



**Supplementary Fig. S2** Bulk range of the Na<sub>2</sub>O vs P<sub>2</sub>O<sub>5</sub> content from the meteorite groups analyzed. Data from [Jarosevich \(1990\)](#). Note the restricted range in P for most meteorite groups, except mesosiderites and shergottites, but significantly more variable Na contents. This variability is also reflected in the observed Ca-phosphate chemistry, especially in merrillites (c.f. Fig. 4).