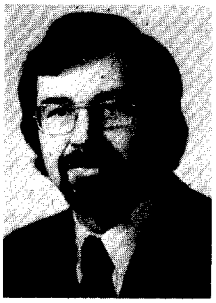

Colin Barker received a bachelor's degree in chemistry in 1962 and a doctoral degree in geology in 1965, both from Oxford. In 1965-67 he was a post-doctoral research fellow at the University of Texas-Austin; in 1967-69 he was senior research chemist with Exxon Production Research Co. in Houston, Texas; and since 1969 has been a faculty member of University of Tulsa, Tulsa, Oklahoma, serving as chairman of the Department of Earth Sciences 1975-78.

EASTERN SECTION AND U.S. DEPARTMENT OF ENERGY JOINT MEETING
October 1-4, 1979, Morgantown, W. Va.

Tentative Schedule

September 25-29
EGSP (Eastern Gas Shale Project) New York field trip
September 29-30
Silurian stratigraphy and structure field trip, West Virginia and Maryland
Sunday, September 30
4:00-9:00 p.m. Registration
6:00-7:30 p.m. Initial Open Flow Test Party
Monday, October 1
7:00 a.m. Registration
8:30 a.m. Session I: General
1:30 p.m. Session II: Geology of carbonate rocks
1:30 p.m. Session III: EGSP resource characterization
7:30 p.m. Poster Session I
7:30 p.m. EGSP Workshops
Tuesday, October 2
8:30 a.m. Session IV: General
1:30 p.m. Session V: Coal
1:30 p.m. Session VI: EGSP technology R&D
6:30 p.m. Social Hour
7:30 pm. Banquet
Wednesday, October 3
8:30 a.m. Session VII: General
1:30 p.m. Session VIII: Offshore Atlantic Coast exploration
1:30 p.m. Session IX: EGSP technology testing
7:30 p.m. Poster Session II
7:30 p.m. EGSP workshops
Thursday, October 4
Carboniferous geology short course and field trip
AAPG Short Courses
October 4-5
Devonian clastics field trip, West Virginia and Maryland

Abstracts of Papers

BARROWS, MARY H., ROBERT M. CLUFF, and RICHARD D. HARVEY, Illinois Geol. Survey, Urbana, Ill.

Petrology and Maturation of Dispersed Organic Matter in New Albany Shale Group of Illinois Basin

The New Albany Shale group of the Illinois basin is being studied to evaluate its potential for yielding hydrocarbons. As part of this study, coal petrographic techniques have been employed to evaluate the composition and thermal maturity of dispersed organic matter in the shales.

Vitrinite reflectance was measured on acid-macerated kerogen separates from 11 cores and 126 cuttings from drill holes through the New Albany Shale in Illinois, Indiana, and western Kentucky. No significant variations in reflectance values were observed within the New Albany at any single location with respect to either depositional facies or depth. An isoreflectance map prepared from the data shows large areas of the Illinois basin where reflectance is uniformly low (>0.5% R_{oil}) and the organic matter has not yet reached the stage of petroleum generation. Several areas of higher reflectance also are present: (1) near the northern erosional truncation of the New Albany in central Illinois; (2) in east-central Illinois, an area associated with a broad southward-plunging syncline just west of the La Salle anticlinal belt; (3) in Wayne and Hamilton Counties, Illinois, the present area of maximum burial depth; and (4) in extreme southeastern Illinois, where the highest reflectances yet observed (>1.0% R_o) correspond to a complexly faulted and mineralized area with nearby igneous intrusions. Changes in color and intensity of UV fluorescence of liptinites are generally in good agreement with reflectance data.

Occurrence and abundance of amorphous organic matter, alginites (mainly *Tasmanites*), vitrinites, and exinites are facies-dependent. Solid hydrocarbons that occur as pore fillings in fusinite are present mainly in samples from southeastern Illinois. Their presence suggests that hydrocarbon generation and expulsion have occurred in the New Albany in southeastern Illinois.

BEEBE, ROBERT R., and HENRY W. RAUCH, West Virginia Univ., Morgantown, W. Va.

Lineaments and Water Wells as Exploration Tools in Midway-Extra Gas Field, West Virginia

A hydrogeologic characterization study was done in the Midway-Extra Devonian shale gas field of northern Putnam County, West Virginia. Lineaments were mapped and water wells were surveyed for physical and chemical parameters, for comparison to initial yield of nearby shale gas wells.

Short, straight photolineaments are significantly associated with water-well yield in gallons per minute. Water wells located within 200 ft (60 m) of a lineament's center line have significantly higher yields, which indi-