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NOMENCLATURE

\equiv	A surface group on a solid, e.g., $\equiv\text{FeOH}$
ω_{gel}	fraction of gel that is water
As(III)	Arsenite
As(V)	Arsenate
C_{measured}	Concentration of analyte in re-equilibrated solution
DET	Diffusive equilibrium in thin films
DGT	Diffusive gradient in thin films
ESEM	Environmental Scanning Electron Microscopy
EXAFS	Extended X-ray absorption fine spectra
FA	Fulvic acid
H_2CO_3^*	Sum of species: $\text{CO}_{2(\text{aq})} + \text{H}_2\text{CO}_3$
HA	Humic acid
HFO	Hydrous ferric oxide
ICP-MS	Inductively coupled plasma mass spectrometry
K_D	Partition coefficient
LAA	Los Angeles Aqueduct
LADWP	Los Angeles Department of Water and Power
LC-ICP-MS	Liquid chromatography ICP-MS
M	mol/L
m_{gel}	mass of hydrated polyacrylamide gel
NOM	Natural organic matter

pK_a	acid dissociation constant
TEA	Terminal electron acceptor
V_{acid}	volume of acid added in re-equilibration
XANES	X-ray near edge spectra
XAS	X-ray absorption spectroscopy
XRD	X-ray diffraction
XRF	X-ray fluorescence