

# Conrad Wilhelm Roentgen in the Reflection of Commemorative Medals and Coins

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## Abstract

### Annotation

In this research article, its author presents the results and analysis of his research devoted to the study of the issue of representing the memory of the famous German scientist, Nobel Prize winner, Conrad Wilhelm Roentgen, in the reflection of such a collecting tool as numismatics - on 45 commemorative medals and coins, issued for circulation and timed to coincide with various events, by a number of countries around the world, in different years.

### Aim of study

The purpose of this article is to present the results of the research conducted by the author, thematically dedicated to the issue of reflecting the memory of the German scientist, Nobel Prize (1901) winner in physics, Conrad Wilhelm Roentgen, in such a collecting medium as numismatics, on commemorative medals and commemorative coins, accompanied by their image (obverse and reverse), with accompanying comments.

### Research objectives

1. Find any sources of information regarding the reflection of the memory of Conrad Wilhelm Roentgen in various collecting media.
2. Select and systematize all found numismatic materials, both commemorative medals and commemorative coins dedicated to this scientist.
3. Convert all found numismatic materials into color and black and white screenshot copies.
4. Conduct an analysis of all the results obtained as a result of the scientific research carried out by the author of the article. with their help, form the text part of this research article.
5. From all the data obtained, both textual and illustrative, form a solid body of this research and author's article.

### Hypothesis of the study

In the process of starting to prepare for this study, its author came up with the following working hypothesis - there is a fairly large amount of a wide variety of collection materials, not only philatelic and phaleristic, but, first of all, numismatic - on commemorative medals and coins dedicated to the memory, about the life and scientific activities of the famous German physicist and inventor, Conrad Wilhelm Roentgen, in the reflection of numismatic materials, different years of issue and many countries of the world, in the form of commemorative medals and coins dedicated to him.

**Keywords:** conrad wilhelm roentgen ; x-rays ; numismatics ; commemorative medals ; commemorative coins ; obverse and reverse ; screenshot copies

## Introduction

Any research interconnected both with medicine and its heroes, and with a number of related and borderline disciplines, is always very interesting, exciting, and also relevant and in demand. It would seem that there is a

relationship between medicine and physics. But the discovery made by the German physicist Conrad Wilhelm Roentgen in November 8, 1895 made the use of X-rays an integral part of many areas and disciplines of

modern medicine. All types and directions of modern collecting did not remain aloof from this historical, epoch-making event and the great personality of this world-famous scientist, Nobel laureate. Dozens and hundreds of miniatures are dedicated to him, both in philately and in numismatics, phaleristics, phylocarty, phylumeny and a number of other means of collecting. The author of this research article had previously written a research article dedicated to the memory of Conrad Wilhelm Roentgen and X-ray, in philately. Reflection of the memory of C.W. Roentgen, in such numismatics as commemorative medals and coins, is his first, major study. In preparation for this research and the subsequent writing, based on its materials, of an article, the author found practically no articles of this kind, with the presentation of numismatic materials in them. There is a fairly large number of studies, primarily devoted to his scientific activities and biography of the scientist. The author of this study, when conducting and writing it, based on their results, did not at all pursue the goal of adding something to his biography, about which quite a lot and voluminously has already been written. The author of the study and this article wanted to present another facet to the memory of this scientist and its preservation, but in such a means of collecting as numismatics, on commemorative coins and medals dedicated to this great scientist.

**Material and methods**

When writing this research article, based on the results and analysis carried out by the author of the study, its author, research methods were used such as literary critical analysis, available sources of information, primarily on the Internet, both domestic and foreign, and also - searching for illustrative materials, systematizing and converting them into color and black and white screenshot copies. All illustrative materials found by

the author of this article during this research, in the form of 45 copies of commemorative coins and medals, thematically dedicated to C.V. Roentgen, were converted by the author into screenshot copies, with a strict indication of the places where they were borrowed on the Internet, in order to respect the copyrights of their owners.

**Results and discussion**

Taking into account the fact that the author of this research article discovered a fairly large number of collectible illustrative materials, the author of this article decided to divide them into two large groups - commemorative medals and commemorative coins dedicated to C.W. Roentgen, which will be, without fail, on the obverse (front part) and reverse (back part) of the commemorative medal and/or coin. Figure 1 shows a large selection of commemorative medals dedicated to C.W. Roentgen (1845-1923) and his scientific activities, minted in different years and timed to coincide with different events in the life of the scientist. These medals are made of different metals (gold, silver, bronze and other metals and/or their alloys), using different techniques, but they are all united by high-tech performance and unsurpassed craftsmanship! In total, in Figure 1, the author of this article presents 37 commemorative medals, thematically dedicated to the memory of Conrad Wilhelm Roentgen [1-19].

Most of the presented medals are made in the classical round form, and some are in the form of (non-round) rectangular plaques or with uneven, asymmetrical edges. At the same time, some of the medals are presented only in their obverse - these are commemorative medals that either do not initially have their own reverse, or the reverse of these medals was not discovered by the author of this study, in the process of searching and preparing materials for this research article.







**Figure 1.** Collectible selection of commemorative medals dedicated to Conrad Wilhelm Roentgen

Further, in Figure 2, a large thematic selection of commemorative medals from different countries of the world and different years of their issue, of different denominations in their local currency, which are also dedicated to various events and dates (minted on obverse and/or reverses), of these commemorative coins is presented [1]. In total, in this figure 2, for the most part, presented in both obverse and reverse, there are 8 commemorative coins dedicated to various memorable dates and significant events in the scientific activity and life of Wilhelm Conrad Roentgen. Presented is a

commemorative gold coin (15 grams of gold, 999 fineness), issued in 2001, with a denomination of 5 North Korean won, dedicated to the 100th anniversary (1901-2001) of the first Nobel Prize laureate in physics (1901) – Conrad Wilhelm Roentgen – A [20]. Further, a North Korean gold coin dedicated to. is also presented. Roentgen Conrad Wilhelm Roentgen and awarding him the first Nobel Prize in Physics, but with a denomination of 1 Korean won (B) [21].



**Figure 2.** North Korean commemorative coins dedicated to the memory of C.W. Roentgen

Also, there are a number of commemorative coins of Germany, both the Democratic Republic of Germany and the Federal Republic of Germany, which are presented, in obverse and reverse, in Figure 3 [22, 23]. This is a commemorative coin of the Federal Republic of Germany (1995), with

a face value of 10 marks, dedicated to the 100th anniversary of the opening of V.K. X-ray, its famous X-rays. Also, in the same picture, there is a commemorative coin of the DRG (1970), with a face value of 5 Eastern Democratic marks, in memory of this scientist [22, 23].



**Figure 3.** Commemorative coins of the two Germanys dedicated to Conrad Wilhelm Roentgen

Further, in Figure 4, in obverse and reverse, there are commemorative gold and silver coins of the African states of Ghana (2021), with a face value of 2 Cedis and Cameroon (2023) - silver coins, with a face value of

500 and 2000 local francs - dedicated to the 100th anniversary anniversary of the death of this great scientist [24-27].



**Figure 4.** Commemorative coins of African states - Ghana and Cameroon, dedicated to the memory of C.W. Roentgen

Figure 5, obverse and reverse, shows a commemorative silver coin of the Isle of Man - Great Britain (1995), denomination of 1 Crown, dedicated to the 150th anniversary of the discovery of C.W. Roentgen, its famous X-rays [24-27].



**Figure 5.** Commemorative coin of Great Britain (Isle of Man), dedicated to the memory of C.W. Roentgen

This concludes another author's research article, which is thematically dedicated to the memory of the life and research activities of the world-famous scientist and the world's first Nobel Prize laureate in the field of physics (1901) - Conrad Wilhelm Roentgen. The author is preparing new research materials concerning the reflection of medicine and a number of biomedical sciences, in the reflection of various means of collecting.

**Conclusions**

1. The author of this research article, in sufficient volume, confirms the hypothesis and achieves the goal of his article.
2. In total, this research article presents 45 screenshot copies of numismatic materials - 38 commemorative medals and 7 coins of different

denominations, made of gold, silver, bronze and other materials, different years of their issue, but thematically dedicated to the memory and a number of commemorative events both in the life and in the scientific work of Wilhelm Conrad Roentgen.

3. The use by the author of this article, as illustrations, color and black and white screenshots, numerous numismatic materials, has enriched and embellished the content of this research article.

The author denies any conflict of interest in writing this article.

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