

## **New types of non-metallic deposits**

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All the industrial minerals are classified on the basis of industrial requirements into five groups of raw materials: (1) crystals, (2) chemical, (3) ceramic and refractory, (4) binding, and (5) aggregate. This classification makes it possible to predict and evaluate new types of deposits: zeolites are widely used in industry and agriculture; brucite is a new high-magnesian industrial mineral which may be used to produce chemical magnesian products of high quality; cryolite are rich in Na, K, F and complex of trace elements; kalsilite, synnyrites and potassium form the basis of the rock (18 %  $K_2O$ ) are used in agriculture; yakutites of rock of kalsilite-pyroxene composition in a syenitic massif are a potential source of potassium and alumina; tausonite ores a potential commercial source of natural titanate strontium; hallegflinta, quartz porphyry, rapakivi granite and syenite represent promising sources of feldspar raw material; porcelain stones are a complex high quality raw material for fine ceramics; basalt and rhyolite glasses are the most common types of volcanic rocks used as a natural pumice and expanded perlite. Recently the geologists of an industrial association have discovered new types of gem deposits: charoite, scapolite, clinohumite, chrome diopside, jadeite, apocarbonate nephrite.

It is proposed that raw materials which regard to the anticipated progress of technology, will become usable before the end of this century should be regarded as having potential. Substitute raw material are also called the raw material of the future.