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## Technology research of the catalytic complex for the production of sulfur bitumen based on elemental sulfur

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The present study is devoted to the consideration of a catalytic process for the production of sulfur-bitumen based on the use of a sulfur-containing component in a mixture with bitumen. The relevance of the research is to improve the technology of sulfur-bitumen production while reducing the cost of raw materials, and there is an intensive research in Western Europe on this issue and in the Russian Federation. So, the possible direction of application of sulfur-bitumen was considered, which reflects: road construction and insulation areas, because technology itself is competitive in today's day. The proposed approach to solving this task, based on the use of elemental sulfur; hydrocarbon components; as well as the use of metal-containing catalysts, which, by the method of their preparation in the form of a complex, constitute the most difficult task in petrochemical industry. However, the comparative result of this technology with conventional and traditional have almost the same value and purpose. Thus, the scientific novelty is associated with a cheaper technology when replacing the raw material by sulfur with about 35-40 weight percent; improvement of the ecological index, as well as an increase in the operational properties of sulfur-bitumen.

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