cfaed Seminar Series

DATE: November 01, 2019 (Friday)
TIME: 16:00 PM – 17:00 PM
LOC: Lecture hall CHE 089/E (ground floor)
CHE building (Chemie-Neubau), Bergstr. 66
01069 Dresden

GUEST SPEAKER:
Prof. Lei Jiang

Technical Institute of Physics and Chemistry, Chinese Academy of Sciences,
Beijing, P.R. China

TITLE: “Smart Interfacial Materials with Super-Wettability”

ABSTRACT:
Learning from nature, we developed super-wettability system: superhydrophobic, superoleophobic, superhydrophilic, superoleophilic surfaces in air and superoleophobic, superareophobic, superoleophilic, superareophilic surfaces under water. Furthermore, we fabricated artificial materials with smart switchable super-wettability, i.e., nature-inspired binary cooperative complementary nanomaterials that consisting of two components with entirely opposite physiochemical properties at the nanoscale, are presented as a novel concept for the building of promising materials.

BIOGRAPHY:
Lei Jiang received his B.S. degree in solid state physics (1987), and M.S. degree in physical chemistry (1990) from Jilin University in China. From 1992 to 1994, he studied in the University of Tokyo in Japan as a China-Japan joint course Ph.D. student and received his Ph.D. degree from Jilin University of China with Prof. Tiejin Li. Then, he worked as a postdoctoral fellow in Prof. Akira Fujishima's group in the University of Tokyo. In 1996, he worked as researcher in Kanagawa Academy of Sciences and Technology, Prof. Hashimoto's project. In 1999, he joined the Institute of Chemistry, Chinese Academy of Sciences (CAS). In 2015, he moved to the Technical Institute of Physics and Chemistry, CAS. Since 2008, he also served as the dean of School of Chemistry and Environment in Beihang University. He was elected as members of the Chinese Academy of Sciences and the World Academy of Sciences in 2009 and 2012. In 2016, he was also elected as a foreign member of the US National