

**Shynkarenko I.R., Obolentseva-Krasyvska O.S. Forensic hemological examinations: concept, problems of conducting and directions of development.** The article is devoted to the definition of theoretical and applied problems of the determination of the essence and directions of scientific research of the problems of the implementation of forensic hemological examinations. The problems of establishing the naturalness of stones, establishing a mechanism for committing crimes connected with violation of the rules of treatment of valuable fireplaces have been identified.

The purpose of the article is to determine the theoretical and applied problems of use in counteracting the crime of hemological examination, clarification of tasks and issues that are being addressed during its conduct.

It is determined that the most common crimes are related to the replacement of natural stones with non-natural (synthetic) and counterfeit products: realization under the guise of natural gems, artificial (synthetic) precious stones having chemical composition, physical properties and natural structure; replacement of natural stones with reconstructed stones (artificial products made by fusing, sintering or pressing from small fragments or powder of natural stones); introduction into circulation under the guise of natural precious stones, enriched stones: thermal treatment – amber, aquamarine, sapphire, ruby, citrine, amethyst, tourmaline; radiation treatment – yellow sapphire, topaz, tourmaline, kenitsit; treatment of cracks – emerald, ruby; ointment – emerald, jadeite, lapis lazuli; drawing of a coloring covering – sapphire; coloring and painting – agate, onyx, coral; laser drilling – diamond]; the use of artificial products that mimic the appearance of precious, semi-precious, decorative stones, but do not have its chemical composition, physical properties and its structure. Directions of scientific researches on methods of carrying out of gemological researches are envisaged

**Keywords:** *hemological examination, extraction, production, use, operations with precious stones, imitation, reconstructed stones.*