Angle in geological literature. Isparta Angle is a big active tectonic structure in the Southwestern Turkey. It is related with subduction zone located between African and Eurasia in Mediterranean Sea at south of Turkey. Subduction zone is the most important convergent plate boundary in the region and is divided into two parts in the south of Turkey. These two parts are called Aegean and Cyprus tectonic arcs. They extend from the Eastern Mediterranean Sea towards the Aegean Sea along the southwestern coast of Turkey. Main reason of the seismicities that occurred in the region are these subduction zones.

Southwestern Anatolia is under the influence of N- S compressional forces along the Aegean and the Cyprus tectonic arcs due to the African–Anatolian Plate's activities and also southwestern part of Taurus Mountains includes lots of enigmatic structures. These subduction zones have different seismotectonic and seismicity characteristics particularly in the east and west of Fethiye Bay. This difference has formed structurally large-scale tectonic fracture zones and big important tectonic structures for example Isparta Angle in the region. This angle is bordered by Aegean-Cyprus tectonic arcs in the south, Southwestern Anatolian Fault at the west and Kırkavak Fault at the east. Southwestern Anatolian Fault is one of the most important NE-SW direction and left lateral slip fault which is located between Fethiye Bay and Eğirdir Lake. On the other hand, Kırkavak Fault is one of the most important NNW-SSE direction and right lateral slip fault which is located between Eğirdir Lake and the Mediterranean Sea. These are conjugate faults and syntectonic deformations in the region. This large-scale structural deformation, which has played an important role in the geodynamic and geotechnical revolution of the region, is located in the Lakes Region in the north of Antalya Bay, Southwestern Turkey.

The Aegean Arc is higher seismicity than Cyprus Arc. This arc differentiates in direction toward NE and NW in south of the Crete Island because of it locally bends an edge around south of island. It caused a forming of a big tectonic line in the region known as Southwestern Anatolian Fault also known as Fethiye-Burdur Fault Zone. On the other hand, it is believed that this bending is responsible for the extension in Western Anatolia since at least the middle-Upper Miocene. Isparta Angle has formed during the Paleotectonic Period (Middle Miocene time), and its evolution continues up until the present time since Upper Miocene. Even today it is the most important active tectonic deformation in the region. During the Neotectonic Period, many interesting events and structures are resulted due to this active tectonic deformation since the Upper Miocene. Examples of these events include active faulting, seismicity, volcanism and continental/lacustrine deposition in southwestern Turkey. On the other hand, The Central Anatolia moves westward along the North Anatolian Fault, relative to Eurasia. However, the Western Anatolia (west of the Isparta Angle) moves in a SW direction along the Southwestern Anatolian Fault. These are major evidence for active tectonic in the region. One of the significant deformations in the Mediterranean Sea is the Pliny-Strabo Trench that has a left lateral slip, extends as the Southwestern Anatolian Fault between the Fethiye Bay and the Eğirdir Lake in southwestern Turkey. Western and the Central Anatolia were separated from each other with the Southwestern Anatolian Fault.

Main purpose of this study is to present the effects of the Aegean and the Cyprus tectonic arcs on the Isparta Angle at the southwestern Taurus and all tectonic structures during the paleotectonic and neotectonic periods.

Non-destructive study on objects from Benedictine Abbey of Einsiedeln

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During this study, chalices made about start of 17^{th} century were investigated. This is the first time that these objects were studied from people outside the Abbey. The goal of the study was to characterize the gems of these items and to compare them with the observation of Father Eustach Tonassini at the end of 18th century. The examination of these chalices took place in the Laboratory for research in conservation at the Centre of collections of the Swiss national museum using only non-destructive methods. More precisely, binocular microscope on a modified stand was used to observe the internal features of the stones, long- and short-wave ultraviolet lamp to see their luminescence, x-ray fluorescence (XRF) for chemical and Raman spectrometer associated with a microscope for spectroscopic/vibration analysis.

After the examination, it is found that all studied gems are natural; neither imitations nor synthetics were identified. It seems also, after studying pearls' chemistry, that all are of saltwater origin. Moreover, comparing our results with those observed by Father Tonassini, it appears that what he had correctly all the rubies, except of some which are dark coloured almandines. He had correctly identified all diamonds too, amethysts (except of two which were dark coloured almandines), sapphires (except of one which is olivine) and emeralds (except for the big stones which are olivines). All the stones that he called "chrysolith" are olivines (the gems quality is a.k.a. peridot), these called "Hyakinths" grossulars and those called "Topaz" are either citrine or grossulars. Finally, Father Tonassini in his manuscript mentioned that the gems are "orientalisch", *i.e.* from oriental countries. Studies of gems inclusions did not exclude this possibility. However, more research is needed in order to study better the possible geographical origin of these stones.

Shear-wave Q determination for the Upper Crust of Western and Central Slovenia

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We have estimated the quality factor, Q_β for shear-waves for western and central Slovenia for five frequency bands centred at 0.8 Hz, 1.5 Hz, 3.0 Hz, 6.0 Hz and 12.0 Hz. We used 150 high quality broadband waveforms, from 15 shallow (depth ≤ 8Km) aftershocks of the 2004 (M_W 5.2) krn mountain earthquake sequence in NW Slovenia. Magnitudes (M_L) range from 2.5 to 3.5 and epicentral distances from 16 to138 km. Our results show that Q_β varies with frequency f according to the power law $Q_\beta=83f^{0.80}$ or $Q_\beta^{-1}=0.012f^{0.80}$. Comparing our results to those previously obtained for the region of Friuli-Venezia-Giulia in the Southern Alps, both show high values of seismic wave attenuation that is typical of seismogenic active regions and among all sets of data we can observe a good agreement.

Polygenetic history of the Chasanbali ophicalcite breccias in Thessaly, Greece

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The "ophicalcite" of the Chasanbali area in Thessaly, central Greece is a characteristic element of the Eastern Thessaly ophiolite complex, which is mainly regarded as constituting a segment of the Mesozoic Vardar Ocean overthrust onto the Pelagonian continent during the Eohellenic orogenetic phase of the Hellenides. It is located in stratigraphic contact with the