Road map to attractive, inclusive, and safe mining workplaces

L Abrahamsson¹

1. Professor, Luleå University of Technology, Luleå 97187. Email: Lena. Abrahamsson@ltu.se

Keywords: safety, gender equality, workplace culture

ABSTRACT

The aim with this paper is to discuss the possibilities, effects, and consequences of the green and digital transformation in the Swedish mining industry from workplace, socio-technical and gender equality perspectives. This discussion is based on preliminary results from the ongoing research project *Attract: A roadmap to attractive, inclusive, and safe mining workplaces*¹. One important part of the project is the applied approach where the researchers work together with two mining companies and one subcontractor company.

The project includes a multidisciplinary research group of five senior researchers and five PhDstudents and a broad repertoire of methods, e.g., literature reviews, qualitative interviews with both managers and workers, workplace observations, workshops, surveys, and project seminars where the researchers and the company representatives together analyse the results. The project has two parallel main subprojects. The first one, *The digital and green miner*, is exploring how the implementation of autonomous technology will change the work for the miners and also what the mining work of the future will mean for workplace learning, competence development, and the possibilities to build attractive workplaces? The second one, *GenSafe*, is studying what prerequisites is needed in the workplace culture at multiemployer mine sites to develop a safe and inclusive mining culture.

The preliminary results show that new complex situations are emerging in the mining industry's work with electrification, circular material flows, digitalisation, and automation. Both the new technologies as well as the use of them affect and are affected by people and workplaces and the organisation of work, safety and learning. To support the functionality of the green and digital technology and at the same time develop inclusive, attractive, and safe workplaces there is a need of research that places people (all types of women and men) in the centre of technological development.

1. A research project (2022–2025) at Human Work Science at Luleå University of Technology financed by the strategic innovation program Swedish Mining Innovation (a joint venture by the national research funds Vinnova, Formas and the Swedish Energy Agency).