

## PHILATELY AND RADIOLOGY

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### ABSTRACT

Information can be transmitted to the public in various ways. Postage stamps act as one of them. The information that they carry may be direct in the form of color and subject of the stamp or indirect through repeated sublime exposures. Postage stamps depicting various aspects of radiologic science ranging from theoretical radiation physics to clinical radiologic imaging and treatment are illustrated in this article.

### INTRODUCTION

Postage stamps constitute an important medium of public information. Their messages often act through repeated, subliminal exposures, but at other times, depending on the size, layout, color and subject of the stamp, they may demand more conscious attention and inform more directly.

Postage stamps with illustrations drawn from radiologic sciences, such as schematic atomic structures, x-ray tubes, radiographs and portraits of pioneers in the field are often issued in support of campaigns directed at combatting cancer, tuberculosis and other diseases.

Countries honor their science and industry through postage stamps, often with motifs drawn from radiologic science. Scientific pioneers are commemorated, award winning scientists are honored for their achievements, and major radiological congresses are announced and supported-all through the medium of postage stamps.

Postage stamps depicting various aspects of radiologic science ranging from theoretical radiation physics to clinical

radiologic imaging and treatment are illustrated in this article.

### WILHELM CONRAD ROENTGEN

W.C. Roentgen was a German physicist (1845-1923). During experiments with a Crookes' vacuum tube, he discovered an unknown radiation on 8 November, 1895. He named his discovery x rays and almost completely described their physical properties in a paper published in January 1896.<sup>1</sup> The abilities of x-rays to penetrate solid bodies and to blacken photographic emulsions are fundamental to diagnostic radiology.



On the occasion of an anti-cancer campaign, W.C. Roentgen was first portrayed on a postage stamp, Danzig, 25 pf, 1939.

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Roentgen was portrayed with an x-ray tube and the atomic symbol on the occasion of the First European Congress of Radiology, Barcelona. Spain, 150 ptas, 1967.



Gustav R. Kirchhoff, a German physicist (1824-1887) together with R. Bunsen discovered a characteristic emission of light from glowing chemical elements. They made the identification of elements possible by spectral analysis. Kirchhoff was commemorated on the 150th anniversary of his birth with two issues: Federal Republic of Germany, Berlin, 30 pf, 1974, German Democratic Republic, 5 pf, 1974.



Roentgen was commemorated on the 50th anniversary of his Nobel Prize in the German Federal Republic, 30 pf, 1952.<sup>2</sup>



A spectrum is shown on a stamp announcing the XV Colloquium Spectroscopicum Internationale, Madrid, Spain, 1.50 pts, 1967.



The 120th anniversary of Roentgen's birth was commemorated by the German Democratic Republic, 10 pf, 1965.<sup>3</sup>



Dmitri Ivanavitch Mendeleiev, Russian chemist (1834-1907) formulated the “periodic law” stating that the properties of chemical elements recur periodically when the elements are arranged in order of their atomic weights. Mendeleiev was commemorated on the 50th anniversary of his death, Soviet Union, 40 k, 1957.



About 400 BC, the Greek philosopher Democritus assumed that substances were composed of indivisible particles and named them atoms after the Greek word atomos: indivisible. Greece, 4.50 dr, 1961.



In 1896, the year after Roentgen's discovery of x-rays, Henri Becquerel, a French physicist (1852-1908), discovered a spontaneous radiation from uranium.<sup>4</sup> A stamp with Becquerel's portrait supported an anti-cancer campaign in France, 2 + 3 f, 1946.



Marie and Pierre Curie together discovered two strongly radioactive elements, polonium and radium in 1898. Their portraits support many anti-cancer campaigns. Monaco, 65 + 25 c, 1938.



The Nobel Prize in Physics for 1903 was awarded to Becquerel for the “discovery of spontaneous radioactivity” and to Marie and Pierre Curie for “work on the radiation phenomena discovered by Becquerel”.<sup>5</sup> Sweden, 50 ore, 1963.



The Nobel Prize is often mentioned in this series of famous scientists. Alfred Nobel was a Swedish chemist and inventor (1833-1896). He described a technique of controlled detonation of nitroglycerine. Before his death, he established the Nobel Foundation in 1895. Nobel's portrait and the reverse of the Nobel medal for physics and chemistry are shown on this stamp from Grenada, Grenadines, 1 c, 1978.

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