



## BRIEF DESCRIPTION

Currently the mining companies in Chile are looking for appropriate mechanisms and systems to locate and position workers, robots, and machinery inside a mine. In this context, the companies are exploring a use of non-traditional communication technologies for localization tasks. This is because traditional radio frequency systems do not operate well in underground environment, such as mining tunnels.

Benefits of appropriate usage of communication technologies in the mining industry can be even broader. Ability to gather information produced by multiple sensors and devices can lead towards systems that help humans to manage and optimize the underground mining processes. Therefore, it becomes important how we are able to – both – communicate and use information in the underground environments.

This workshop is a forum for academic researchers, professionals and industrial specialists interested in the state of the art, innovative applications and field trials related to the underground mining processes from a perspective of information technology. Given the scope of the main conference ([www.ijcrs2016.cl](http://www.ijcrs2016.cl)), we would like to emphasize the importance of intelligent and analytical methods in the mining industry. However, more generally, we welcome all aspects of communications in underground mining.

## TOPICS (OPEN LIST)

- Localization Systems
- Communications Systems
- Wireless Communication
- Optical Wireless Communication
- Knowledge Engineering
- Instrumentation and Monitoring
- Tracking Systems
- Digital Signal Processing
- Risk Management
- Intelligent Systems
- Data Processing
- Data Analysis
- Decision Support Systems
- Numerical Modelling
- Proximity Warning Systems
- Energy management in mining
- Management of technological change in mining

## PAPER SUBMISSION & PUBLICATION

Authors can decide between two submission types: 10-page papers (prepared in Springer's LNCS style: <http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>) or one-page abstracts. Accepted and registered 10-page papers presented at the workshop will be included in the conference proceedings published by Springer and indexed in Web of Science. One-page abstracts will be made available in an abstract booklet. Both types of submissions will be treated as equally important while preparing a schedule of workshop presentations. The authors are invited to submit their papers and abstracts via the IJCRS 2016 electronic paper submission system (<https://www.easychair.org/conferences/?conf=ijcrs2016>) and send a copy to Iván Jirón ([ijiron@ucn.cl](mailto:ijiron@ucn.cl)) and Cesar Azurdia ([cazurdia@ing.uchile.cl](mailto:cazurdia@ing.uchile.cl)) at the same time.

## IMPORTANT DATES

<b>10-page paper submissions:</b> 20.05.2016	<b>1-page abstract submissions:</b> 20.06.2016	<b>Early registration due:</b> 01.07.2016
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## WORKSHOP CHAIRS & CONTACT INFORMATION

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*We look forward to meeting with you in Santiago de Chile, Chile!*