Uranium Report

Cheyanne Powell

Uranium was discovered by a German chemist named Martin Heinrich Klaproth in 1789, Berlin. Dr. Klaproth also discovered Zirconium in 1789, Berlin. How uranium got its name was that it was named after the planet Uranus, because it was just discovered at the time. Uranium’s atomic number is 92 and its atomic mass is 238.03. Uranium’s atomic symbol is U. Uranium is classified as a metal and is highly toxic. Uranium wasn’t studied much until they found the radioactivity in it. The radioactivity was discovered accidentally in 1896 by Henri Becquerel. Today, Canada is the largest producer and exporter of uranium. The biggest uranium reserves are found in Canada, Australia, Kazakhstan, Russia, Niger, Namibia, and Uzbekistan. The German mining company, Wisbut, was the 3rd biggest uranium producer in the world until 1990. In 1909 the first license for mining uranium was approved. By 1991 62 uranium mines were running in Portugal. When uranium is mined, milled, transported, and used to build nuclear power plants it lets off a greenhouse gas. When uranium decays the radon is released from it. The highest amount of radioactivity in uranium is given to it by its main isotope uranium-238. When uranium is added to glass it turns a green-yellow color. Uranium had 2 names given to it long ago, one was Harmful stone and the other was Wolf stone. Although the names, uranium was used as a medicine in the form of a radon bath. Uranium was used in weapons as early as the First World War. It was mainly used in instrument engineering and in paint for gauge dials. The Navy used the paint most out of the branches. One pound of completely fission uranium has the fuel value of over 1,500 tons of coal. Uranium is used in inertial guidance devices, gyro compasses, counterweights for aircraft control surfaces, and as shielding material. Uranium was once thought to be rare but is now more plentiful than mercury, antimony, silver, or cadmium and is about as abundant as molybolenum or arsenic. Uranium can be found in the mineral pitchblende, uranintite, carnotite, autunite, uranophane, and tobernite. It is also found in Phosphate rock, lignite, and monazite sands. If you are exposed to uranium to long you increase the risk of getting a variety of cancers. Uranium is used to cover army tanks and parts in bullets and missiles. Uranium has twenty-one isotopes with three major isotopes that control uranium’s radioactivity. The uranium isotope uranium 238 is the most stable and is about as old as the Earth. Canada produces twenty to thirty percent of all uranium. Uranium is negatively charged and when it hits the air it becomes highly toxic to living organisms. Uranium is the heaviest naturally occurring element on Earth. The first uranium produced was used to make two atomic bombs that were dropped at Hiroshima and Nagasaki in 1945. Canada is the only uranium mining company that is expanding. The price of uranium gets lower as the years go on. Marie Curie dissolved a uranium rock in acid and even with the uranium out it’s still radioactive. When something explodes atoms become unstable and give off little burst of energy. When atoms explode they turn into a new substance. For example, when uranium explodes it turns into protactinium, which turns into thorium, which turns into radium, which turns into radon gas, and that turns into radon daughters. When everything is done changing it turns into a stable but highly toxic substance called lead. Lead’s atomic symbol is Pb from its ancient name Plumbum.