

**Section of  
Public Relations**Hyo Jung Kim  
Section Chief  
(+82) 62-715-2061Nayeong Lee  
Senior Administrator  
(+82) 62-715-2062**Contact Person  
for this Article**Da-hye Oh, Administrator  
Ultrafine Dust Diagnosis Research Center  
(+82) 62-715-2463**Release Date**

2020.06.12

**GIST plays the role of a state-of-the-art  
general clinic to identify and scientifically  
solve the exact cause of fine dust**

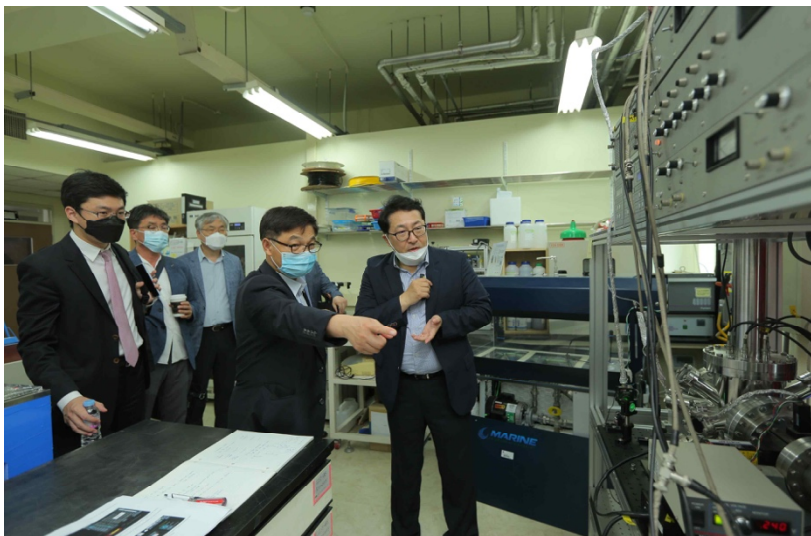
- Deputy Minister of Science and ICT Byung-sun Jeong visited GIST (Gwangju Institute of Science and Technology, President Kiseon Kim) on June 12 to have a meeting with fine dust researchers to discuss the specific implementation plan of the “Ministry of Science and Technology's fine dust R&D strategy.”
  - This meeting was prepared for the announcement of the 「Ministry of Science and Technology's Fine Dust R&D Promotion Strategy ('20~'24)」, discussion of the strategy implementation plan and examination of the status of research on the investigation of the cause of fine dust.
  - About 10 people attended the meeting, including Deputy Minister of Science and ICT Byung-sun Jeong, fine dust R&D business manager (2 business teams), KIST Director of the Clean Air Center, Director of the Science and Technology Ministry Research Foundation and GIST Professor Kihong Park, and Professor Chul-Han Song.
- After the meeting they visited GIST's Fine Dust Research Laboratory ▲ high-resolution fine dust secondary generation real-time tracking equipment (simultaneous analysis of gaseous and particulate chemical composition using difference in flight time by mass) ▲ real-time measurement equipment for fine dust components (measured chemical components of fine dust in real time) ▲ Korean-type fine dust generation system (development of ultra-fine dust

production system in-house to independently generate various Korean-type fine dust) ▲ research on the process of identifying the cause of fine dust using fine dust measuring equipment such as the fine dust mobile lab (three-dimensional observation while moving around the source of fine dust using a mobile truck equipped with various fine dust and polluted gas real-time measurement equipment).

- Through detailed observation of fine dust using state-of-the-art equipment it has been confirmed that it can be used to quickly diagnose the characteristics of fine dust, diagnose sources through the composition of fine dust, and diagnose the effects of health and climate change by securing real-time high-resolution data of chemical composition. In order to prevent the spread of COVID-19, thermal detection cameras, hand sanitizers, and masks were installed at the site.
- Deputy Minister Byung-sun Jeong said, "Fine dust is one of the issues closely related to the quality of people's lives as much as COVID-19. We will actively support the implementation of this science and technology strategy, which aims to solve the problem by identifying the cause of fine dust, and will actively cooperate with related ministries and organizations such as the Ministry of Environment and the National Institute of Environmental Science."
- GIST Ultrafine Dust Diagnosis Research Center Director Kihong Park said, "GIST's Ultrafine Dust Diagnosis Research Center has the highest level of infrastructure in Korea and is actively pursuing comprehensive diagnosis of fine dust and research into the cause. It will serve as a state-of-the-art general clinic to find out the exact cause of fine dust and to solve it scientifically."
- Currently, the Ultrafine Dust Diagnosis Research Center is carrying out national tasks such as diagnosing and determining the cause of fine dust in rural areas, international joint observation of fine dust in Korea, aging of fine dust, and research on the generation of nanoparticles in the atmosphere, and is leading the comprehensive diagnosis of fine dust in Korea.



[Photo 1] Deputy Minister of Science and ICT Byung-sun Jeong held a meeting with the directors of fine dust research



[Picture 2] Deputy Minister Byung-sun Jeong visited GIST's Ultrafine Dust Diagnosis Research Center and saw a demonstration of fine dust measurement equipment such as high-resolution fine dust secondary generation real-time tracking equipment