

# CSIRO-led innovation to help miners save on drilling costs

By [Vittorio Hernandez @ibtimesau](#) on September 30 2015 9:32 AM



*Jeremy Vore, project geologist for Newmont Mining, looks over rock chip samples from exploration drilling at the future Long Canyon gold mine site near Elko, Nevada May 22, 2014. The numbers on the box represent the depth the sample was taken from in feet. Long Canyon is still in the exploration phase but is expected to be a multi-million ounce open pit mine by 2017. Picture taken May 22. Reuters/Rick Wilking*

The analysis of rock materials straight from mining sites is now possible, according to Australian agency the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

In a press release, the organisation revealed that it has partnered with giant brands Imdex and Olympus, under the Deep Exploration Technologies Cooperative Research Centre, or DET CRC, to come up with a revolutionary product that would help miners save millions of money typically spent on on-site-related operations such as extracted material transport to laboratories and time-consuming methodologies on ore examination.

The Lab-at-Rig technology, as the company calls it, enables chemistry and mineralogy of rocks found within a drill hole to be examined just within minutes after ore has been extracted from the earth. It is capable of conducting analyses of mineralogy and geochemistry of drill-hole

cuttings direct from the drill site, eschewing the need for transporting the mineral to laboratories outside the mine facility.

It also has the capacity to offer sampling methods and quality control features present in existing processes in the segment, making the technology an all-in-one invention.

"Lab-at-Rig is an important breakthrough for the industry because of the potentially massive cost savings in drilling, exploration and overall mining operations," stated CSIRO Lab-at-Rig Futures Project Leader Dr Yulia Uvarova. "If mining or exploration companies have real time information about the mineralogy and chemistry in the drill-hole they can efficiently plan what to do next; whether that is to drill deeper, drill further holes, try elsewhere or to stop."

The new technology's most important contribution to the mining segment, according to the company, is that it offers improved decision-making and productivity for mineral resource operations. On top of that, it will help companies save a large amount of money. Saving costs from examinations and processes could also help miners offer consumers better and cheaper prices on the market.

The invention is in keeping with the current state of the global mining segment, especially the industrial metals sector.

Currently, the industrial and base metals segment is in its most precarious state, as prices on the global market remains weak due to [various economic quandaries directly affecting the mining market](#). Weak data from China, a stronger US dollar, ongoing political and economic crisis in the European region, and cheap oil prices have collectively created a supply glut discouraging investors to risk on extracted commodity items.

This market phenomena has forced many miners to suspend their global commerce participation (lest they would end up selling their products cheaper than they intended to be), and wait for the market to recover and record uninterrupted bear market rallies.

Russia-based [Amur Minerals \(London AIM: AMC\)](#) , for example, has chosen to focus on upgrading its infrastructure on its Kun-Manie Reserve instead of immediately conducting drilling on the site and selling the extracted products on the market. The company has just obtained a pre-production license approval from the Russian government in May. Amur plans to build its own smelting plants to make its high-grade products' prices cheaper and more accessible to its future consumers.

Industrial metals remain [weak](#) on the London bourse. Copper, zinc, lead, aluminum, and nickel all failed to record better prices on the London Metals Exchange (LME), extending its losses as a segment to seven-to-eight month lows.

Experts believe that the only thing that could save the segment is renewed consumption from China, which could only happen if the Chinese government finally finds a way to offset the losses it obtained from the market rout in July.