



Mary Gilles, Lawrence Berkeley National Laboratory (LBNL)

Staff Scientist

Chemical Science Division (CSD)

Berkeley, CA 94720

(W) 510-495-2775

<https://commons.lbl.gov/display/csd/Mary+K.+Gilles>

<https://sites.google.com/a/lbl.gov/gilles-research-group/home>

Dr. Gilles' undergraduate work was at the University of Washington, and her Ph.D. was on negative ion photoelectron spectroscopy (Chemistry 1993 University of Colorado). Post-doctoral work, on gas phase atmospheric kinetics, was at the National Oceanic and Atmospheric Administration in Boulder. After her post-doctoral work, she continued at the Boulder site until 2002 when she joined LBNL. Currently, Gilles' independent research program focuses on: determining mixing states, phase changes and atmospheric processing of atmospheric aerosols and their surrogates using a micro and spectroscopic methods, developing and utilizing *in situ* methods in microscopy, and examining the details of chemical interactions during gas uptake onto metal organic framework thin films. She has roughly 100 peer-reviewed publications (h ~ 40) on atmospheric chemistry, negative ion photoelectron spectroscopy, single particle aerosol analysis, and *in situ* cells. She interacted regularly with users in her position at the Molecular Environmental Science Beamline at the Advanced Light Source. She routinely reviews proposals for EMSL, the Advanced Light Source, and the Canadian Light Source, and has served on proposal review panels for the National Synchrotron Light Source and the Canadian Light Source. She has had over 30 proposals accepted at user facilities (i.e., the Advanced Light Source, Molecular Foundry, National Synchrotron Light Source, and National Center for Electron Microscopy at LBNL, and EMSL). Collaboration with EMSL scientists has been an essential component of Gilles' aerosol programs and designing and fabricating *in situ* cells. This has resulted in a frequent exchange of post docs and students between labs at EMSL and the CSD-LBL. Running for a second term on EMSL's UEC, Gilles would bring expertise as a user with extensive familiarity of user facilities, as a staff scientist at a DOE User Facility, and as a DOE BER-funded researcher in the field of aerosol chemistry.