Extractive Metallurgy Of Copper

1. Copper, its occurrence, and use

A. Naturally Occurring Forms of Copper

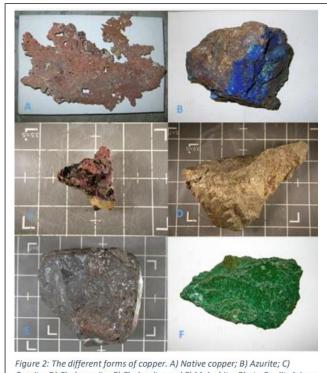


Figure 2: The different forms of copper. A) Native copper; B) Azurite; C)
Cuprite; D) Chalcopyrite; E) Chalcocite; and F) Malachite. Photo Credit: Arizona
Geological Survey.

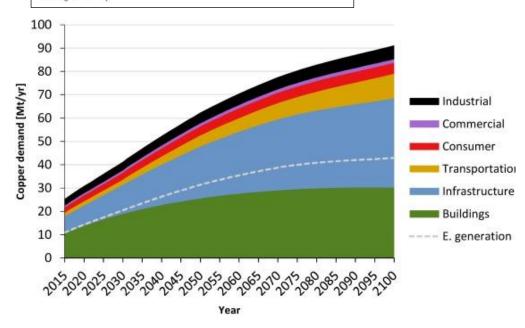


Figure 3.the overall estimated copper demand by category.

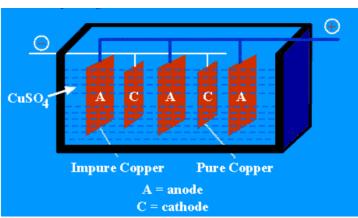
Lecture 4

Slag formation stage:

 $2FeS + 3O_{2} \longrightarrow 2FeO + 2SO_{2}$ $2FeO + 2SiO_{2} \longrightarrow 2FeSiO_{3}$ $2Cu_{2}S + 3O_{2} \longrightarrow 2Cu_{2}O + 2SO_{2}$ Blister copper formation

 $2Cu_2O + Cu_2S \longrightarrow 6Cu + SO_2$





Lecture 4

