

## **ABSTRACTS OF THE PAPER PUBLISHED ONLY IN THE TURKISH EDITION OF THIS BULLETIN**

### **A NEW AGE RECOVERY ABOUT THE MINING HISTORY IN ANATOLIA; AN ORE HULL OF 2500 YEAR OLD**

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ABSTRACT.- The radiometric age of an ore hull in 14x28 cm dimensions found in the gallery of an old copper mine in the Çımaklı quarter of Espiye town (Giresun) which was carried out in two different laboratories, has been dated as  $2610 \pm 70$  and  $2441 \pm 30$  yrs. According to these data the age of the material is as old as 2500 yrs, in other word belong to 500' s of BC. However the written sources point that the mining activities started in 183 BC, the ore hull found in the mentioned copper mine shows that the mining activities extend to 500' s of BC in the region. If it is considered that the district of Giresun was under the control of Persian empire between the years of 600-400 BC, the mining activities should belong to this period of time

### **UNIVERSAL TRANSVERSE MERCATOR AND LAMBERT'S CONFORMAL CONIC PROJECTIONS**

Cemal GÖÇMEN \*\*

ABSTRACT.- This article has been prepared with the purposes of giving information about the mapping projections and noticing which points should be taken into account in using these projections. In the article not all of the mapping projections have been described but the two of them, which are mostly used in our works; namely Universal Transverse Mercator and Lambert's Conform Projections which retains the angles have been considered. In the article, for the degree-UTM conversion programs, the importance of the determination of mid-meridian of the zone has been emphasized and the reason of why our maps drawn in Lambert's projections system does not coincide with those drawn in the neighboring countries has been investigated. Further, in the article, the mathematical models used in the map projections have been considered and the interests of human being and works done about the shape and dimensions of the earth in the archaic era has been described under the title of Historical Development.

Key words: Shape of the Earth, UTM Projection, Lambert's Projection.

### **SHORT NOTE ON POLYPHASES Pd-Pt-Te MINERALISATIONS WHICH IS DETERMINED IN RUTILE BEARING BERIT METAOPHIOLITE CHROMITITES IN KAHRAMANMARAŞ**

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ABSTRACT.-The Pt-Pd bearing mineralisations and rutiles are firstly determined in the transition zone (mohozone) chromitite deposits of the Berit Metaophiolite Massif (BMM) in Kahramanmaraş in our country with this study. The data of electron microprobe analyses of the chromitites indicate that most of the samples are high-Al

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chromitites with Cr# numbers between  $(100 \times \text{Cr}/(\text{Cr} + \text{Al}))$  29-37. The rest of the samples are high-Cr chromitites, with Cr# numbers between 60-70. Microscopic examination and electron microprobe analyses of the PPGE and IPGE-enriched samples reveal platinum-group element minerals (PGM) as euhedral (10-15  $\mu\text{m}$ ) inclusions in the chromite grains. The PGM hosted by IPGE-rich high-Cr chromitites are primary inclusions of laurite, irarsite, Ir sulphide and erlichmanite. Very small Pd-Pt telluride phases (merenskyite-moncheite) are hosted by polyphase sulphide droplets in the PPGE-rich chromitites of BMM. Considering the different chemical compositions of both chromitite and PGM at Berit, suggested that their parent melts derived from two different magma sources. The presence of hydrosilicate inclusions and the depletion of compatible elements in high-Cr chromitites of BMM suggested that they resulted from higher degrees of partial melting of the upper mantle, probably from second stage melting of a residual source. The Berit chromitites could have formed both from magmas related to the initial rifting process and to subsequent supra-arc magmatism prior to obduction of the host ophiolite. Because of having in different chemical compositions of the Berit chromitites it has been suggested that they could have generated from both of magmas related with the supra-arc magmatism (SSZ) by partial melting process due to metasomatism of oceanic lithosphere (high-Cr chromitites) and subsequently by changing parent magma composition (the high-Al chromitites) in back arc basin environment.

Key words: Kahramanmaraş, Berit, Metaophiolite, Chromitite, Rutile, Pd-Pt-Te