**Nanofibers- preparation and potential applications**

**Zeeshan Khatri, Kai Wei and Ick-Soo Kim**

Nano Fusion Technology Research Group, Faculty of Textile Science and Technology,

Shinshu University, Ueda, Nagano, JAPAN

Email: khatri.zeeshan@gmail.com. Cell: +81 (0) 80-4476-3444

In general, the talk will give audience insight into the Nanofibers potential applications that include nanofiber based biosensors, tissue engineering, drug delivery, nerve regenerations and other medical applications. Starting with basics of how nanofibers are produced via electrospinning on lab scale and mass production (include video). Nanofiber production challenges and opportunities worldwide and in Pakistan will be discussed. Our recent contribution to the nanofibers research will be presented and main part of the talk will cover by providing selected experimental data of our research in nanofibers such as Nanofibers apparels, protective clothing, Drug delivery, biosensors, artificial vein for nerve regeneration, air filters, breathable water proof fabrics, conductive nanofibers and other biomedical applications.