

# NATIONAL RESEARCH COUNCIL

COMMISSION ON PHYSICAL SCIENCES, MATHEMATICS, AND RESOURCES

2101 Constitution Avenue Washington, D.C. 20418

U.S. NATIONAL COMMITTEE  
FOR ROCK MECHANICS

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Mr. Trueman L. Seamans  
U.S. Nuclear Regulatory Commission  
Mail Stop 697-SS  
Washington, DC 20555

Dear Mr. Seamans:

The U.S. National Committee for Rock Mechanics is pleased to submit the attached Quarterly Activities Report for the Period October 1, 1982 - December 31, 1982 as required under Articles II and III of U.S. Bureau of Mines Contract No. JO 199030.

Sincerely,

  
John E. Wagner  
Executive Secretary

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PDR WMRES EPSNATRC  
B-6932 PDR

U.S. NATIONAL COMMITTEE FOR ROCK MECHANICS  
ACTIVITIES REPORT

October 1, 1982 - December 31, 1982

This report covers continuing activities of the U.S. National Committee for Rock Mechanics from October 1 through December 31, 1982, under U.S. Bureau of Mines Contract JO 199030. It is submitted pursuant to the provisions of Articles II and III of the contract.

International Society for Rock Mechanics

ELECTION OF ISRM OFFICERS. Election of President and Vice Presidents of ISRM for 1983-1987 will be held at the ISRM Council Meeting in Melbourne April 14, 1983. The Sociedade Portuguesa de Geotecnia has requested U.S. national group support of their nomination of Dr. Edward T. Brown (Australian citizen and U.K. resident) for ISRM President to replace Professor W. Wittke whose term is expiring. The Sociedad Mexicana de Mecanica de Rocas has requested U.S. national group support of their nomination of Mr. Arturo Alfonso Bello Maldorado for ISRM Vice President for North America to replace Dr. Thomas C. Atchison whose term is also expiring.

5TH CONGRESS. The organizing committee in Melbourne has received fifteen of the congress papers selected by the USNC/RM. The authors did not complete their proposed papers in time for publication in the proceedings.

Meeting

The Vice Chairman, at the invitation of the U.S. National Committee on Tunneling Technology (USNC/TT), participated in the USNC/TT Executive Committee meeting on November 8, 1982 and briefed federal agency sponsors who were present on activities of the USNC/RM.

The USNC/RM secretariat has been invited to present a briefing on committee activities at the annual meeting of TRB's A2L02 Committee Meeting on Soil and Rock Properties, January 17, 1983.

Rock Mechanics Research Requirements Report

An excellent synopsis of the USNC/RM report entitled "Rock Mechanics Research Requirements for Resource Recovery, Construction and Earthquake-Hazard Mitigation" was published by the American Geophysical Union's *E&S*, Volume 63, No 25. Copies of the synopsis prepared by Howard J. Pincus, William K. Judd, John W. Handin and Terry Engelder are available from the USNC/RM secretariat.

## Annual Review of U.S. Progress in Rock Mechanics

As a logical follow up to the Rock Mechanics Research Requirements Report, the Panel on Science and Engineering of Rock Mechanics has completed its first annual assessment of programs and needs in rock mechanics. The theme of the 1982 assessment is "rock mass characterization with particular consideration given to thermo-mechanical properties determination and in situ stress." The review will be given wide distribution in early 1983.

### Technical Society Participation

**FINANCIAL CONTRIBUTIONS.** The secretariat sent invoices to all participating technical societies for 1982 contributions and has received contributions from AEG, AGU, ASCE, ASTM, GSA, SEG, SME, SPE and TRB.

**INTERSOCIETY ROCK MECHANICS NEWS.** The secretariat has been advised the SME will provide society newsletters. No response has been received from ASTM in regard to exchange of society news.

**AMERICAN SOCIETY OF MECHANICAL ENGINEERS.** On December 9, 1983, the Petroleum Division of ASME notified the Executive Secretary that ASME plans to withdraw temporarily from USNC/RM activities because of a lack of expertise on rock mechanics amongst their active members.

**SOCIETY OF PETROLEUM ENGINEERS OF AIME.** On October 28, 1982, the SPE executive director advised the USNC/RM chairman of the decision made by the SPE Board of Directors to withdraw participation as a member society in the U.S. National Committee for Rock Mechanics effective October 1, 1982. In a separate letter the SPE executive director indicated that SPE had appointed an ad hoc committee to review SPE's role in rock mechanics, and the report from that ad hoc committee could result in a decision to reinstate their member society status.

**SOCIETY OF EXPLOSIVE ENGINEERS.** The USNC/RM vice chairman has received inquiries from SEE pertaining to their possible participation in the U.S. National Committee for Rock Mechanics as a member society.

### Workshop on Hydraulic Fracturing Stress Measurements

The Workshop on Hydraulic Fracturing Stress Measurements cosponsored by the U.S. Geological Survey's Office of Earthquake Studies and USNC/RM was held in Monterey, California, December 3-5, 1981. Publishing of the proceedings is expected to be complete during the next reporting period. The deadline for USNC/RM receipt of camera-ready manuscripts previously scheduled for July 15, 1982, was postponed by the USGS project officer.