

## FOREWORD

The Twentieth Oil Shale Symposium was held at a time when activity in the oil shale field was at a low point because of a drop in world crude oil prices and a perception that the United States had an adequate and safe source of liquid fuels from the western hemisphere. It is interesting that the Foreword from the Proceedings of the Tenth Oil Shale Symposium begins "The Tenth Oil Shale Symposium was held 13 years after the first of this series, and, at first glance, commercial production of oil from shale appears to be no closer to reality than it did in 1964. Even though the energy crisis is still with us—and, during one month this year, for the first time, liquid petroleum imports comprised more than half of the total liquid fuels consumed by the United States—commercialization of shale oil is still an elusive goal." At the time of the Twentieth Symposium, liquid fuel imports are running about 40% of total liquid fuels consumption of the United States even though total liquid fuels demand is about 25% lower than in 1977. Apparently, the only major change in the past ten years is in the perception of the general public as to the seriousness of importing 40% of our liquid fuels needs and its effects on our economic security.

There has been progress in the past ten years and, in 1987, there is one commercially operating unit producing shale oil. This is the Unical plant at Parachute, Colorado, which is processing oil shale to a low sulfur synthetic crude oil at about one-half of its design rate of 10,000 barrels per day. Hopefully, data and experience obtained from the operation of this plant will permit the competitive production of liquid fuels from oil shale.

The Twentieth Oil Shale Symposium was a successful one due to the quality and number of the papers presented and the attendance of over 100 people still working in the field. As always, the success of the symposium is due directly to the authors and their employers who make the results of their work available to the session chairman, Annette Reed of the CSM Continuing Education Department, and Jean Shadwell of the CSM Public Information Department for their help.

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