



Discovered by
Swedish Chemist,
Johan August
Arfwedson



Discovered in August
1817 in Stockholm,
Sweden



A metal soft enough to
cut with a knife



Lithium was
named after the Greek
word "lithos" meaning
stone, indicating its
origin of discovery

Li

3

Arfwedson discovered Lithium during an analysis of petalite ($\text{LiAlSi}_4\text{O}_{10}$). He found the petalite contained "silica, alumina and an alkali." The new alkali metal in the petalite had unique properties. It required more acid to neutralize it than sodium and its carbonate was sparingly soluble in water – unlike sodium carbonate. He tried to produce a pure sample of the new metal by electrolysis, but he was unsuccessful. The pure metal was isolated the following year by both Swedish chemist William Brande and English chemist Humphry Davy working independently through the electrolysis of lithium oxide (Li_2O).