

# OH Issues in Semiconductor Industry Symposium 1

# SYMPOSIUM

## - Chemical and EMF hazards in recent semiconductor Industry

The semiconductor industry has emerged in the late twentieth century as a brilliant contributor to all over the world but occupational and environmental health issues have been raised thereafter and concerns have persisted. The purpose of this symposium is to discuss the health hazards of the chemicals and EMF in the recent semiconductor industry. The first speaker will present the status of chemical substances used in 12 semiconductor workplaces in Korea and the characteristics of chemical substances, especially focus on trade secrets and health hazards. The second speaker will present the metals measured at the semiconductor plant. The third speaker will compare the exposure level of EMF in the semiconductor industry with other industries. These discussions will provide a guide for the future semiconductor industry to further develop while protecting the health of workers. Participants will get information on the recent status of chemical use, EMF risk in the semiconductor industry and related companies will also have information to protect workers for sustainable development.

### Chemical use and health hazards in semiconductor industry in Korea

Chungsik Yoon (Seoul National University, Korea, Republic of)

### Evaluation of Extremely Low Frequency Magnetic Fields (ELF-MF) at Semiconductor Industry in Korea

Sangjun Choi (Catholic University, Korea, Republic of)

### Metal Exposure during Preventive Maintenance in a Semiconductor industry.

Seunghon Ham (Gachon University, Korea, Republic of)

## MODERATOR



Chungsik Yoon

He is a professor of the Graduate School of Public Health, Seoul National University and president of the Korean Industrial Hygiene Association. He has published more than 150 peer reviewed papers. He also published many papers on the respirators used in workplace and for general citizens. Recently, his research area includes nanomaterial assessment of the consumer as well as workers and health hazards in the semiconductor industry and liquid crystal display industry. He is also studying how to deal with unknown risks in the workplace.

## SPEAKERS



Sangjun Choi

Sangjun Choi is an associate professor in the Department of Preventive Medicine at the Catholic University of Korea and a vice president of the Korean Industrial Hygiene Association. He has worked as a senior researcher at the Wonjin Institute of Occupational and Environmental Health and has been working on consulting to assess exposure to hazardous agents and improve the working environment at various workplaces. He conducted an exposure assessment of chemicals and extremely-low frequency magnetic fields at semiconductor industry. He has recently conducted research on constructing Job-Exposure Metrics through standardization of national exposure databases.



Seunghon Ham

Seunghon Ham is an assistant professor in the Department of Occupational and Environmental Medicine at Gachon University from 2017. He got bachelor degree from Seoul National University of Science and Technology and University of Northumbria at Newcastle, U.K. about Manufacturing system and Design engineering(Robotics). Also, he got MPH and Ph.D. as a major of industrial hygiene at the Department of Environment Health at Seoul National University. His major research area included exposure assessment at the workplace and indoor environment covering wide range of hazardous agents from nanoparticles, chemical, physical agent to bioaerosols. Recently, his research topic is the development of measurement system using Internet of things(IoT).