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Scientist of the Novosibirsk Mining Institute (1982-2008)
Veteran of Siberian Branch of Russian Academy of Sciences (2005)
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LIST OF PUBLICATIONS by Igor Leo BOLTENGAGEN

Publications 2003-2008

In English:

Boltengagen, I.L., Vlasov V.N., Klishin V.I. (2003) Calculation of Roller-Press Parameters for Kimberlite Ore Crushing
Journal of Mining Science, Vol. 39, No. 3

Baryshnikov, V.D., Boltenhagen, I.L., Ganchenko, M.V. (2005) Simulation of stress distribution around cylindrical mined-out spaces. Proceedings of the International conference **EUROCK 2005** (Brno, Czech Republic).
Rotterdam: Balkema.

Boltenhagen, I.L. (2008): Structure of elastic presage of earthquake
Proceedings of the 3rd International Symposium on Energetic Materials and their Applications (**ISEM 2008**). Book of Abstracts.
Japan, Tokyo, Japanese Society of Explosives
Disk of Abstracts on the 33rd International Geological Congress, Oslo, 2008
<http://www.cprm.gov.br/33IGC/1196178.html>

Boltenhagen, I.L., Age of Kimberlite pipe
Disk of Abstracts on the 33 International Geological Congress, Oslo, 2008
<http://www.cprm.gov.br/33IGC/1352171.html>

In Russian:

Baryshnikov, V.D., Boltengagen, I.L., Kramskov N.P., Vechkitov, A.V., Kulminsky, A.S., Shanshin O.G. (2005): Geomechanical analysis of stress state of rock mass for test working of block in mine "International".

Boltengagen, I.L., Kuznetsov, A.S., Estimation of critical load on mechanical system by method of net programming (2005).
Proceedings of International Conferences on Problems and Prospects of Mining Sciences (1-5 November 2004, Novosibirsk). V.1 Geomechanics, 2005 [In Russian]:
Novosibirsk: **Mining Institute** of Siberian Branch of Russian Academy of Sciences [in Russian].

Boltengagen, I.L. (2003): Estimation of possibility and energy on tectonic failure near mined out space.
Baryshnikov, V.D., Boltengagen, I.L. (2004): Modeling of stress state of rock mass around cylindrical mined-out spaces.

Boltengagen, I.L. (2005): Geomechanical estimation of age of Kimberlite pipe in salt rock.

Boltengagen, I.L. (2006): Estimation of fracture zone over workings.

Boltengagen, I.L. (2007): Displacement and stress around seam.

Boltengagen, I.L. (2008): Structure of elastic presage of earthquake. 35 - 40.

There is a short variant of last paper [in English] (look over)

Proceedings of International Scientific School by Academician S.A.Hristianovich “Deformation and fracture of materials with defects and dynamical phenomena in rock and workings” (Alushta, Crimea, Ukraine, September-October every year).

Simpheropol: **Research Institute of Geodynamics** [in Russian].

Baryshnikov, V.D., Boltengagen, I.L., Vasil’ev, A.S. (2008) Geo informative data for solving of problems of mining practice. Proc. GEO Siberia 2008, V.5, Geo informative systems
Novosibirsk, **Novosibirsk State Geodesy Academy** [in Russian]

Boltengagen, I.L. (2004): Analysis of system for strain measuring.

Baryshnikov, V.D., Boltengagen, I.L., Kovrizhnykh, A.M. (2004): Measuring of stress by method of slot unloading.

Boltengagen, I.L., Popov, S.N. (2004): Energy analysis of rock burst on tectonic failure near mined-out space.

Boltengagen, I.L. (2006): Geomechanical analysis of chamber – pillar system of working.

Proceedings of International Conferences on Geodynamics and stress state of Earth’s bowels (Novosibirsk, Russia, September-October, one time for two years).

Novosibirsk: **Mining Institute** of Siberian Branch of Russian Academy of Sciences [In Russian].

Baryshnikov, V.D., Boltengagen, I.L. (2006): Peculiarities of deformation of artificial filling in mined-out spaces. Proc. Conference on deformation and fracture of constructions (Novosibirsk, 9-13 October 2006). Book of abstracts.

Novosibirsk: **Institute of Hydrodynamics** of Siberian Branch of Russian Academy of Sciences, 2007 [In Russian].

Boltengagen, I.L. (2007): Estimation of stress state of constructing elements of a variant of chamber – pillar system of working by Fourier method.

Baryshnikov, V.D., Boltengagen, I.L., (2007): Estimation of displacement of day surface and pressure on pillars for geotechnical conditions of gold ore mine “BADRAN”.

Baryshnikov, V.D., Boltengagen, I.L., Titov, D.A. (2007): Experimental estimation of reology parameters of salt rock in mine.

Baryshnikov, V.D., Boltengagen, I.L., Vasil’ev, A.S., Kachalsky, V.G. (2007): Collecting of data about geomechanical conditions of system of excavation of deposits with using open-pit and underground working.

Proceedings of the Conference in partnership with foreign scientists on Fundamental Problems of the Technogenic Geomedium Formation (Novosibirsk, Russia, 10-13 October 2006). V.1 Geotechnology. 2007.

Novosibirsk: **Mining Institute** of Siberian Branch of Russian Academy of Sciences, 2007. [In Russian].

Boltengagen, I.L. (2007): Analysis of Cambridge Meteorite Catalog. Proc. International scientific and technical conference “The 2nd Erzhanov’s reading” (Kazakhstan, Aktobe, on 19-21 of June, 2007).

Aktobe: **State Technical University** [In Russian].

Boltengagen, I.L. (2005): Problems of geomechanical analysis of mine-technical situations

Proceedings of the Conference in partnership with foreign scientists on Scientific Technologies of Mining (Novosibirsk, Russia, 29-30 March 2005).

Novosibirsk: **Mining Institute** of Siberian Branch of Russian Academy of Sciences, 2005. [In Russian].

Publications before 2003

In English:

Kurlenya, M.V., Popov, S.N., Boltengagen, I.L. (1992): Geomechanical substantiation of extraction of

undermined ore deposit. Proc. 10th Int. Conf. on Ground Control in Mining, Morgantown, USA, 1991. Morgantown, **West Virginia University**, 83-87.

Shalaurov, V.A., Popov, S.N., Boltengagen I.L. (1992) Geomechanical substantiation of extraction of undermined copper ore deposit. Proc. Int. Conf Geomechanics 91, Ostrava. **Rotterdam: Balkema**. 83-87.

Kurlenya, M.V., Popov, S.N., Boltengagen I.L. (1992): Geomechanical analysis for excavation of an underworked ore placer. **Journal of Mining Science**. Vol. 33, No. 1.

Boltengagen I.L., Koren'kov E.N., Popov S.N., Freidin A.M. (1997) Geomechanical substantiation of the parameters of a continuous chamber system of mining with caving of the roof rock. **Journal of Mining Science**. Vol. 33, No. 1.

Boltengagen, I.L. (1999): Modeling of initial stress and weakening surfaces by finite element method. **Journal of Mining Science**, Vol. 35, No. 2.

Boltengagen, I.L. (2002) Influence exerted by direction of the principal initial stresses on the stress-strain state of rock mass mine workings **Journal of Mining Science**, Vol. 38, No. 3.

In Russian:

Kurlenya, M.V., Popov, S.N., Boltengagen, I.L. (1985): Algorithm of automatic triangulation. Proc. Int. Conf. on Mechanics, Bulgaria. Sophia: Bulgarian Academy of Sciences.

Boltengagen, I.L., Kurlenya, M.V., Popov, S.N. (1986): Automatic generation of triangular elements in two-dimensional multiply connected regions. Proc. Analytical and numerical researches in Rock mechanics. Novosibirsk: **Institute of Mining** of Siberian Branch of Russian Academy of Sciences [In Russian].

Boltengagen, I.L., Popov, S.N., Seryakov, V.M. (1987): Elastic deformation of timbering of tunnel in rock. Proc. Mathematical methods and numerical technique in rock mechanics. Novosibirsk: **Institute of Mining** of Siberian Branch of Russian Academy of Sciences [In Russian].

Boltengagen, I.L., Fedorenko, V.K., Tapsiev, G.A. (1988): Method for experimental studying of filtration in rock in mine.

Boltengagen, I.L., Fedorenko, V.K. (1988): Stress measuring in mine Komsomolsky of Talnakh deposit. Proc. Stress strain state of rock mass. Novosibirsk: **Institute of Mining** of Siberian Branch of Russian Academy of Sciences [In Russian].

Boltengagen, I.L. (1989): Deformation of elasticity domain with prismatic cavity. Proc. Numerical methods of continuous medium mechanics. V.2. Krasnoyarsk: **Numerical Center**.

Boltengagen, I.L. , Popov, S.N. (1989) Estimation of parameters of combining system of working. Proc. Conference on Optimization of underground working on ore mines. Novosibirsk: **Institute of Mining** of Siberian Branch of Russian Academy of Sciences [In Russian].

Shalaurov V.A., Boltengagen, I.L. (1990): Substantiation of technological solutions for excavation of undermined ore deposits. Proc. Development of mining for mines and open-pits of Siberia.

Novosibirsk: **Institute of Mining** of Siberian Branch of Russian Academy of Sciences [In Russian].

Boltengagen, I.L., Popov, S.N. (1990): Numerical modeling of undermined ore massif. Proc. Numerical and analytical investigations in underground building.

Apatity: **Mining Institute of Kolsky** scientific center of Academy of Sciences of USSR.

V.K. Popov, S.N., Fedorenko V.K., Boltengagen, I.L., Red'kin, V.A., Spirin, L.A. (1990): Deformation of pillar between ore mines.

Yun, R., Boltengagen, I.L., Spirin, L.A., Kovtun, K.G. (1990): Experimental estimation of stress state of rock near mined-out space.

Proc. Experimental researches of stress strain state of rock on ore and coal mines.

Novosibirsk: **Institute of Mining** of Siberian Branch of Russian Academy of Sciences [In Russian].

Kurlenya, M.V., Boltengagen, I.L. (1991): Geomechanical substantiation of extraction of undermined ore deposits. Proc. the 9th conference on rock mechanics, USSR, Kyrgyzstan, Bishkek.

Bishkek: **ILIM**.

Boltengagen, I.L. (1999) Modeling of defending seams with finite element method. Proc. Scientific and practical Conference on Geotechnology of 21st century, Novosibirsk, Siberia, Russia.

Novosibirsk: **Institute of Mining** of Siberian Branch of Russian Academy of Sciences [In Russian].

Baryshnikov, V.D., Boltengagen, I.L., Gakhova, L.N. (1999): Definition of initial stress state of rock using experimental data about displacement and strain on contour of workings.

Boltengagen, I.L., Tapsiev, A.P. (1999) Geomechanical substantiation of methods of stress control in ore mines of Talnakh.

Boltengagen, I.L., Fedorenko V.K. (1999): Researches of stress state of pillars of October deposit with hydrolic fracturing method.

Boltengagen, I.L. (2001): About influence of elastic modulus of soil on oscillation of steel cylinder in ground.

Boltengagen, I.L., Popov, S.N. (2001): Geomechanical analysis of unloaded zones for defending layer in roof of deposit.

Proc. Geodynamics and stress state of Earth's bowels.

Novosibirsk: **Institute of Mining** of Siberian Branch of Russian Academy of Sciences [In Russian].

Boltengagen, I.L. (2002) Geomechanical substantiation of methods for improving of stability of workings.

In Journal: **Mining informative and analytical bulletin**. ISSN 0236-1493. No.8. 2002.

Any very short papers (1-2 pages) published for 2003-2008 are not here (about 5). Author did not look at these books of abstracts.

More from papers of Igor BOLTENGAGEN are in Russian. Author can describe shortly in English every paper, if somebody has interest to it.

Some papers can be seen in the following Internet site: <http://boltengagen.narod.ru>.

I. Boltengagen 25 October 2008, Novosibirsk, Siberia, Russia