

**На английском языке:**

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| University   | National University of Science and Technology MISIS  |
| Level of English proficiency   | B2   |
| Educational program and field of the educational program for which the applicant will be accepted  | 1.6.20 Geoinformatics and cartography<br>Modeling of mineral deposits (field of the educational program)   |
| List of research projects of the potential supervisor (participation/leadership)   | Development of geometallurgical and resource models of mineral deposits.<br>Development of lithological models of rock massifs.<br>Creation of hydrogeological models of territories where open-pit mining is carried out.<br>Quality management of mineral raw materials, charge preparation in the development of deposits of iron, gold and other ore minerals  |
| List of the topics offered for the prospective scientific research   | 3D modeling of deposits;<br>quality management of mineral raw materials;<br>geological support of open-pit coal mining at great depths;<br>geological support for the development of technogenic mineral raw materials;<br>research and processing of mining waste;<br>engineering-geological and hydrogeological support of mining operations;<br>development of systems for integrated monitoring of the condition of slope structures.  |
|  <p>Research supervisor:<br/>Vasilii V. Cheskidov, PhD<br/>(Moscow State Mining University, 2012)</p> | <b>Geology</b>   |
|  | Supervisor's research interests:<br><i>geological and economic assessment of deposits, management and optimization of ore flows (mine to mill optimization), geometallurgy, modeling of geological objects and processes, evaluation of mining projects, processing and interpretation of geological data, engineering-geological and hydrogeological support of mining operations, research of man-made massifs (including for further use as man-made deposits), assessment of the stability of slope structures.</i>    |
|  | Research highlights:<br>- extensive experience of interaction with representatives of the real mining business in Russia and abroad;<br>- availability of modern software for research;<br>- availability of research equipment.   |
|  | Supervisor's specific requirements:<br><i>The student's desire to master new knowledge and conduct scientific research.</i>  |
|  | Supervisor's main publications:<br><ul style="list-style-type: none"> <li>• <i>Modeling mineral component distribution in iron ore deposits</i><br/>Kozhukhov, A.A., Omelchenko, D.R., Melnichenko, I.A., Cheskidov, V.V., Moseykin, V.V. // <i>Mining Informational and Analytical Bulletin</i>, 2023, 2023(8), pp. 5–17</li> <li>• <i>Modeling quality of concentration factory feedstock in ferruginous quartzite mining at the Lebedinskoe deposit</i><br/>Gorbatenko, V.D., Cheskidov, V.V., Yakubov, M.M.</li> </ul> |

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|  | <p><i>Gornyi Zhurnal</i>, 2022, 2022(6), pp. 15–20</p> <ul style="list-style-type: none"> <li>• <i>Distribution of iron and sulfur compounds: A case study of hydraulic waste fills</i><br/>Cheskidov, V.V., Barabanov, N.N., Lozhkin, M.O., Smirnov, P.A., Lagutina, A.A.<br/><i>Mining Informational and Analytical Bulletin</i>, 2021, 2021(3), pp. 142–153</li> <li>• <i>Slope Monitoring Systems Design for Mining Enterprises</i><br/>Cheskidov, V., Grobler, H., Kurenkov, D., Lipina, A.<br/><i>E3S Web of Conferences</i>, 2020, 174, 01025</li> <li>• <i>Modern methods of monitoring and predicting the state of slope structures</i><br/>Cheskidov, V., Kassymkanova, K.-K., Lipina, A., Bornman, M.<br/><i>E3S Web of Conferences</i>, 2019, 105, 01001</li> </ul> <p><i>Всего: 5 статей за 5 лет.</i></p> |
|  | <p><i>Results of intellectual activity:</i></p> <ul style="list-style-type: none"> <li>- author of the methodology for designing testing networks in the study of mining waste warehouses;</li> <li>- author of methods for modeling ore flows and quality management of mineral raw materials based on simulation modeling;</li> <li>- author of 3 patents;</li> <li>- and over the past three years, he has participated in ten projects as a manager, executive officer or chief geologist.</li> </ul>   |