GUEST EDITORIAL

The classification approach will remain the backbone of rock engineering design and practice till fast, reliable and affordable geo-physical methods of investigations suited to rock mass characterisation are available. New research efforts are however needed for developing classification methods for all rock engineering purposes like slopes, foundations and caverns, etc.

My real concern today is the gradually vanishing hard-to-get field data essentially because compilation of data banks is not sufficiently glamorous. I would like to suggest special efforts directed at development of expert systems for all rock engineering purposes which automatically preserve the precious field data. The idea is to make experts available to the practicing engineers in the form of these expert systems. The reliability of the software will improve with use since the correlations controlling the design output would improve with enlargement of the data base. The benefit becomes at once obvious when a few users are imagined to collectively share their experiences and the data bank rather than a single Bieniawski or a Barton making a lifetime efforts to develop one classification method.

The other point I would like to make, of special importance to a country like India but of less significance to the developed world, is the need for rock mechanics audit. My concern is a plethora of rock mechanics consultants, all claiming to use the classification methods and the powerful numerical modelling tools which may result in a needlessly expensive design even for an excellent site on one hand and an expensive collapse on the other.

My one suggestion to practicing rock engineers and designers is never to work against nature but to work with nature keeping an eye open for simple tips. The nature always provides tips leading to a practical solution to a rock engineering problem provided we keep our eyes open.

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