

## Working Experience - Resumé

## Akinori Zukeran

Business Position Professor

Company Kanagawa Institute of Technology

Year of Birth 1971 Years in Industry 25

Nationality: Japan

Phone: +81-46-291-3089

Email: zukeran-akinori@ele.kanagawa-it.ac.jp

Akinori Zukeran received the B.E., M.E. and Ph.D. degrees from Musashi Institute of Technology, Tokyo, Japan, in 1994, 1996 and 1999, respectively. He started studying an electrostatic precipitator (ESP) in 1993, and investigated a mechanism of particle reentrainment and its preventing method in the ESP for highway road tunnels.

From 1999 to 2009, he had been a research engineer of an electrostatic precipitator for road tunnels with Fuji Electric Co., Ltd., Tokyo, Japan. He developed an ESP operated at high gas velocity of 13 m/s, an ESP with rectangular AC electric field (AC ESP) for preventing a particle re-entrainment and a rectangular AC high voltage power supply. The AC ESPs had been installed in Japanese and Korean tunnels. He also had installed some ESP plants in Japanese tunnels as the chief engineer.

Since 2010, he has been with Kanagawa Institute of Technology, Japan, where he is currently Professor in the Department of Electrical and Electronic Engineering. His research interests are improving the collection efficiency for nano-particles, preventing particle reentrainment, saving the energy, simulating particle behavior and collecting suspended viruses in an ESP. He is also interested in applications of electrostatics in nonthermal plasma technology such as inactivating microorganisms and viruses, removal SOx or PAHs included in exhausted gases. He has authored or co-authored more than 80 peer-reviewed papers.

Zukeran is the board member of the International Society for Electrostatic Precipitation (ISESP) and the Institute of Electrostatic Japan (IESJ). Also, he is a member of the IEEE, the Institute of Electrical Engineers of Japan, the Japan Institute of Marine Engineering and the Institute of Electrical Installation Engineers of Japan (IEIEJ). He received an international fellow award from ISESP in 2016, and a Prize Paper Award from the IEIEJ in 1998, the IESJ in 2019 and the IEEE IAS in 2021.