

THE PERIODIC TABLE: MENDELEVIUM TO SEABORGIUM TO OGANESSON AND BEYOND!

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The elements gold, silver, copper, and others were known from antiquity. In the 19th century as more elements were discovered, an extraordinary Russian chemist conceived of the most significant and revolutionary contribution to modern science, the Periodic Table of the Elements. Holes in Mendeleev's table were later filled with discoveries of man-made technetium and promethium. In the 20th century discoveries of neptunium and plutonium extended the table beyond naturally-occurring uranium. Unexpected behavior of americium and curium prompted Seaborg to propose a rearrangement to include an actinide series. The modern periodic table now extends to element 118, oganesson.^{1,2,3} The table has been refined and extended over time as new elements are discovered and as new theoretical models are developed, but Mendeleev's fundamental concept remains intact. A brief history of the periodic table will be reviewed along with memories of my trip to Mendeleev's birthplace, Tobolsk, Siberia.



References

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