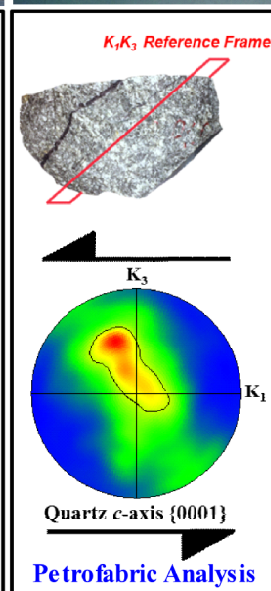
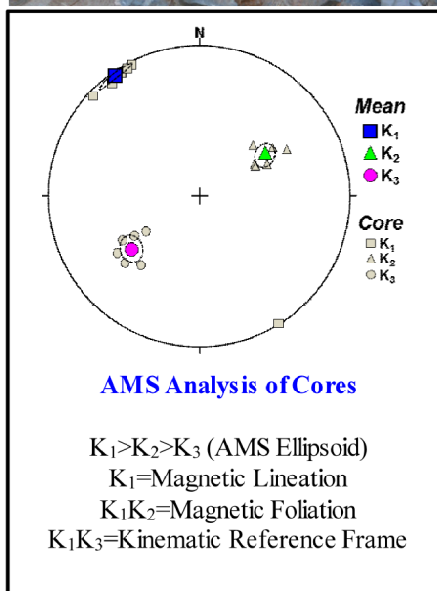
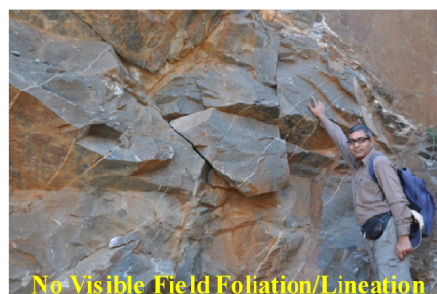


Using anisotropy of magnetic susceptibility (AMS) as a tool for petrofabric analysis of deformed rocks

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Petrofabric analysis is an important component of several Structural Geology studies. It is particularly useful in working out aspects related to kinematics, which has implications to understand regional tectonics. Petrofabric analysis requires studies to be carried out in a specific reference frame, which normally is the XZ section of the strain ellipsoid in deformed rocks. This section is identified by the presence of stretching lineation (X of strain ellipsoid) developed on the foliation (XY plane of strain ellipsoid). However, many rocks in nature lack visible foliation and lineation despite being extensively deformed (and strained). Plutonic rocks such as granite are a common example of deformed rocks that lack visible foliation/lineation. Through this Seminar, the importance of using Anisotropy of Magnetic Susceptibility (AMS) to identify the correct reference frame for petrofabric and kinematic analysis in such rocks will be discussed. The robustness of integrating field, AMS and microstructural data (including SEM-EBSD) will be highlighted by presenting examples of deformed granites, metavolcanic rocks and gneisses from different parts of India.



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