

PETROGRAPHY OF IRANIAN COAL

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The main commercial coal presence in Iran is connected with Upper Triassic, Early-Mid. Jurassic sediments that form an independent coal bearing formation, having been deposited in either marine or continental environments. Analysis of features of coal bearing sediments, developed on the territory of Iran shows, that the latter have no analogues in any country of the world. Lower Mesozoic coal bearing sediments in Iran are typical subgeosynclinal formations. they are characterized by considerable thickness of the sediments - over 3000 m., presented by coastal-marine, marine, rare coastal-continental (of rivers, deltas) facies with distinctly manifested rhythmicity with thin (up to 1 m.), in places up to 1.5 -2 m. and very rarely 4 -7 m. thick coal seams. They also display some similarity with coal bearing sediments of Paleozoic coal basins.

According to the genetic classification Iranian coals appear to be predominantly Humic; by the degree of metamorphism they embrace a wide range from the first to the VII-th stage and by the rank composition they are presented by the whole gamut of ranks from Lignite to Anthracites. According to the International Classification of Coal Microlithotypes (ICC), the Iranian coal seams refer to mainly Vitrinertite bimacerals and Vitrite monomacerals. The distinguishing features of the coals are relatively low content of Fusinite, Semivitrinite, occasionally Mixtinite and a very low percentage or absence of Liptinite accounted for by a high-rank metamorphism of the coal-bearing rocks. The mean maceral composition of the coals somewhat changes along the stratigraphic section.