Download Organic Maturation Studies And Fossil Fuel Exploration

Kerogen is solid, insoluble organic matter in sedimentary rocks. Consisting of an estimated 10 16 tons of carbon, it is the most abundant source of organic compounds on earth, exceeding the total organic content of living matter by 10,000 fold.Over the past decade, there has been a growing interest in exploration and exploitation of unconventional resource plays. Unconventional shale-based (defined as rocks characterized by a grain size of predominantly less than 62.5 μm) petroleum systems are unique in that all necessary elements for a viable system are present within the organic ...The oil-prone maceral bituminite (and its equivalents: ‘amorphous organic matter’, ‘sapropelinite’, ‘amorphinite’, etc.) converts to petroleum during thermal maturation of source rocks, resulting in formation of a mobile saturate-rich hydrocarbon and a polar-rich residue of solid bitumen.Oil shale geology is a branch of geologic sciences which studies the formation and composition of oil shales–fine-grained sedimentary rocks containing significant amounts of kerogen, and belonging to the group of sapropel fuels. Oil shale formation takes place in a number of depositional settings and has considerable compositional variation.