Rock Mech Rock Eng (2010) 43:1–2
DOI 10.1007/s00603-010-0081-x

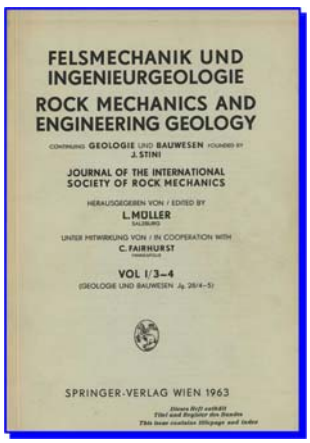
EDITORIAL

Editorial

Giovanni Barla · Herbert Einstein · Kalman Kovári

Published online: 4 February 2010

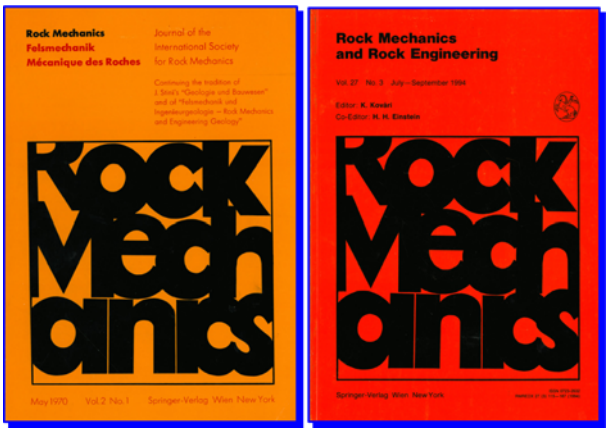
The present issue of "Rock Mechanics and Rock Engineering" is the first one to be published in A4 size and in a format, which has been completely renovated. This process, which is taking place smoothly and has been prepared with great care by the Publisher and the Editor, should not go unnoticed and without mentioning it as a "special event".



The change in size and format from the small "pocket size" to A4 is taking place 80 years after Joseph Stini founded this journal with the title "Geologie und Bauwesen". Also, 48 years have passed from 1962, when the International Society for Rock Mechanics (ISRM) was founded and the name of the journal was changed to "Rock Mechanics and Engineering Geology", to become its official scientific journal (Muller 1963).

G. Barla (✉) · H. Einstein · K. Kovári
Torino, Italy
e-mail: giovanni.barla@polito.it

The small size was kept through the years and even in 1969, when the name was changed to "Rock Mechanics-Felsmechanik-Mechanique des Roches", to emphasize the link with ISRM (Muller 1969). And finally, the size and format remained the same in 1983, when the present name "Rock Mechanics and Rock Engineering" was adopted to underline the growing interest in engineering practice (Kovári and Einstein 1983).

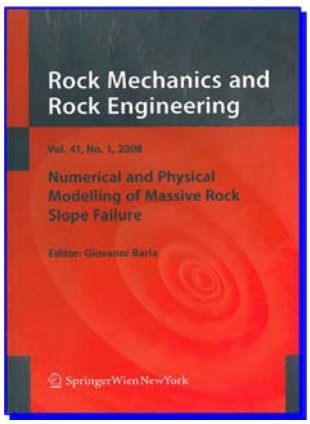


The switch to the A4 size, which was desired by the Publisher, in order to fit this journal with the other journals published in the same series is bringing a number of benefits to our readers and authors such as: more papers in each issue with 30% more content; a substantial reduction in waiting time between the time a paper is accepted and visible on the "Online First" and the time it is printed.

All of this will be done, being well aware of the importance of maintaining the published material at a high level, while continuing the efforts we have made in recent years in promoting the discipline of rock mechanics and in keeping a close connection between theory and practice.

This will be possible, if we will continue to have the support of the many people involved in the review process, to whom we would like to express our deep gratitude at this occasion.

A very important step has been made by Springer in 2008, when the journal website was set up, so that papers can now be submitted and reviewed electronically and hopefully more rapidly than in the past. This has apparently resulted in more papers being submitted each year and from regions, which were not previously contributing with papers to our journal.



Readers will have noted that the four issues published up to 2002 were increased first to five (in 2003) and then to six (in 2007). Starting in 2002, the Rocha Medal Paper has been published each year.

Also, special issues started to be published in 2007: the first special issue was on "Numerical and physical modeling of massive rock slope failure" in 2007; the second was "Deep tunnels: issues in rock engineering" in 2008.

In this way, we have contributed more significantly to rock mechanics knowledge by bringing the attention of the rock mechanics community to relevant subjects. A special issue on "Earthquake engineering and rock dynamics" is under preparation and will be published in 2010.

We will continue to look for a close connection between theory and practice. Our aim is "to have a balance between articles dealing with fundamentals of rock mechanics, with engineering geology, and problems arising from construction practice" (Kovári and Einstein 1983).

Rock mechanics can be regarded as a truly interdisciplinary subject, with applications in geology and geophysics, mining, petroleum, and civil engineering. Rock engineering intends to use rock mechanics for solving problems in engineering practice. We will pay attention to site investigations, rock mechanics design and design analysis, construction practice, and performance monitoring of surface and underground works.

The emerging fields in rock mechanics and rock engineering (Barla 2008) will be considered without disregarding the important steps yet to be made in the understanding of fundamentals of rock behavior and in the description of rock mass response.

Typical problems are concerned with sustaining our environment, dealing with natural threats and climate change and with preservation of historical and cultural heritage for future generations.

The maintenance of transportation infrastructures which are aging represents another subject of interest such as the response of dams, bridges, and tunnels under seismic loading. New tunnels, such as base tunnels are under design or being excavated.

Not to be overlooked are the present and future needs for energy worldwide, which call for new options such as geothermal energy, Also, nuclear waste storage and the related need to deal with coupled thermo-hydro-mechanical-chemical processes in geo-engineering systems are to be considered.

Finally, of great importance is mining for ore extraction both involving open pit and underground mining.

Our readers are invited to contribute with papers on these topics but also on other topics of their choice.

Giovanni Barla, Editor.
Herbert Einstein & Kalman Kovári, Co-Editors.

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