FMD
GEOLOGIA APLICADA

## About the Company

FMD Geologia Aplicada is a Brazilian consulting company specialiized in applied geology, hydrogeology, and environmental management. The company provides advanced technical solutions for industrial, mining, energy, agrobusiness and public sectors, integrating field data, geophysical and hydrogeological modeling, and remote sensing analysis to support sustainable decision-making.

## Innovation & Partnerships

FMD collaborates with TIMGEO (Germany) to develop and apply advanced geological and hydrogeological models for solving complex projects. The company also co-developed the HydroGeoTwin platform a digital twin system that integrates satellite and environmental and geoscientific data, AI, and numerical modeling for predictive groundwater and water-balance analysis. In addition, FMD maintains research and development partnerships with UNESP and other renowned Brazilian universities, strengthening its scientific foundation and innovation capacity. These collaborations reinforce FMD's position as a leader in data-driven and technology-based environmental consulting.

## Core Expertise

- Geological, Hydrogeological and Hydrogeochemical Modeling: 3D models for infrastructure projects, tunnels, mining, and environmental studies..
- Geotechnical & Engineering Geology: Site investigation, soil and rock characterization, slope stability, and foundation studies.
- Environmental & Hydrogeochemical Assessment: Monitoring programs, background studies, contaminant transport analysis, and compliance with Brazilian and international standards.
- Remote Sensing & GIS: Integration of Sentinel, GRACE, and national datasets (MapBiomas, CPRM, ANA) to map recharge areas, land use, and hydrological changes.
- Water Resources & Sustainability: Water balance, recharge estimation, water management, strategies for mining and industrial operations, ESG and compliance.

## Key Clients

- Mining and Energy Companies (South and Central America)
- Environmental Agencies and Public Utilities
- Engineering and Infrastructure Firms
- Industrial and Petrochemical Sectors

## Offices

São Carlos - SP (main office)
São Paulo - SP

contato@fmdgeo.com.br
www.fmdgeo.com.br