Ye. Tileuberdi, Ye. K. Ongarbayev,
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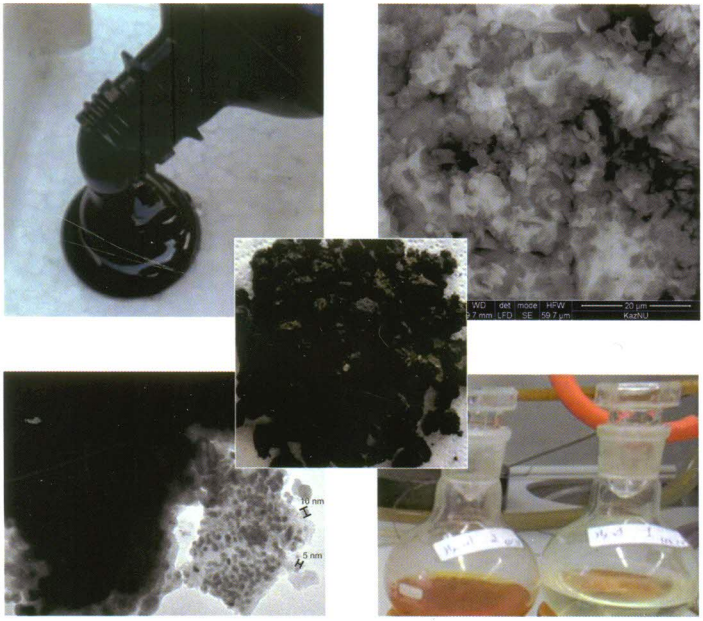
NANOSTRUCTURE of BITUMEN PRODUCED from HEAVY OIL



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The monograph is devoted to study of nano/microstructures of bitumen produced from high viscous heavy oil. It studied and developed processing technology of Kazakhstan oil sands: Extracting natural bitumen from oil sands and examining their all the physical and chemical properties, studying structures of oil sands, precipitating nano-sized aspahltene aggregates of bitumen materials and studying asphaltene composition and surface morphology, producing synthetic oil and high-quality oxidized bitumen from natural bitumen and preparing asphalt concrete with oil sands.

Also investigated bitumen modification with rubber crumb: studying surface morphology of rubber crumb from worn tires, preparing rubber-bitumen compounds and asphalt concrete on the based rubber crumb, analyzing gas composition on released during the preparation of RBC and asphalt concrete with rubber crumb, studying surface morphology of rubber-bitumen compounds

The monograph can be useful to a wide range of professionals involved in petrochemistry and nanotechnology as well as bachelors, masters and Ph.D. students.

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