The monograph on "Intensification of the heating process of oil raw materials" has been published

Senior Researcher for the Institute of General and Inorganic Chemistry, Academy of Sciences of the Republic of Uzbekistan A.A. Khudaiberdiev published a monograph on the topic of "Intensification of the process of heating oil raw materials".



The monograph is devoted to the results of a study of the intensification of the process of heating hydrocarbon raw materials in tubular heat exchangers of oil refining. It discusses the basics of the theory and practice of convective heat transfer in tubular apparatuses, presents the results of determining indicators of the basic properties of raw materials and coolants, and analyzes the influence of technological and hydraulic process parameters on the heat transfer efficiency in an experimental tubular apparatus. Methods for intensifying the process of heating raw materials in tubular apparatuses using hydrocarbon coolants and a centrifugal force field were described. The issues of modeling and optimization of the process of heating raw materials in tubular apparatuses were examined; the static and dynamic characteristics of the process in model and industrial heat exchangers were studied. The apparatus and

technological design of the process of heating raw materials with hydrocarbon coolants was carried out and the effectiveness of introducing the proposed methods of process intensification into production was shown.

The monograph is intended for researchers, undergraduates, doctoral students, teachers of higher educational institutions and engineering and technical workers in the oil refining, chemical and related industries.