

# NOISE FIELDS GENERATED BY POLYMERIC ACTIVE MATERIALS

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With 5G about to be unveiled globally there has been a great deal of discussion regarding the physiological effects of being blanketed in this extent of electromagnetic radiation (EMR) density since the effects of less intense EMR is already documented.<sup>1</sup>  
 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Currently there are several existing intervention technologies for elimination or varying degrees of protection against the effects that fill the literature regarding potential damage. Faraday cages, while extremely impractical, offer total protection by placing the individual virtually inside a metal cage that does not allow any signal to pass through the perimeter and of course no device will function inside that area.

<sup>1</sup> Wertheimer N, Leeper E. Adult cancer related to electrical wires near the home. *Int J Epidemiol.* 1982; 11:p345-355.

<sup>2</sup> Poole C, Trichopoulos D. Extremely low-frequency magnetic fields and cancer. *Cancer Causes Control.* 1991; 2:p267-276.

<sup>3</sup> Adey W R. Evidence for tissue interactions with microwave and other nonionizing electromagnetic fields in cancer promotion. In Fiala J and Pokorny J (eds). *Biophysical Aspects of Cancer.* Charles University. Prague. 1987.

<sup>4</sup> Draper G, Vincent T, Kroll M E, Swanson J. Childhood cancer in relation to distance from high voltage power lines in England and Wales: a case controlled study. *BMJ.* 2005; 330:p1290-1295.

<sup>5</sup> Baris D, Armstrong B G, Deadman J, Theriault G. A mortality study of electrical utility workers in Quebec. *Occupational and Environmental Medicine.* 1996; 53:p25-31.

<sup>6</sup> Desai NR, Kesari KK, Agarwal A Pathophysiology of cell phone radiation: oxidative stress and carcinogenesis with focus on male reproductive system. *Reprod Biol Endocrinol.* 2009 Oct 22;7:114.

<sup>7</sup> Sepehrimanesh M, Davis DL. Proteomic impacts of electromagnetic fields on the male reproductive system. *Comp Clin Path [Internet]. Springer London;* 2017 [cited 2018 Feb 28]; 26: 309–13.

<sup>8</sup> Sajeda S, Al-Watter Y. Effect of mobile phone usage on semen analysis in infertile men. *Tikrit J Pharm Sci* 2011;7:p.77–82.

<sup>9</sup> Agarwal A, Deepinder F, Sharma RK, Ranga G, Li J. Effect of cell phone usage on semen analysis in men attending infertility clinic: an observational study. *Fertil Steril* 2008;89:p.124–8.

<sup>10</sup> Sadetzki S, Chetrit A, Jarus-Hakak A, Cardis E, Deutch Y, Duvdevani S, Zultan A, Novikov I, Freedman L, Wolf M. Cellular Phone Use and Risk of Benign and Malignant Parotid Gland Tumors—A Nationwide Case-Control Study. *Am J Epidemiol.* 2008; Feb 15;167(4):p.457-67.

<sup>11</sup> Eroglu O, Oztas E, Yildirim I, Kir T, Aydur E, Komesli G, et al. Effects of electromagnetic radiation from a cellular phone on human sperm motility: An in vitro study. *Arch Med Res* 2006;37:p.840–3.

<sup>12</sup> Agarwal A, Desai NR, Makker K, Varghese A, Mouradi R, Sabanegh E, et al. Effects of radiofrequency electromagnetic waves (RF-EMW) from cellular phones on human ejaculated semen: an in vitro pilot study. *Fertil Steril* 2009;92:p.1318–25.

<sup>13</sup> Ahmed L, Baig NM. Mobile phone RF-EMW exposure to human spermatozoa: an in vitro study. *Pak J Zool* 2011;43:p.1147–54

<sup>14</sup> De Iuliis G, Newey R, King B, Aitken R. Mobile phone radiation induces reactive oxygen species production and DNA damage in human spermatozoa in vitro. *PLoS One* 2009;4(7):e6446.

<sup>15</sup> Gandhi G, Singh P. Mobile phone users: Another high health risk group. *J Hum Ecol.* 2005; 18(2):p.85-92.

<sup>16</sup> Salford L, Brun A E, Eberhardt J L, Malmgren L, Persson B R, 2003, "Nerve Cell Damage in Mammalian Brain After Exposure to Microwaves from GSM Phones." *Environmental Health Perspectives.* 2003;111:p.881-883.

In 1986 the US Army funded research into Noise field technology. Their fields were generated by devices that were proven to eliminate the detrimental effects of EMR.<sup>17 18 19 20 21 22</sup> Russian physicist Dr. Igor Smirnov created the first portable noise field by developing a polymer capable of responding to any EMR by generating a field in response to ambient radiation or generated radiation.<sup>23 24 25 26 27 28 29 30</sup> This is evidenced by both the MRET water activation (a generated magnetic field producing the effects on water) and the Waverider noise field generator.

5 G generally operates at a higher frequency with smaller cells and is therefore a more intense form of EMR however the MRET noise field generating polymer which is the core element of Waverider, MRET Water Activation Unit and Noise Field Polymer does not ascertain the intensity or frequency but generates a noise field in response to the presence of ambient radiation. As a result, the increased intensity will cause the MRET noise field polymer to increase noise field intensity as well.

Any type of ambient EMR can “activate or intensify” the MRET polymer noise field generation. This slide using a Electron microscopy demonstrates the mechanism of

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<sup>18</sup> Litovitz T A, Penafiel L M, Farrel J M, Krause D, Meister R, Mullins J M. Bioeffects induced by exposure to microwaves are mitigated by superposition of ELF noise. *Bioelectromagnetics*. 1997; 18(6):p.422-30

<sup>19</sup> Litovitz T A, Montrose C J, Doinov P, Brown K M, Barber M. Superimposing spatially coherent electromagnetic noise inhibits field-induced abnormalities in developing chick embryos. *Bioelectromagnetics*. 1994;15(2):p.105-13

<sup>20</sup> Litovitz T A, Penafiel L M, Farrel J M, Krause D, Meister R, Mullins J M. “Bioeffects induced by exposure to microwaves are mitigated by superposition of ELF noise”, *Bioelectromagnetics*. 1997;18(6):422-30

<sup>21</sup> Wu W, Yao K, Wang K J, Lu D Q, He J L, Xu L H, Sun W J. Blocking 1800 MHz mobile phone radiation-induced reactive oxygen species production and DNA damage in lens epithelial cells by noise magnetic fields. *Zhejiang Da Xue Xue Bao Yi Xue Ban*. 2008; 37(1): p.34-38

<sup>22</sup> Yao, K et al, (2008), “Electromagnetic noise inhibits radiofrequency radiation-induced DNA damage and reactive oxygen species increase in human lens epithelial cells”, *Molecular Vision*, 14:964-969.

<sup>23</sup> Smirnov I V. Polymer Material Providing Compatibility between Technologically Originated EMR and Biological Systems. *Explore Magazine*. 2006; (15)4:p.26-32.

<sup>24</sup> Smirnov I V. Electromagnetic Radiation Optimum Neutralizer. *Explore Magazine*. 2002;11(1):p.45-50.

<sup>25</sup> Fisher H W, Pisarek S, Smirnov I V. The Beneficial Effect of MRET-Shield on Blood Morphology in Vitro Following the Exposure to Electromagnetic Radiation of Cell Phone. *Explore Magazine*. 2008;

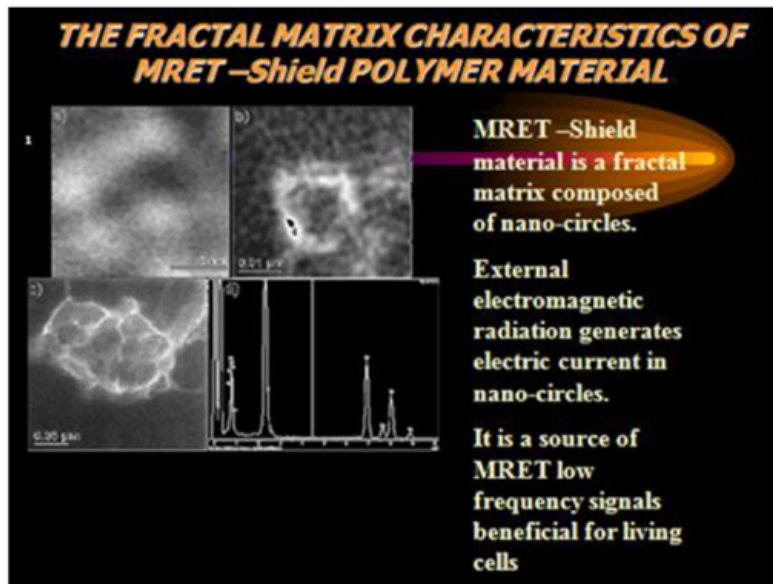
<sup>26</sup> Fisher H W, Gauvin C, Pisarek S. Darkfield Microscopic Evaluation of the Noise Field Polymer on the Reduction of Live Blood Effects Caused by Radio Frequency Radiation. *Explore magazine*. 2010;Vol.19, No 3.

<sup>27</sup> Fisher H W, Pisarek S, Smirnov I V. Thermographic Evaluation of the MRET-Shield Polymer on the Reduction of Thermal Effects Caused by Radio Frequency Radiation. *Explore Magazine*. 2009;18:1: p.14-17.

<sup>28</sup> Fisher H W, Gauvin C, Pisarek S. The Effect of Radio Frequency Radiation (RFR) from Cell Phone Usage on In Vitro Human Astrocyte Cells (Glial Cells) and the Subsequent Intervention of the MRET Polymer on RFR Effects. *Explore Magazine*. 2009;18-4.

<sup>29</sup> Smirnov, I V. Synopsis: Exposure of Normal Human Astrocytes Cells to Mobile Phone Radiation with and without MRET-Nylon Protection. Global Quantech, Inc. 2009

<sup>30</sup> The Effect of the MRET Wave Rider Device on Cerebral Blood Flow and the Blood Brain Barrier: A Case Study Smirnov IV1,\*, Fisher HW2

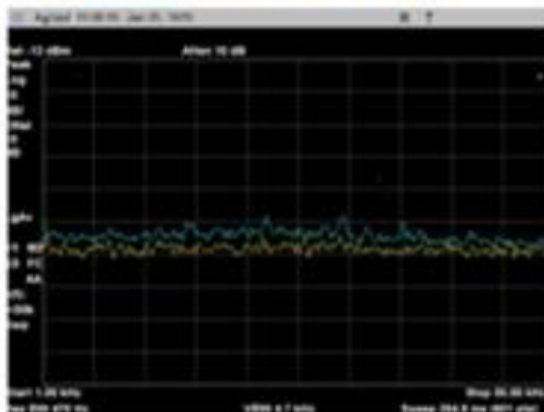


how ambient fields can generate electrical activity of MRET polymer molecular structures.

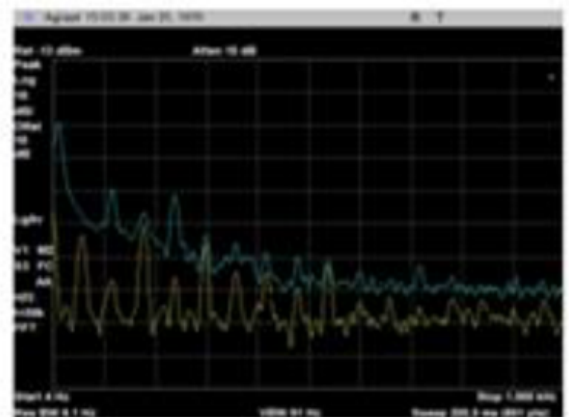
Ambient electrical activity of the MRET noise field polymer's molecular nano-rings structures as seen in this image is the source of noise field generated by polymer.

In research conducted at MET laboratory (FCC certified), USA shows that the MRET polymer generates a “noise field” as detected by Spectrum Analyzer device. This device has “detecting” range of Hz – MHz frequency. This limitation did not allow the opportunity to run experiment in GHz range, but it clearly indicates that MRET polymer has ability to absorb small amount of ambient field energy and transform it into “noise field” energy of polymer. The same physical mechanism can be adopted and extrapolated for GHz range of frequencies, since it is a fundamental law of nature.

Antenna at the range of 1 kHz-50 kHz:



Antenna at the range of 4 Hz – 1 kHz:



**MET Laboratories: a leading independent electrical testing & certification lab, USA. MET Report: EMCS35370-GEN; Test Engineer: Lionel Gabrillo**

Description of Test Sample:

Wave Rider (MRET Noise Field Generator) is a source of low frequency, low intensity electromagnetic signals of noise field characteristics. These signals are generated in a repeating sequence for the two discrete rate type: 7.8 Hz for 5 seconds and 14.5 Hz for 5 seconds. These low frequency signals of noise field characteristics are superimposed on microwave carrier signal. The superposition leads to the amplitude modulation of microwave carrier signals.

**Test Procedure:** Wave Rider/Prototype was placed in the center of an anechoic chamber, and the radiating antenna was placed 0.2ft in front of Wave Rider. The plot was taken with Wave Rider OFF (**Yellow Trace**) and ON (**Blue Trace**).

**Test Results:** It was detected with the help of Spectrum Analyzer (Agilent E4447A) the increase of **the noise field spectrum** content level in the range of 4 Hz to 50 kHz at close proximity to Wave Rider. The noise field spectrum content increase is most likely due to the amplitude modulation of microwave carrier signals by Wave Rider

The range of frequencies is irrelevant in relation to the MRET polymer's ability to generate a noise field. The fractal structure of the MRET polymer responds to all range of frequencies. Any electromagnetic field will activate the MRET nano-rings electrical activity that leads to the generation of a noise field. In case of Wave Rider technology, there is a solenoid incorporated together with MRET polymer which generates a sine wave (**sinusoidal wave** is a curve that describes a smooth repetitive oscillation) field of 7.8 Hz and 14.5 Hz ( a repetitive cycle of 5 second for each frequency) frequency when switched on. Thus, when Wave Rider is turned on, there is continual generation of noise field signals regardless of the frequency range of ambient field around – Hz, MHz, GHz range.

Smirnov IV Fisher HW. The Effect of the MRET Wave Rider Device on Cerebral Blood Flow and the Blood Brain Barrier: A Case Study. J Nanotech Smart Mater 2018. Vol 3:102