In *Kazakhstan, chemical production as a technology*, unlike *Russia*, was developed much later - only at the end of the 19th century (1885 - industrial harvesting of wormwood for the production of the drug santonin).

The development of the chemical industry in *Kazakhstan* was closely and directly connected with the study of natural resources. During this period the main attention was paid to the geological and geochemical researches connected with specification of geological stocks and search of new mineral deposits. In 1928-1930 the Committee on Chemicalization of Kazakhstan was organized. Studying of raw material resources of the republic and training of chemists was its main direction. The most important practical problems were covered: the study of mineral resources, the development of advanced technology of enrichment and smelting of metals, the production of refractories and building materials, etc.

It is necessary to refer works of geochemists, geologists-mineralogists *V.I. Vernadsky* and *A.E. Fersman* to number of the most important in this area.

In 1930 *the Aktyubinsk chemical plant* for the production of mineral fertilizers was built. In 1932, construction began on *the Aralsulfat* processing plant in *the Kyzylorda region* based on proven reserves of mirabilite and tenardite, from which anhydrous sodium sulfate was obtained for glass plants, production of sodium chloride, magnesium chloride, etc.

In 1935, the domestic production of boron compounds from potassium-boron ore deposits *Inder* (work of academician *A. B. Bekturov*) was organized. In the post-war period (1945) *the Kazakh metallurgical plant* was built, the capacity of *Aktobe ferroalloys plant* increased, the first stage of *Karatau mining and chemical plant* was put into operation. Since 1958, the construction of new facilities of the chemical industry has been widely developed. The main direction was the production of mineral fertilizers.

The development of *Karatau* phosphorites resolved the issue of supplying phosphate fertilizers throughout *Central Asia*. Phosphorite processing has allowed *Kazakhstan* to create powerful enterprises for obtaining elemental yellow phosphorus using an electrothermal process. It was decided on the construction of *the Dzhambul double superphosphate plant*. The production of sodium silicofluoride has been mastered. A shop for the production of ammophos was put into operation. The technology of extraction phosphoric acid production by anhydride method was developed. In *Chimkent hydrolysis and tire repair plants* began to operate.

In the 60s. due to the pronounced raw material nature of the economy of the republic, extractive industries have received priority development. In the 1961-1965 y.y., 729 large industrial enterprises and 535 workshops entered service. In the second half of the 60s. years another 445 large enterprises and workshops were commissioned, hundreds of factories and plants were reconstructed and technically re-equipped.

The ferrous and non-ferrous metallurgy, oil and gas, chemical and petrochemical industries have been accelerated, a number of new industries for the production of titanium, magnesium, alumina, cast iron, coke, synthetic rubber, cranes, electric motors, new drawing mills and forging machines, asbestos, etc. have appeared.

During these years, construction of *the Aktyubinsk chemical plant* in the city of *Alga*, for the production of precipitate, was started. For the processing of phosphate ores, a special technological enrichment scheme has been developed to obtain standardized flotation concentrate.

In 1963, the second phase of *the Aktyubinsk plant of chromium compounds*, *the Karaganda synthetic rubber plant*, and *the Guryev chemical plant* were commissioned. Tire-repair plants were built in *Tselinograd*, *Kustanai*, *Karaganda*, *Pavlodar*. Sulfuric acid shops were launched at the *Balkhash Mining and Metallurgical Combine* and at *the Chimkent Lead Plant*. At *the Karaganda Metallurgical Plant*, coke-chemical production was developed.

In 1964, for the processing of *Karatau* ores, a gravity enrichment method was used in heavy suspensions to produce final products in the form of concentrate and waste, as well as intermediate products - objects for flotation or roasting.

The process is based on the technology developed by scientists *L.I. Stremovsky* and *M.I. Baskakova*. For the first time, the flotation separation of phosphates from magnesium carbonates