

SYMPOSIUM ON GEOCHEMISTRY AND CHEMISTRY OF OIL SHALE
PRESENTED BEFORE THE DIVISIONS OF FUEL CHEMISTRY, GEOCHEMISTRY,
AND PETROLEUM CHEMISTRY, INC.
AMERICAN CHEMICAL SOCIETY
SEATTLE MEETING, MARCH 20 - MARCH 25, 1983

GEOCHEMISTRY OF BRAZILIAN OIL SHALES

By

C. Costa Neto
Instituto de Química, Universidade Federal do Rio de Janeiro,
Rio de Janeiro, Brasil

ABSTRACT

A general survey of the main Brazilian oil shale formations presenting their location, oil reserve, age and stratigraphy introduces this paper. It is followed by a comparative survey of the data on chemical composition (elementary, minerals and organic constituents/biological markers) and of thermal alteration indexes in order to define their maturity. The geochemical phenomena involved with a large diabase intrusion in the Irati formation is particularly stressed. The analytical methods of Solid Phase Extraction and Functional Group Marker developed for the analysis of bitumens and kerogens and the results obtained from the application of these methods to Brazilian oil shales are discussed. The paper ends with a brief description of a comprehensive analytical bibliography on Brazilian oil shales prepared to serve as a data base for these organites.