



Editorial: JRMTT's Vibrant Role in the Growth of Rock Engineering during the last 30 years: An Overview

As the Indian Society for Rock Mechanics and Tunneling Technology (ISRMTT) and its official journal- JRMTT commemorate three decades of existence, it is prudent to reflect on its instrumental role in advancing the field of rock engineering. While preparing an editorial for this issue, I had the fortune of reviewing past editions which carried some notable quotes and profound thoughts from the members of the editorial board of JRMTT and the past presidents of the society. I take immense pleasure to resurface these as a way of reminiscing the journey through the last 30 years.

It all started back in 1992, when ISRMTT was established, sowing the seed for a dedicated publication outlet focused on this niche but vital domain. As Er. A. B. Joshi, Former Chairman, Central Water Commission (CWC), Govt. of India and the first president of ISRMTT through his first message rightly mentioned in July 1992 issue of the first news bulletin of ISRMTT - "Rock Mechanics is a complex and as such a highly specialised field of engineering. It is not surprising that scientists and engineers concerned with rock formations have relied heavily on qualitative interpretation, judgement and empirical rules. However, this may not be adequate and it is necessary that a thorough understanding of the behaviour of rock mass from engineering consideration is developed. The experience and judgement of scientists and engineers who had dealt with the problems in the past will of course serve as a good guide..... There is plenty of work to be tackled by the ISRMTT to ensure that the highest levels of current understanding and its application to practice are available to all.....!"

The founding member (LM-01) of ISRMTT and the past member of editorial board - Dr. V.M. Sharma (formerly Director, CSMRS/ AIMIL, New Delhi) stated in JRMTT's 1995 inaugural issue - *"The journal will fill up the long-felt need for an international journal originating from this part of the world."*

Another member and the Former Director of CSMRS, Dr. A.K. Dhawan wrote in the July 2003 edition *"It's a matter of honour to have been associated with ISRMTT right since its inception and also with its journal. The pioneering efforts of a group of dedicated engineers / geologists based at Roorkee, deserves all appreciation for bringing out this bi-annual journal. The journal has been publishing informative and useful articles contributed by authors with wide experience in their respective areas."*

Over the subsequent 30 years, ISRMTT through the proceedings of many conferences/ workshops/ training courses etc. organised at different parts of the country, and a regular publication of a bi-annual research digest in the form of a journal (JRMTT) have left an indelible imprint on the growth trajectory of this critically important discipline. The journal's pages chronicle countless pioneering developments and technical milestones that have shaped modern rock mechanics practices. *As Prof. John A. Hudson of Imperial College, London and one of the active members of JRMTT board aptly stated in the October 2000 issue, "The most important contribution a rock engineer can make is to provide a predictive capability - because without this there can be no basis for design."*

Tunnelling, excavation, mining, slope stability - JRMTT's 30 volumes collectively represent an unparalleled body of knowledge that expanded our abilities to safely and sustainably harness the incredible potential locked within rock masses. As Dr. J. L. Jethwa wisely advised in the September 2001 issue, *"My one suggestion to practising rock engineers and designers is never to work against nature, but to work with nature keeping an eye open for simple tips. Nature always provides tips leading to a practical solution to a rock engineering problem provided we keep our eyes open."*

On this pearl Jubilee year, it is evident that ISRMTT and its journal have been driving forces fueling rock engineering's incredible growth and maturation over the past three decades. As Er. R. Jeyaseelan, former Chairman of CWC and the past President of ISRMTT, noted in the January 2003 edition, "ISRMTT in its existence for over a decade, has proved to be a very useful forum for interaction and promotion of information and technology for practising engineers, professionals and researchers." Their impacts reverberate across marquee infrastructure projects, advances in excavation methods, improved mining safety protocols, refined slope stabilisation techniques, and so much more.

Prof. S. Sakurai, a past President of ISRM and the JRMTT board member noted in the July 2004 edition, *"The journal can provide both theoreticians and practising engineers with a forum to exchange ideas and information concerning rock mechanics and tunnel engineering. Contributions on both theory and practical applications are highly welcome. Case studies are also welcome."* This encapsulates JRMTT's role as a vital nexus fostering cross-pollination between academia and industry.

Dr. Nick Barton (the propounder of a popular "Q" System of Rock mass Classification), an important member of "ISRMTT" family once wrote through his Guest Editorial (Vol.15, No.1, January 2009 issue) - "During two recent trips to India, the first to September 2008 ITA Congress in Agra, the second to hold a three days short course in New Delhi in December, the undersigned was impressed by two things in particular (leaving aside, of course, the incomparable Tajmahal, admired equally on any occasion)..... *While more Indian engineering geologists may now be utilising the Q-System in large hydroelectric projects in India and surrounding countries, the limitations in certain extreme conditions are not to be ignored*"!

In conclusion, I would like to quote a few lines penned down by Prof. Bhawani Singh, the founder Chairman of the board as appeared in the January 2019 issue, " *The team spirit helps in crisis management. There is a way to greatness. The way to greatness is originality. Thus, the spirit of science should be preserved....*" .

The valuable suggestions of practising engineers, researchers and readers have been continuously inspiring us to nourish this journal for the last 30 years The road ahead will be challenging yet rife with opportunities to ensure rock engineering's pivotal role in building a more robust, sustainable world. With ISRMTT and its journal "JRMTT" leading the way, the path forward for this crucially important field has never been brighter.

I look forward to useful advice and contribution from the rock mechanics fraternity so that the quality of the journal may be improved further and the journey of the journal remains joyful as it has been in the past.

- **Dr. Subhash Mitra**
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