

Happy
Anniversary

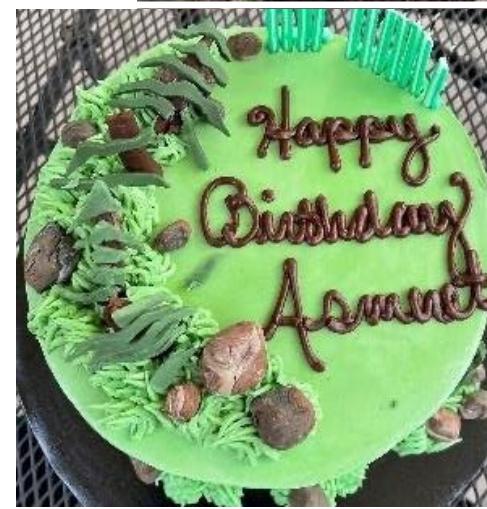
Asmeret Asefaw Berhe
Director



U.S. DEPARTMENT OF
ENERGY

Office of
Science

About me



U.S. DEPARTMENT OF
ENERGY

Office of
Science

Energy.gov/science

P speciation in soil and dust: application of XANES in earth sciences

Environmental Science & Technology

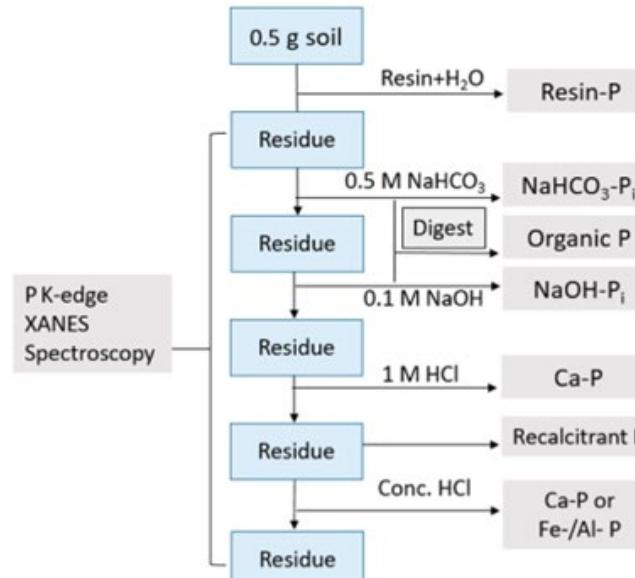
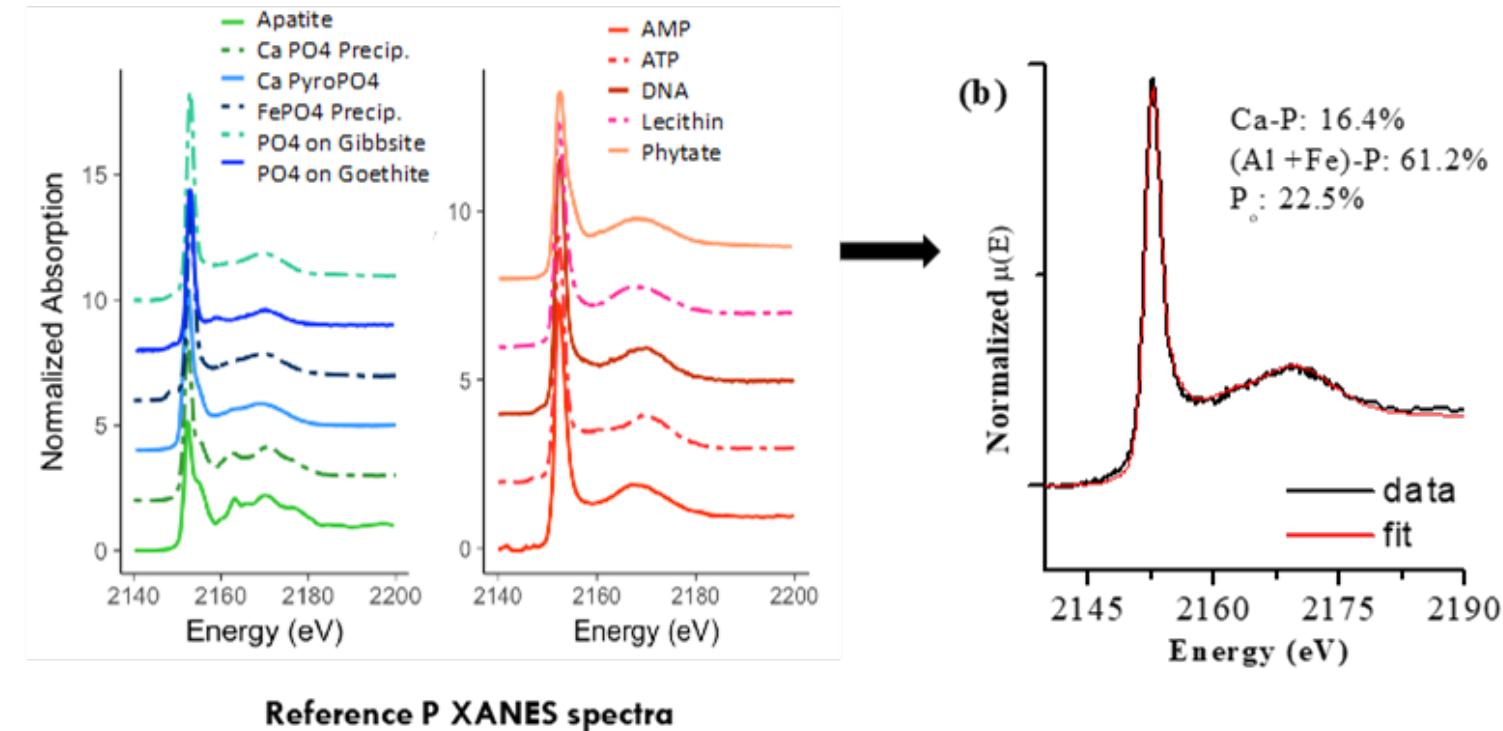
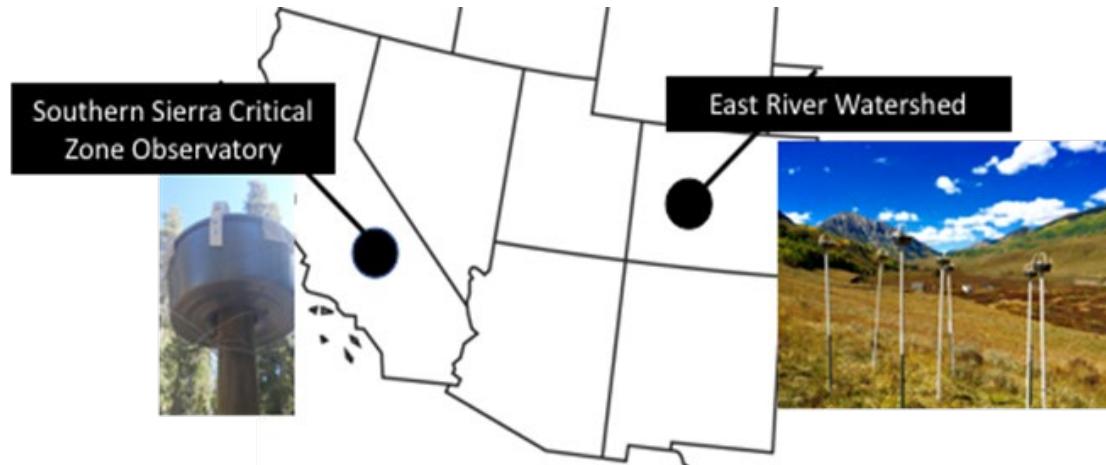


Figure 1. Flow chart for modified Hedley fractionations combined with phosphorus K-edge X-ray absorption near-edge structure (XANES) spectroscopic analysis.



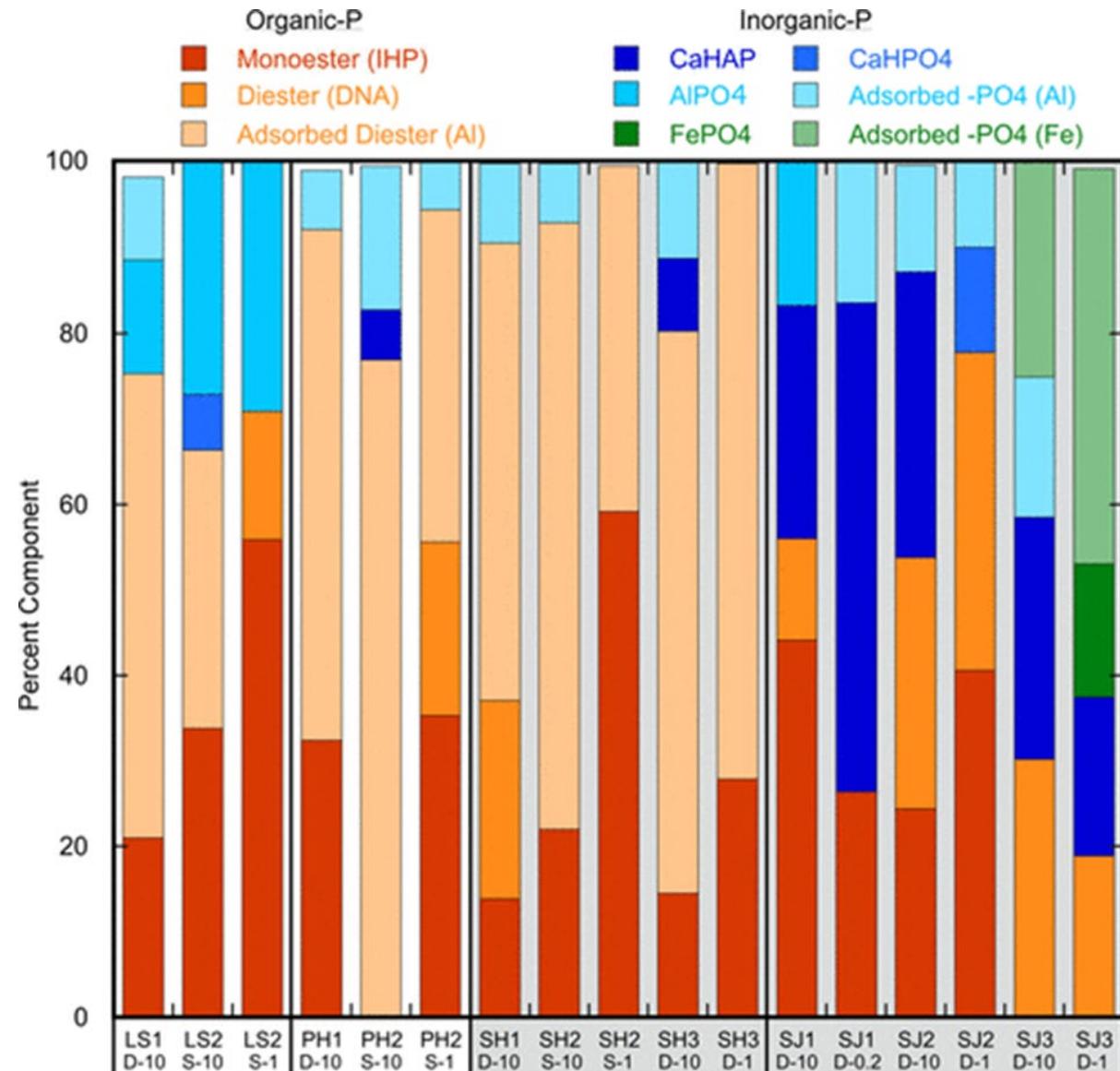
Gu et al. 2020 ES&T; Barnes et al. (forthcoming)

K-edge XANES: composition of bulk PM



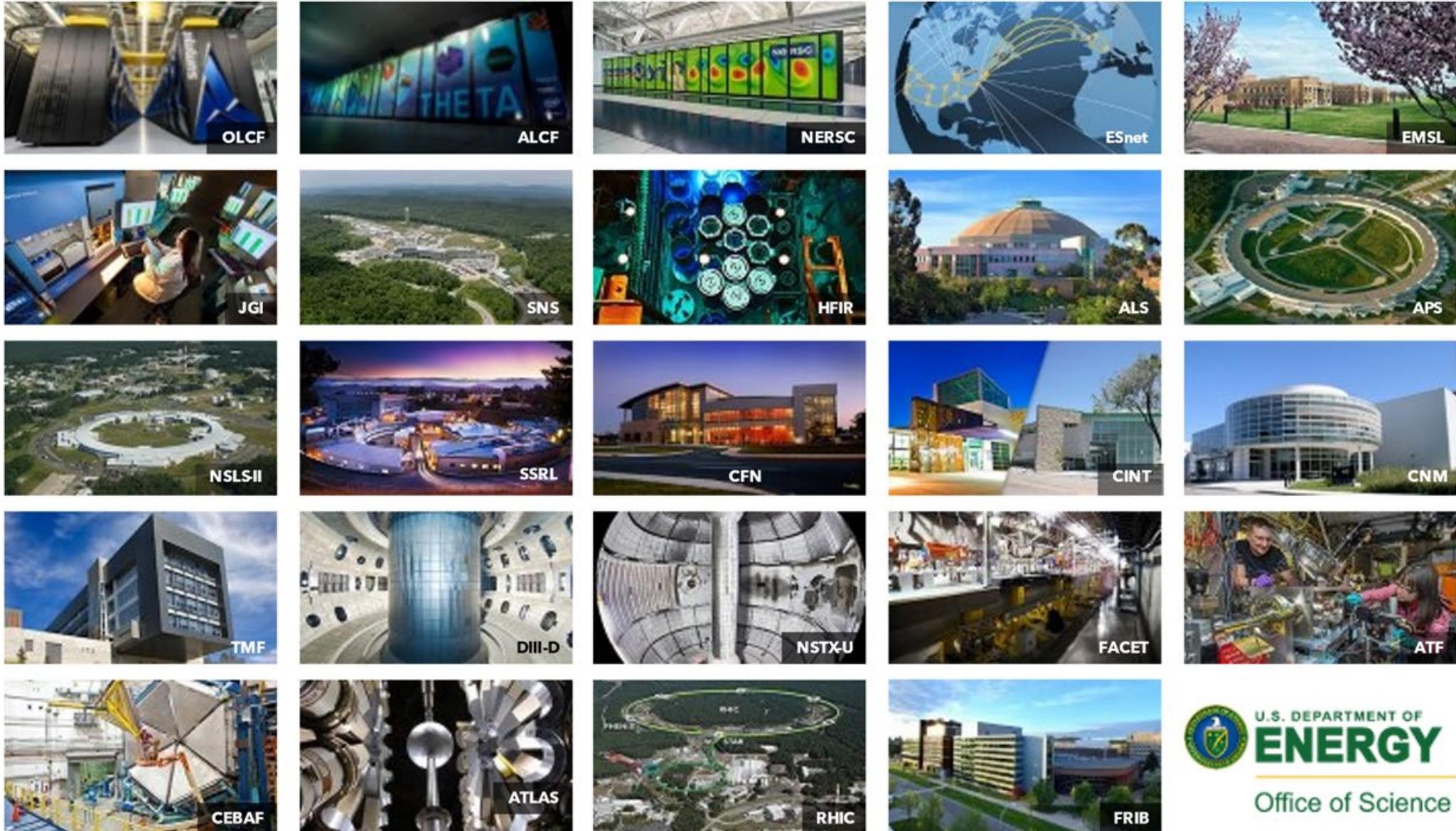
Organic P species dominant in dust collected from high-elevations in both the Sierra Nevada and Rockies

O'Day et al. 2020 ES&T



Office of Science User Facilities

FY 2023
28 scientific
user facilities
~**36,000** users





U.S. DEPARTMENT OF
ENERGY

Office of
Science

Driving Discovery Science for the Nation

Discovery science supported by the Office of Science builds the foundation for ensuring America's future prosperity and competitiveness by addressing its energy, environment, and national security challenges.

Fostering Great Minds and Great Ideas

The Office of Science addresses the world's most challenging scientific problems, supporting innovation from America's brightest minds, across multiple disciplines, and at universities, DOE's national laboratories, and other research institutions.

Providing Unique, World- Class Facilities

The Office of Science stewards a suite of scientific user facilities that provide the broad scientific community with world-leading capabilities for research – from physics, materials science, and chemistry to genomics and medicine.



U.S. DEPARTMENT OF
ENERGY

Office of
Science

Energy.gov/science

Diversity, Equity, Inclusion, and Accessibility

The Office of Science is deeply committed to:

- Supporting diverse, equitable, inclusive, and accessible environments
- Promoting people of all backgrounds
- Harnessing a diverse range of views, expertise, and experiences



Office of Science Initiatives



RENEW

Reaching a New Energy Sciences Workforce



FAIR

Funding for Accelerated and Inclusive Research



PIER Plans

Promoting Inclusive and Equitable Research



THANK YOU!



U.S. DEPARTMENT OF
ENERGY

Office of
Science

Energy.gov/science