NANO KOREA 2020
July 1~3, KINTEX, Korea

Jungho Hwang
Professor, Yonsei University

Address: N302, 1st Engineering bldg, Yonsei University, Seodaemun-gu, Seoul, Korea
Telephone: (+82)-2-2123-2821 **Fax:** (+82)2-312-2821
E-mail: hwangjh@yonsei.ac.kr **Nationality:** Republic of Korea
Web: http://pccp.yonsei.ac.kr/

EDUCATION

University of California, Berkeley	Ph.D	Mechanical Engineering	**1991**
Seoul National University, Korea	MS	Mechanical Engineering	**1985**
Seoul National University, Korea	BS	Mechanical Engineering	**1983**

PROFESSIONAL ACTIVITIES

- Professor, Dept. Mechanical Engineering, Yonsei University, Korea, March 1993 to Present.
- President, Korean Association for Particle and Aerosol Research, Korea December 2017 to November 2019.
- Editor of J. Mechanical Science and Technology (JMST) Division of Micro/Nano Engineering and Technology, February 2013 to January 2019.
- Editor of Aerosol and Air Quality Research (AAQR), December 2011 to Present.
- Editorial Board Member of Journal of Aerosol Science (JAS), January 2016 to Present.
- Editorial Board Member of Aerosol Science and Engineering, January 2017 to Present.
- Member of the Korean Academy of Science and Technology (KAST), January 2016 to Present.
- International Aerosol Conference Committee, March 1993 to Present.
- Indoor Air International Scientific Committee. March 1993 to Present.

AWARD AND HONORS

- College of Engineering Best Professor Award 2017
- Yonsei University Outstanding Professor Research Award 2016, 2017
- Yonsei University Outstanding Professor Research 2016
- Awarded commendation from the Minister of Environment of Korea, 2016

MAIN SCIENTIFIC PUBLICATION

- Dae Hoon Park, Yun Haeng Joe, Amin Piri, Sanggwon An, and Jungho Hwang, (2020) Determination of Air Filter Anti-Viral Efficiency against an Airborne Infectious Virus, Journal of Hazardous Materials, 396, 122640.
- Milan Gautam, Dae Hoon Park, Sung Jae Park, Kang Sik Nam, Geun Young Park, Jungho Hwang, Chul Soon Yong, Jong Oh Kim, and Jeong Hoon Byeon, (2019) Plug-in Safe-by-Design Nanoinorganic Antibacterials, ACS Nano, 13, 12798-12809.

- Amin piri, Hyeong Rae Kim, and Jungho Hwang, (2020) Prevention of damage caused by corona discharge-generated reactive oxygen species under electrostatic aerosol-to-hydrosol sampling, Journal of Hazardous Materials, 384, 121477.
- Dae Hoon Park, Yun Haeng Joe, Jungho Hwang, and Jeong Hoon Byeon, (2020) Evaporation-condensation in the presence of unipolar ionic flow for solvent-free production of ultrasmall antibacterial particles, Chemical Engineering Journal, 381, 122639.
- Myung Soo Kang, Jaeuk Shin, Tae U Yu, and Jungho Hwang, (2020) Simultaneous removal of gaseous NOx and SO2 by gas-phase oxidation with ozone and wet scrubbing with sodium hydroxide, Chemical Engineering Journal, 381, 122601.
- Sangmo Kang and Jungho Hwang, (2020) Fabrication of hollow activated carbon nanofibers (HACNFs) containing manganese oxide catalyst for toluene removal via two-step process of electrospinning and thermal treatment, Chemical Engineering Journal, 379, 122315.
- Dae Hoon Park, Milan Gautam, Sung Jae Park, Jungho Hwang, Chul Soon Yong, Jong Oh Kim and Jeong Hoon Byeon, (2019) Plug-and-play safe-by-design production of metal-doped tellerium nanoparticles with safer antimicrobial activities, Environmental Science: Nano, 6, 2074-2083
- Hyeong Rae Kim, Sanggwon An, Jungho Hwang, Jae Hong Park, and Jeong Hoon Byeon (2019) In situ lysis droplet supply to efficiently extract ATP from dust particles for near-real-time bioaerosol monitoring, J. Hazardous Materials, 369, 684-690.
- Kim, H.R., Park, J.-W., Kim, H.S., Yong, D. and Hwang, J. (2018) Comparison of Lab-made Electrostatic Rod-type Sampler with Single Stage Viable Impactor for identification of Indoor Airborne Bacteria, J. Aerosol Sci., 115, 190-197
- Bijay Kumar Poudel, Jungho Hwang, Saekwang Ku, Jongoh Kim, and Jeonghoon Byeon, (2018) A batch-by-batch free route for the continuous production of black phosphorus nanosheets for targeted combination cancer therapy, NPG Asia Materials, 10, 727-739
- Park, J.-W., Kim, H.R. and Hwang J. (2016) Continuous and Real-time Bioaerosol Monitoring by Combined Aerosol-to-Hydrosol Sampling and ATP Bioluminescence Assay, Anal. Chim. Acta, 941, 101-107

RESEARCH INTERESTS

- Real-time sampling, detection, and inactivation of bio-aerosols
- Fabrication and deposition control of functional aerosol particles
- Aerosol measurement technology
- Non-thermal plasma for environmental applications such as NOx/SOx removal
- Functional Nanoparticle generation via spark discharger, and anti-microbial air filtration
- Electrohydrodynamic (EHD) Technology and jet printing
- Aerosol agglomeration
- Experiment and numerical modeling for combustion/pyrolysis/gasification technologies
- Computational fluid dynamics (CFD) modeling of gasification