

# Technology, Development & Applied Research Priorities of **IMIDRO**



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# Energy, Water & Environmental Management

- ▶ Mineral processing and beneficiation technologies focusing on dry and low water consumption processes
- ▶ Energy optimization and water recycling in mining and related industries
- ▶ Using clean and renewable energies in mines and mining industries
- ▶ Improving health, safety and environment (HSE) issues in mines, mining industries and local communities

# Waste & Tailing Management

- ▶ Recycling technologies, reuse of solid wastes and gases in mining plants
- ▶ Precious metals recycling from electronic wastes and mining dumps
- ▶ Environmental management of solid wastes and greenhouse or toxic gases emitted from mining plants
- ▶ Processing and beneficiation technologies for low grade ores, tailings and fines



# High-Tech & Modern Technologies

- ▶ Technology development, Production of minerals which are critical or strategic for emerging technologies
- ▶ Employing information and communication technology (ICT) in mining and related industries
- ▶ Expanding nanotechnology and biotechnology in mineral processing
- ▶ Automation and remote control technologies for mining operations

# High-Tech & Modern Technologies

- ▶ Implementation of modern technology in mining operations: drilling, blasting, loading, haulage, hoisting and so on
- ▶ Developing mobile mineral processing and beneficiation plants for small scale mining
- ▶ Extraction elements and minerals from sea water and brines



*Thank You for  
Your Attention*