

## MICROSCOPY OF LATERITIC SLAGS

### SUMMARY

In Africa laterites are everywhere and occur in various forms e.g. concretionary laterites, massive iron laterites (either hard or brittle), quartziferous (quartz) laterites, scoriaceous laterites, tubular laterites, etc. All these types are real natural products. However there is one "slaggy type" strongly resembling some natural laterites which is not natural but a man made product. This is a "lateritic slag" made by the natives when melting iron rich real laterites into lumps of pig iron. Later this pig iron is hammered into useful steely (a good hard carbon steel with some manganese and silica and only traces of phosphorus and sulphur) tools and weapons.

The pig iron is easy to distinguish from the natural laterites but the lateritic slag not always. However both occur on small melting places where they lie about scattered or in heap and where sometimes even the remains of the primitive but very effective blast furnaces can be seen. Moreover some "lateritic slag" still contain pieces of charcoal from the melting process.

Under the microscope the difference between natural and "man made laterite" is quite evident as the mineral fayalite never occurs in natural laterites. But of course the minerals magnetite and hematite do occur in both forms though sometimes differently crystallized.