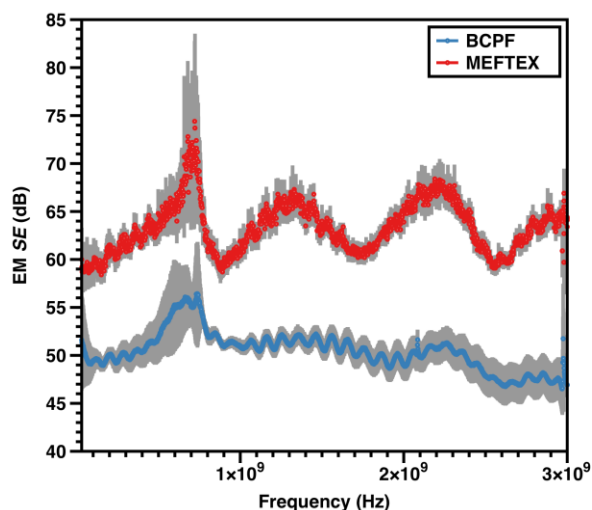
Xiuling Zhang<sup>1</sup>, Kai Yang<sup>1</sup>, Josef Vecernik<sup>2</sup>, Dana Kremenakova<sup>1</sup> and Jiri Militky<sup>1</sup>

<sup>1</sup> Department of Material Engineering, Studentska 1402, 46015, Liberec, Czech Republic, e-mail: [xiuling.zhang@tul.cz](mailto:xiuling.zhang@tul.cz), [kai.yang@tul.cz](mailto:kai.yang@tul.cz), [dana.kremenakova@tul.cz](mailto:dana.kremenakova@tul.cz), [jiri.militky@tul.cz](mailto:jiri.militky@tul.cz)

<sup>2</sup> Vecernik s.r.o., Alsovice 468 21, e-mail: [jvecernik@seznam.cz](mailto:jvecernik@seznam.cz)

**Abstract:** Cu-plated fabrics have been used for EMI shielding for decades. However, Cu is easily oxidated under the room environment, which affects following EMI shielding behavior. In this work, benzotriazole was coated on the Cu-plated polyester fabric (MEFTEX). The morphology, chemical component, conductivity and EMI shielding of the benzotriazole-coated Cu-plated polyester fabric (BCPF) was investigated. The results reveal that BTA coating is well coated the surface of the Cu-plated polyester fabric. The BTA coating does not affect the surface resistivity and volume resistivity. The EM SE of the BCPF is above 60 dB over the whole frequency. We believe that this work provides a robust method for metal-plated fabric for long-time usage.

**Keywords:** Benzotriazole, Cu, polyester fabric, EMI shielding.



**Figure 1** EMI shielding of BCPF and Cu-coated fabric (MEFTEX)

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