David O. Lignell, Ph.D.

Dr. David Lignell is a professor of Chemical Engineering at Brigham Young University (BYU). His research involves simulation and modeling of turbulent reacting flows including combustion (flares and fires), soot formation, radiative transfer, and flame extinction and ignition. Simulation tools include large eddy simulation (LES), and stochastic methods: the One-Dimensional Turbulence (ODT) model, and the Hierarchical Parcel Swapping (HiPS) model. Dr. Lignell received his Ph.D. at the University of Utah and worked as a graduate student and post-doctoral researcher at the Combustion Research Facility at Sandia National Laboratories. He has been at BYU since 2009 where he teaches courses in combustion, combustion modeling, numerical methods, and energy engineering. He is currently the Associate Department Chair at BYU, and is the AIChE student chapter advisor. Dr. Lignell serves as the Vice Chair of the Western States Section of the Combustion Institute and is on the board of the U.S. Sections of the Combustion Institute.