

## Faculty Profile



**Name:** Dr. ASHWIN KUMAR MYAKALWAR

**Designation:** Assistant Professor

**Teaching Areas:** Physics, Electronics, Classical mechanics, Laser Physics, Optics, Chemometrics

**Research Interests:** Laser Spectroscopy, Chemometrics, Optical instrumentation and automation.

### Education:

- Ph.D in Physics, University of Hyderabad, Hyderabad, India, 2016.
- M.Sc in Physics, Osmania University, 2009
- B.Sc Physics, Sri Krishna Devaraya University, 2006

### Research / Selected Publications:

1. Saeidfirozeh H, Myakalwar AK, Kubelík P, Ghaderi A, Laitl V, et al. 2022. ANN-LIBS analysis of mixture plasmas: detection of xenon. 37: 1815-23
2. Velásquez M, **Myakalwar AK**, Manzoor S, Vadillo JM, Laserna J, Yáñez JJSAPBAS. 2022. Progress in arsenic determination at low levels in copper ores by laser-induced breakdown spectroscopy. 195: 106501
3. Fuentes R, Luarte D, Sandoval C, **Myakalwar AK**, Alvarez J, et al. 2022. Laser-Induced Breakdown Spectroscopy and Hyperspectral Imaging Data Fusion for improved Mineralogical Analysis of Copper Concentrates. 55: 85-90
4. **Myakalwar AK**, Sandoval C, Sepúlveda B, Fuentes R, Parra R, et al. 2021. Laser induced breakdown spectroscopy for monitoring the molten phase desulfurization process of blister copper. 1178: 338805
5. **Myakalwar AK**, Sandoval C, Velásquez M, Sbarbaro D, Sepúlveda B, Yáñez JJM. 2021. LIBS as a spectral sensor for monitoring metallic molten phase in metallurgical applications—A review. 11: 1073
6. Fuentes R, Luarte D, Sandoval C, **Myakalwar AK**, Yáñez J, Sbarbaro DJME. 2021. Data fusion of Laser Induced Breakdown Spectroscopy and Diffuse Reflectance for improved analysis of mineral species in copper concentrates. 173: 107193
7. Luarte D, **Myakalwar AK**, Velásquez M, Álvarez J, Sandoval C, et al. 2021. Combining prior knowledge with input selection algorithms for quantitative analysis using neural networks in laser induced breakdown spectroscopy. 13: 1181-90

### Funded Projects

1. FONDECYT 3200371, Chilean National Agency for Research and Development 2020-23
2. ANILLO ACM 170008, Chilean National Agency for Research and Development, 2018-2020
3. Thulium fibre lasers for industrial and medical applications, Czechia, Czech academy of Sciences 2016-2018.