

of the possible variables that enter into the system, to recognize which are the important factors, and then to undertake whatever measurements and calculations seem necessary at least to improve our understanding of the problems.

It is appropriate to conclude the general report with a list of subjects which reflect the current interests of workers in our field. Accordingly, the following subjects are proposed for discussion, namely:

- 1) The problems involved in recognizing which of the many possible intrinsic characteristics of rocks and rock masses (in conjunction with the physical environmental factors) are the most significant or critical in governing the deformation behavior of the material.
- 2) The use of detailed petrographic studies (modal analyses, quality indices, petrofabric analyses) and field studies as a means of predicting at least the relative physical and mechanical properties of rocks and rock masses.
- 3) The descriptive characteristics of mechanical discontinuities [macrofractures (joints), bedding, foliation, etc.] that tend to influence the physical and mechanical behavior of the rock mass.
- 4) The extrapolation of quantitative laboratory test data for the small intact rock specimen to problems involving the deformation of the rock mass.
- 5) The use of the experimental deformation test to detect planes or lines of "easy" potential failure, permanent strain, principal stress axes, and other phenomena that relate to the tectonic history of the sample.
- 6) The descriptive classification of rocks and rock masses for applied rock mechanics. Is a general classification possible at this time or is a classification practical only when it is designed to fit local conditions and a specific application? In either case what factors should be considered in such a classification?