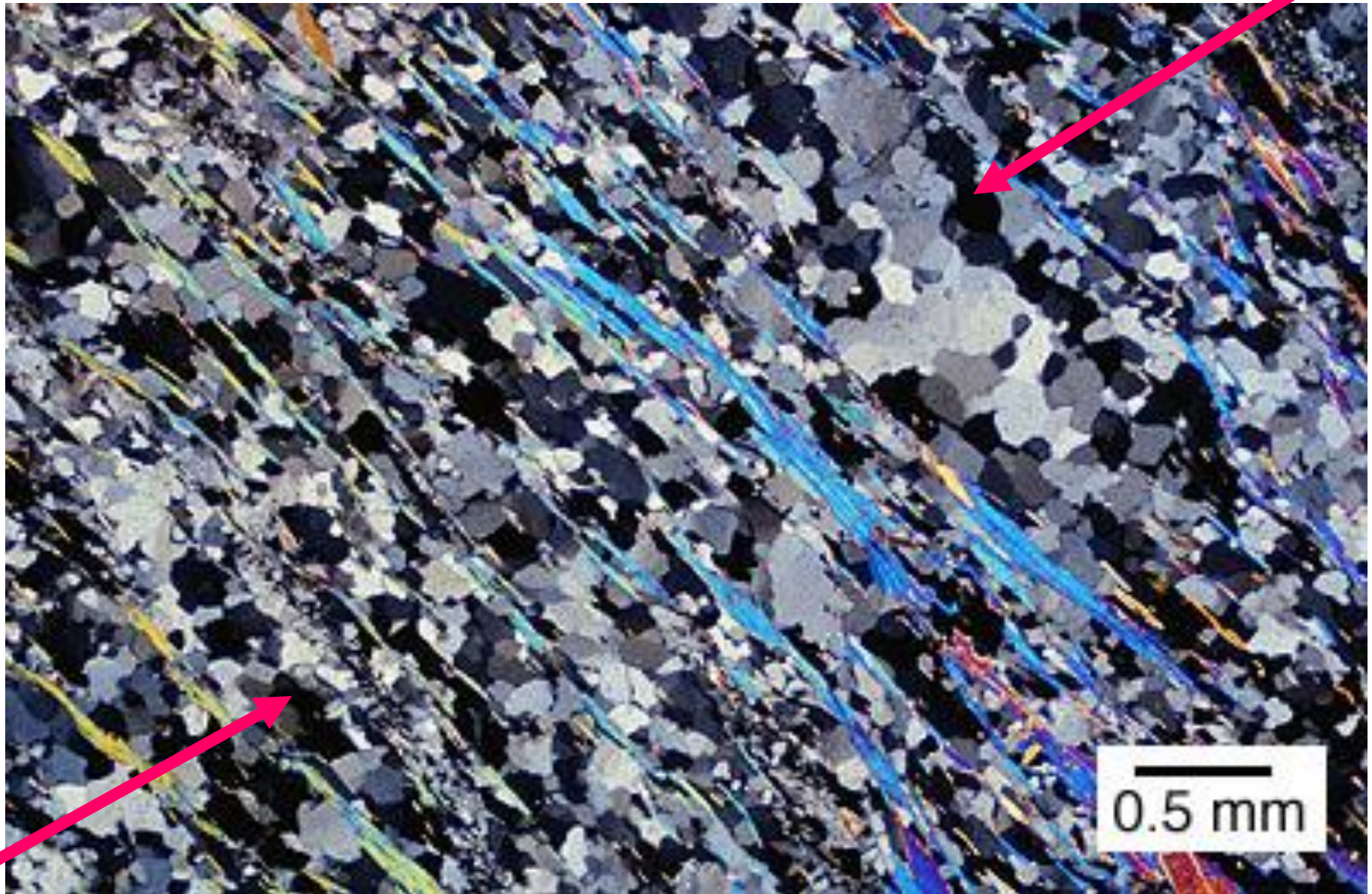


Garnet schist



Mica schist



GNEISS



BANDED GNEISS



Common Metamorphic Rocks



Slate



Schist



Gneiss



Marble



Quartzite

Folded metamorphic rocks



Rocks As Construction Materials

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- **Construction material** is any material used for construction purpose such as materials for house building. Wood, cement, aggregates, metals, bricks, concrete, clay are the most common type of building material used in construction. The choice of these are based on their cost effectiveness for building projects.

Industrial resources (minerals) are geological materials which are mined for their commercial value, which are not fuel (fuel minerals or mineral fuels) and are not sources of metals (metallic minerals) but are used in the industries based on their physical and/or chemical properties. They are used in their natural state or after beneficiation either as raw materials or as additives in a wide range of applications.

Typical examples of industrial rocks and minerals are limestone, clays, sand, gravel, diatomite, kaolin bentonite, silica, barite, gypsum, and talc. Some examples of applications for industrial minerals are construction, ceramics, paints, electronics, filtration, plastics, glass, detergents and paper.

The evaluation of raw materials to determine their suitability for use as industrial minerals requires technical test-work, mineral processing trials and end-product evaluation; free to download evaluation manuals are available for the following industrial minerals: limestone, flake graphite, diatomite, kaolin, bentonite and construction materials.

- Every manufactured product contains materials derived from minerals.
- One of the most significant characteristics of chert is being brittle under load.
- Plaster is obtained from gypsum rock that is crushed and dehydrated
- Porcelain is made with kaolin. It is transparent, translucent, compact, acid-resistant and hard.

- Travertine may be used in cladding and tiling.
- Cement is a grey powder made from a mixture of crushed and heated limestone, clay and gypsum.
- Limestone is porous, off-white and used as aggregate, pavements, cladding and tiling materials.
- Feldspars decompose to clay minerals.
- Scoria is used as a suitable construction material in light weight aggregate.

- Basalt is suitable Aggregate sources.
- Feldspar is used as a glazing layer in ceramic industry.
- Ceramic materials are made from fine grained earth clay composed of aluminum silicates and other substances.
- Terrazzo is a mixture of gravel and white cement and it's a very resistant material.
- Silica sand is the main raw material in glass industry.

- Cement is a grey powder made from a mixture of crushed and heated limestone, clay and gypsum.
- Marble is a metamorphic rock, dense and resistant to compression. It is cold to the touch and it has a widely varied natural colours. It's used on floors and walls, in architecture and in sculpture.
- Tuff is a light porous black rock formed by consolidation of volcanic ash. It is used as thermal insulator and as a light weight aggregate.
- Mud bricks are made of a mixture of clay and silt.