Geology and mineral resources in Madagascar: An overview
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Abstract:
Madagascar is composed of two main geological units: the Precambrian crystalline formations in the eastern part of the country, and the Phanerozoic, non-metamorphosed sedimentary formations in the west:

- The Precambrian is subdivided into Archean, medium to high-grade metamorphic rocks, and Proterozoic metasediments.
- Late Palaeozoic to Tertiary sediments, mainly marine in origin, cover the basement rocks in the west of the country.


About available data, two big projects are recently realized:

- The Japan International Cooperation Agency (JICA) has conducted the geological and geochemical surveys and the remote sensing data analysis in southern part of Madagascar.

- The geological maps and the data of mineral potential in Madagascar were revised by the World Bank through PGRM projects (Programme de Gouvernance des Ressources Minérales) for some parts of Madagascar. The geological, geophysical and geochemical surveys were carried out in 158 sheets of 1:100,000 scale topographic maps with the area of 222,500 km2 in one side, these survey areas cover mainly the region with the potential of mineral resources, such as Ni, Cr, Cu, Au, and Fe and so on. The PALSAR satellite images are effective to recognize the geological structure especially in the area where metamorphic rocks are distributed in another side. The PALSAR mosaic image covering throughout Madagascar was created by 251 scenes of the high resolution mode data.

Biography:
Rasoamalala Vololonirina is currently serving as a Lecturer researcher at University of Antananarivo, Majunga and Antsiranana - Madagascar. She takes a keen interest in research promotion, planning of mining services for the community and inculcating newer teaching methodologies for students. Since 2010 she worked as Director of Geology at the Ministry of Mines - Madagascar.

Publication of speakers: