

SCIENTIFIC AND TECHNICAL
UNION OF MINING, GEOLOGY
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PROCEEDINGS

OF THE

IVth INTERNATIONAL GEOMECHANICS CONFERENCE

THEORY AND PRACTICE OF GEOMECHANICS FOR EFFECTIVENESS THE MINING PRODUCTION AND THE CONSTRUCTION

3-6 June 2010

International House of Scientists "Fr. J. Curie"
Resort "St. St. Constantine and Elena", Varna, Bulgaria



TOPIC 8

Обучение и квалификация на кадри по геомеханика.

Education and qualification of geomechanical experts.

Обучение и подготовка кадров по геомеханике.

IV INTERNATIONAL GEOMECHANICS CONFERENCE

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ABSTRACT

Safety of tailings dams: post-university formation

G. Lucchi¹, G. Tosatti^{2*}

¹ Stava 1985 Foundation, Stava 17, 38038 Tesero, Italy

² Department of Earth Sciences, Modena and Reggio Emilia University, 41121 Modena, Italy

* Corresponding author

After a historical introduction regarding the origin, causes and responsibilities of the 19th July 1985 disaster in the Stava Valley (Italy) and of the 1st May 1966 disaster in Sgorigrad and Vratza (Bulgaria), the Stava 1985 Foundation (a non-profit organization) expresses the hope that, starting from a common tragic experience, universities and research Institutions in Italy and Bulgaria will organize post-graduate courses for young graduates and technicians from mining societies and public administrations who are to be in charge of the safety of geotechnical structures and, in particular, of active and abandoned tailings dams in Europe and elsewhere in the world.

Since 1986 – the year following the Stava disaster – to date, there have been over forty failures of tailings dams worldwide. On the whole, they have caused the loss of over 500 lives and extremely serious socioeconomic and environmental damage. This demonstrates that a lot remains to be done for the safety of these geotechnical structures and prevent disasters that could be avoided since they depend entirely on negligence, superficiality, short-sighted cost-cutting and speculation. The primary goal of the Stava 1985 Foundation (a non-profit institution) is to increase the level of awareness of those who have responsibilities.

Publication of books, pamphlets, folders, etc. to keep alive the memory of Stava and other similar disasters; Production of short films and recording of music and theater performances staged during commemoration events; Twinning ceremonies with delegates from other places where similar disasters have occurred; Traveling exhibition explaining the causes and responsibilities of the Stava tailings dams failure; Patronage of a 2nd level University Master Degree for qualifying young engineers in the proper construction and management of large geotechnical structures and make them aware of the risks involved; Seminars for engineers and geologists and conferences for both the general public and young students.

In particular, the Documentation Centre provides visitors with various information displays to explain the disaster: from pictorial panels to original mine items and tools. Since it was opened in 2003 over 35,000 people have visited it, with an average of 7,000 visitors per year. The Centre location was chosen for its particular significance: it was built on the path of the disastrous flowslide.