

On the Gold Resources in China

ZHANG HONGTAO China Geological Survey, Beijing, China

With the characteristics by multiphase of mineralization, superimposition of ore-forming and diversity of mineralization, the gold deposits in China have been mainly classified to greenstone, epimetamorphic clastic, structural-tered, Volcanic-subvolcanic, Carlin, potassic pegmatite vein, metamorphic conglomerate, gossan, and laterite types, etc., occurring as the rocky-gold (51.76% of reserves), alluvial-gold (16.77%) and associated-gold (31.48%). The epoch of them is mainly Archeozoic of greenstone type (e.g. Jiapigou, 2500 Ma), Proterozoic of epimetamorphic clastic (Jinshan, 740 Ma), Mesozoic (most of them in east China, e.g. Jiaojia, 150 Ma), and Cenozoic (Jinguashi, less than 40 Ma).

It is referred that there are some problems of that: (1) concentrating mainly in mid-eastern China, (2) higher level of utilized degree, lower one of remained reserves, (3) higher proportion of associated, less of rocky gold, (4) lower reserves for the opencast mining, difficult to separate and smelt, (5) a large number of types, difficult to utilize because of the technology, (6) more of medium and small scale, less of that of large scale, and (7) most at mid-lower grade of that with 5-12 grams/t.

The gold reserves in China had added 1,723 tons during 1990-1995, and now 7,000 gold deposits have been found, 353 counties produce gold, 600 gold mines and 200 mining boats operate. The national gold output has increased at 10.3% per year, and reaches 166.3 tons in 1998. The west China, with a small proportion of the gold reserves due to the lower level of the geological work, is the most important strategic area to tighten the national basic geological survey for gold resources.