Jaegun Jung, PhD

EDUCATION

2008 PhD, Chemical Engineering, Carnegie Mellon University, Pittsburgh, PA

2002 BS, Chemical Engineering, Hanyang University, Seoul, Korea

EXPERIENCE

Dr. Jaegun Jung is an Associate in ENVIRON's Air Sciences office in Novato. Since joining ENVIRON in 2008, he has specialized in air quality modeling and analysis. Jaegun has experience with the CAMx, CMAQ and CALPUFF air quality modeling systems and well as the EPS emissions model. He has participated in CAMx model development, implementing the Zhang dry deposition scheme in CAMx and testing a new vertical velocity algorithm. His project experience includes:

- CMAQ modeling for analysis of health effects of emissions reductions in Alberta, Canada
- Assessment of local and regional visibility impacts of power plant emissions of PM_{2.5} and SO₂ using CALMET/CALPUFF
- Regional-scale CAMx ozone modeling for Northeast Texas
- High-resolution CAMx modeling of an industrial facility
- Source apportionment analysis of effects of emissions of organic matter on visibility in the southeastern U.S.

Jaegun has extensive computing experience on Linux/UNIX and Windows platforms and knows several programming languages including FORTRAN 77/90 and PERL. He is skilled in visualizing scientific data using Surfer, PAVE, and Matlab and has experience using database software.

Prior to coming to ENVIRON, Jaegun participated in the development of PMCAMx. He modeled the formation, growth and dissipation of nanoparticles, and compared the model results with insitu measurements. His experience also includes the following:

January 2005 – May 2006, Teaching Assistant, Carnegie Mellon University

 Teaching assistant for Chemical Engineering Process Control, Heat and Mass Transfer, and Advanced Mathematics courses

January – July 2003, Mathematics Instructor, Ji-san Institution, Seongnam, Kyung-ki, Republic of Korea.