

Sdvyzhkova Olena

Office Address:

Department of Higher Mathematics of the NMU
National Mining University, Karl Marx Ave. 19,
build. 5, office 33,
Tel.: +38 0562 471717, +38 0562 469956
E-mail: Sdvyzhkova_e@nmu.org.ua



Home Address:

apt.25, av. Gaz."-Pravda" 6-A,
Dnipropetrovs'k, Ukraine, 49081
Tel. +38 056 7251598, +38 067
6301048
E-mail: Sdvyzhkova@yandex.ua

PROFESSIONAL INTEREST:

Rock Mechanics, Support design, stochastic modeling of geomechanical process.

EDUCATION:

2003 Doctor of Technical Science
1987 Candidate of Technical Science
1982-1987 Engineer Degree in Mining equipment and complexes (mechanical engineer),
National Mining University, Ukraine

WORK EXPERIENCE:

2003 - up to date Professor, Department of Higher Mathematics and Department of Geomechanics,
Construction and Geotechnics, National Mining University, Dnipropetrovs'k, Ukraine.

Duties: teaching academic courses for NMU students and students of International
Resource University; methodical work, participation in research projects.
2007- up to date Director of Research Educational Centre at National Mining University, Ukraine
Duties: Coordinating the work of the Centre, interaction with business partners, research
work.
1992- 2003 Associated Professor of Department of Higher Mathematics and Department of
Geomechanics, Construction and Geotechnics at National Mining University, Ukraine

Duties: Teaching academic courses; methodical and research work.
1987-1992 Assistant Professor of Department of Higher Mathematics and Department of
Geomechanics, Construction and Geotechnics, at National Mining University, Ukraine

Duties: Teaching academic courses; methodical and research work.
1982-1987 Researcher at Mining Department of National Mining University, Ukraine

Duties: research work.

COURSES TAUGHT: Mathematics, Rock Mechanics, Mathematical modeling of processes and systems,
Statistics

RESEARCH ACTIVITY:

1987 up to date Participation in research projects related to support designing and excavation stability
ensuring funded by Ukrainian business ("DTEK-Energo" company and others).

Last projects:
2015-2016 Geomechanical support of driving the cross-heading in the zone of geological fault
"Bogdanovsky". Introduction of complex "doubled" support. The project was funded by
DTEK Company, Pavlograd city, the mine "Ternovskaya"
2012-2015 Simulation of geomechanical processes nearby the plow complex dismantling chamber to
ensure the excavation stability under effect of high rock pressure. Developing regulations
related to the assembly and dismantling chambers construction. The project was funded by
DTEK Company, Pavlograd city.
2011 Geomechanical support of the plow longwall technology introduction at thin coal mining.
The project was funded by DTEK Company, Pavlograd city.
2007-2009 CRDF grant in the framework of the program "Cooperation in Research and Education in
Science and Technology" (CREST), the project «Stability of Geotechnical Systems: Processes,
Phenomena, Risks», USB1-021-DP-07.

CONFERENCES:

2016, March Participation in 39th Winter School of Geomechanics, TU "Mining and Metallurgical

2014, November	Academy , AGH", Krakow-Yawornic, <i>Poland</i> . Participation in International Conference "The threat in mining", Head Mining Institute, Katowice, <i>Poland</i> .
2014, March	Participation in 37th Winter School of Geomechanics, TU "Mining and Metallurgical Academy , AGH", Krakow-Yawornic, <i>Poland</i> .
2012, November	Participation in the 4th Colloquium of Non-Blasting Rock Extraction and 4th International Protodjakonov colloquium, TU "Bergakademie Freiberg", Freiberg, <i>Germany</i>
2012, March	Participation in the workshop "XXXV Winter School of geomechanics and Geo-engineering", TU "Mining and Metallurgical Academy , AGH", Krakow, <i>Poland</i> .
2011, September	Participation in 22 nd World Mining Congress & Expo, Istanbul, <i>Turkey</i>
2010, march	Participation in the International Conference "XXXIV Winter School of geomechanics and Geo-engineering", TU "Mining and Metallurgical Academy , AGH", Krakow, <i>Poland</i> .

LANGUAGE SKILLS

Native Ukrainian, fluent Russian , good English.

COMPUTER SKILLS:

Competent in use of Windows XP Professional, MS Office 2010, MS Project 2007, Internet, e-mail. Outstanding skills of oral presentations in PowerPoint. Engineering software – Phase2.

PUBLICATIONS

1. Shashenko, A., Pustovoitenco V. Sdvyzhkova. Geomechanics (textbook), O. , 2016.- Kiev: "Novy Druc".- 527p.
2. O.Sdvyzhkova, R. Patynska. Effect of increasing mining on longwall coal mining - Western Donbass case study, 2016 // Studia geotechnika et mechanika vol 38(№1), 2016, p.91-99.
3. Sdvyzhkova O.O., Babets D.V., Kravchenko K.V. and Smirnov A.V., 2016. Determining the displacements of rock mass nearby the dismantling chamber under effect of plow longwall// Scientific bulletin of National Mining University, No. 2, pp.34–42.
4. Sdvyzhkova, O.O., Babets, D.V. and Smirnov, A.V., 2014. Support loading of assembly chamber in terms of Western Donbas plough longwall//Scientific bulletin of National Mining University,No. 5, pp. 26–32.
5. Sdvyzhkova, O.O. Modelling of the rock slope stability at the controlled failure / Sdvyzhkova, O.O., Shashenko, O.M., Kovrov, O.S. // Rock Mechanics in Civil and Environmental Engineering - Proceedings of the European Rock Mechanics Symposium – Switzerland : European Rock Mechanics Symposium, EUROCK 2010; Lausanne; Switzerland;, 2010. – P. 581-584