



Correction to: Numerical modeling of an umbrella arch as a pre-support system in difficult geological conditions: a case study

Ayub Elyasi¹ · Parisa Bagherzadeh² · Mohammad Javadi³ · Taher Moradi⁴ · Javad Moharrami⁴ · Saeid Parnian⁴ · Mohsen Amrac⁵

Published online: 20 July 2023
© Springer-Verlag GmbH Germany, part of Springer Nature 2023

Correction to: Bulletin of Engineering Geology and the Environment (2016) 75:211–221
<https://doi.org/10.1007/s10064-015-0738-5>

Originally a significant contributor was not included in the paper. Parisa Bagherzadeh was involved in data analysis and interpretation of the results. The contribution was essential to the completion of the research.

The original article can be found online at <https://doi.org/10.1007/s10064-015-0738-5>.

✉ Ayub Elyasi
a.elyasi1986@yahoo.com

- ¹ Department of Mining Engineering, Tarbiat Modares University, Tehran, Iran
- ² Department of Mining Engineering, Faculty of Engineering, Tarbiat Modares University, Tehran, Iran
- ³ Department of Mining Engineering, Shadid Bahonar University of Kerman, Kerman, Iran
- ⁴ Consultant Engineering Institute of Iman Sazan, Tehran, Iran
- ⁵ Department of Mining Engineering, Tehran University, Tehran, Iran