Air pollution is a global health hazard resulting in millions of premature deaths annually. Co-occurring air pollutants such as fine particulate matter (PM$_{2.5}$) and surface ozone (O$_3$) can have compounding human health impacts. I will present ongoing work that shows an increase in widespread co-occurrences of extremes in PM$_{2.5}$/O$_3$ across parts of the western U.S during the warm season (April-September). I will also investigate the contributions of wildfires and changing meteorological conditions on trends in widespread co-occurrence episodes and discuss implications for climate change.

Deepti is an assistant professor in WSU’s School of the Environment. Her research interests are focused on the intersection of physical climate and human vulnerability, to assess climate risks to society. She combines climate dynamics with statistical approaches to study the influence of historical and future climate forcings on the characteristics of climate extremes and their associated physical processes. Overall, her research aims to improve our understanding of the societal risks from changing weather and climate extremes to inform policy, risk-management, and adaptation strategies.