



**Topic of the Speech:**

Fabrics Make Records: Bioengineering in Sportswear

**Professor Kanji Kajiwara**

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Japan



**Professor Kanji Kajiwara** is now a Special Project Professor for Fiber Innovation Incubator of Shinshu University. He has started his carrier as a polymer physicist at Kyoto University, specialized in the field of dilute solution properties of synthetic and bio-polymers including critically branched polymers. A natural extension of this study led to the structural characterization of gels, where a small-angle X-ray scattering method has been fully explored by the use of synchrotron radiation.

In 1988, he joined Kyoto Institute of Technology and was engaged more in fiber and textile science, and served as a Governmental adviser in the policy making committee for the fiber/textile technology strategy. He moved to Otsuma Women's University in 2002 in order to refurbish the education system for female talents in the textile and apparel field. He went back to Kyoto Institute of Technology and Shinshu University as a Specially Appointed Professor, where his task was to establish an innovation center for nano-fusion and human-centered fiber/textile technology

Professor Kanji Kajiwara is now back to Kyoto as a Senior Research Fellow at KIT.

## ABSTRACT SUBMISSION



-For invited speaker only

### **Fabrics Make Records: Bioengineering in Sportswear**

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#### **ABSTRACT (NO MORE THAN 500 WORDS:)**

Olympic Games are a showcase for new materials. In each Olympic Game, new materials have demonstrated a high performance and assisted to yield new world records. Taking an example of swimming suits, a development history of materials and designs will be shown. The bioengineering has been a main tool for this development, but in some cases the development went too far and eventually the use of the developed materials/sporting tools was banned as a tool doping.

What is the boundary to step into doping in sportswear? Although many arguments were done, no clear answer is available for the decision of the boundary. However, new materials are being developed and applied to sportswear with more elaborated designs. Emerging new materials will be presented and their potential will be discussed.