Geosciences and Society –occupation and usage of areas of geological interest nearby Campinas-SP

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Syn-conference Tour

Planned route: IG/UNICAMP (Campinas) –Rocha Moutonnée and Parque das Lavras (Salto) –Parque Geológico do Varvito (Itu)–Praça Ulysses Guimarães / Chapadão (Campinas - Downtown) –IG/UNICAMP (Campinas)

Date 07/27/2018
Duration: 8 hours (full day)
Maximum number of participants: 30 (minimum of 10 people)
Total distance: approximately 146 Km – the event will cover transportation

Objectives:

✓ To comprehend Earth Sciences concepts through a systemic and integrative vision between environment and society;
✓ To present in a ludic and practical manner the concepts of geological time, the rock's cycle and their diverse conditions and environments of formation;
✓ To discuss about extraction and usage of natural resources (water and mineral);
✓ To contextualize historically the urban and economic growth of the visited area (factories, industries and mining companies);
✓ To discuss about environmental liability and the recovery of degraded areas.
Contextualization:

SALTO/SP – Parque da Rocha Moutonnée (Moutonnée Rock Park)

Initially a quarry for gravel extraction, the “Parque da Rocha Moutonnée” (Moutonnée Rock Park) is also considered a State Geological Monument. Its name derives from the French word *mouton*, which means lamb, as originally the rock resembled the form of a lamb lying down, and it’s a granitic rock outcrop (igneous rock), of pink coloration. The round shape of the rock is the result of the movement of big glaciers that left abrasion marks (striations and grooves), between 270 and 350 million years ago.

Both the Vavite and the Moutonnée parks house direct evidences of the occurrence of a glacial period in the area where today are located the cities of Itu and Salto.

Historically, it is possible to view from the park the “Salto do Rio Tietê” (River Tietê’s Fall, free translation), a place famous for its use as lodging by the boatmen in the time of the “Bandeirantes” (Portuguese settlers from the 17th century), who had to transport their boats out of the river due to impossibility of navigation through the falls and the sheer amount of rock. Environmentally, this place marks the point where the famously polluted river Tietê, which flows here originating from the city of Sao Paulo, initiates its process of re-oxygenation, flourishing back to life while flowing towards the countryside.

The city of Salto, as many other cities bordering the river Tietê, has the history of its creation and development tied to the river. The travelers navigating it had to find lodge and supplies, leading to the first small villages, which later became cities. At these strategic stops, and with the growth of the cities, big industries started to appear, amongst them a paper money factory, inaugurated in 1889 by the riverside.
SALTO/SP – Parque de Lavras (Lavras Park)

Inaugurated in 1906, Lavras was one of the first hydroelectric power plants built in the river Tietê for power generation in the area. At the Lavras Park, there sits the Mirante da Santa (Saint’s Overlook), where it’s possible to observe various geological and geomorphological aspects that were used to justify the usage of the river for power generation, as well as a source for mineral resources in the area.

At the park, in Praça do Granito (Granite Square), we will touch on concepts of weathering and erosion, as well as geological processes inherent to the formation of minerals and rocks.
ITU/SP – Parque Geológico do Varvito (Varvite Geological Park)

Originally an old quarry, where rock plates were extracted to be used as flooring, the “Parque Geológico do Varvito” (Varvite Geological Park) was inaugurated in 1995, and is located in the Jacu City Road (ITU-050), no number, corner of Glacial Street, city of Itu, SP.

Varvites are sedimentary rocks composed of rhythmic layers, and the local ones formed approximately 280 million years ago. The Park is the most important occurrence of these rocks in South America, and it is recognized as a State Geological Monument. It stands as an important place for scientific and cultural dissemination.

Photo by the authors, 2017.

CAMPINAS/SP – Praça Ulysses Guimarães / Pedreira Chapadão (Ulysses Guimarães Square / Chapadão Quarry)

In the 1930's, at the Chapadão Farm in Campinas, began the extraction of basalt and diabase (extrusive igneous rocks). The then formed Chapadão Quarry was of extreme importance for the growth and development of the city of Campinas. A big part of the gravel and flooring extracted were used in paving downtown and in the duplication of the Anhanguera Highway, connecting the city of Campinas to Jundiaí.

When the city started to grow around the quarry, it was shut down by popular demand, being closed and abandoned in 1975. For years, it was used as dumping grounds, with all kinds of urban solid residues dumped in the open. This environmental liability prevailed until the 1990’s, when the quarry was turned into a Public Square, with a big open space for entertainment, shows, expositions and cultural activities.

After approaching the geological concepts present there, highlighting the usage of hydric and mineral resources, at this part it will be possible to discuss the importance and necessity of the sustainable use of these natural resources, so important to the development of area.
References:


Governo do Estado de São Paulo – Mugeo monumentos http://monumentosgeologicos.mugeo.sp.gov.br/visitacao/rocha-moutonnee/ (access 05/07/2018)

Prefeitura da Estância Turística de Salto – Parque da Rocha Moutonnée: https://salto.sp.gov.br/site/?page_id=728 (access 05/07/2018)

Prefeitura da Estância Turística de Salto – Parque de Lavras https://salto.sp.gov.br/site/?page_id=730 (access 05/07/2018)
