



The Use of Uranium

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12-10-18



Introduction

This project is about uranium in Niger. I chose Niger because it is in the continent where I come from and I find it very interesting. Uranium is a rare natural resource so when I found out that it was in Niger I decided to choose it.

Niger

Niger is a country in Africa. Even though it is the one of the poorest countries in the world and has a 44.1% poverty rate. It is also the fourth largest supplier of uranium. It is in-between Nigeria, Algeria, Mali, Libya, Chad, Benin, and Burkina Faso. The population is 21.48 million.



Uranium

Uranium is a type of hard, dense radioactive metal that is a naturally occurring radioactive element. It occurs in places like soil, rock, surface, and groundwater. It also powers nuclear reactors and atomic bombs, and it constantly emits particles and changes into other elements. It was discovered by a man named Martin Klaproth in 1789 which he had named after the planet Uranus. It is a nonrenewable resource.



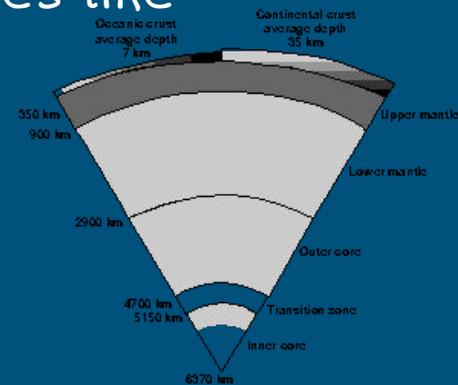
How is Uranium by Humans

Uranium is used by humans in multiple ways. In the military it is used to power nuclear submarines and in nuclear weapons. It is also used as an abundant source of energy for around 60 years. So basically it is a power source for things that are nuclear.



How Uranium is Formed

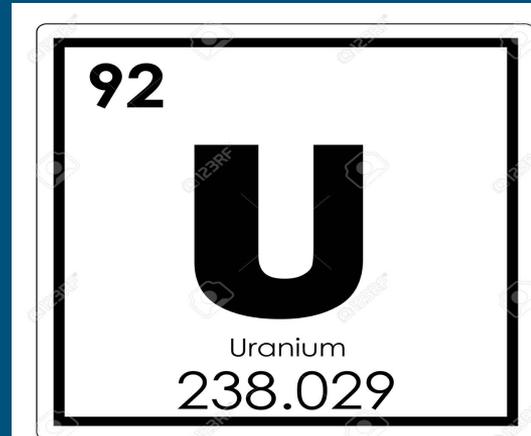
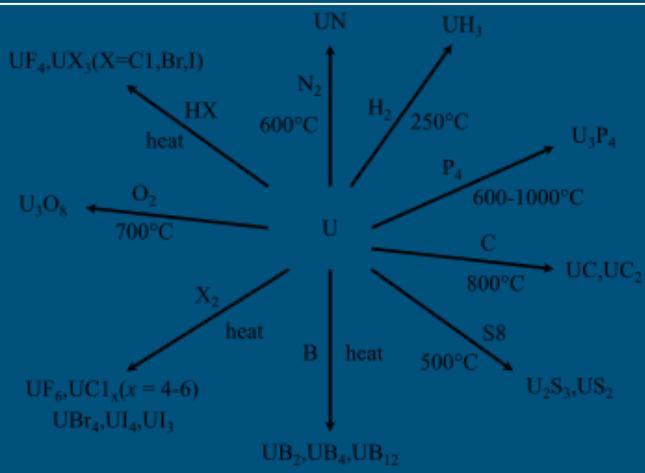
Some people say that in the beginning uranium was created in supernovas about 6.6 billion years ago. Since it is a nonrenewable resource it is mined from the ground and then goes through a series of treatments. Niger is the fourth highest producing country of uranium because it has a large amount of uranium which they provide to countries like France.



Uranium's Properties

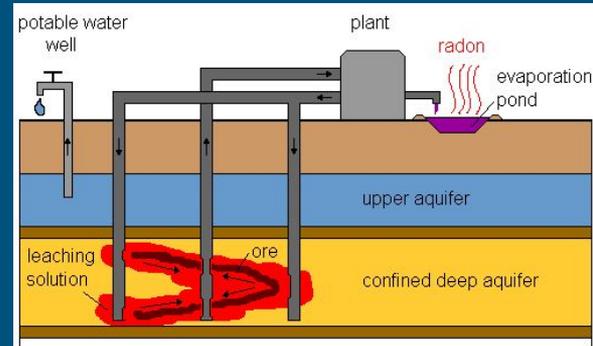


The chemical formula for uranium is $\text{HC}+\text{Pu}=\text{U}$. The atomic number is 92 and the atomic mass is 238.029. The symbol is just U.

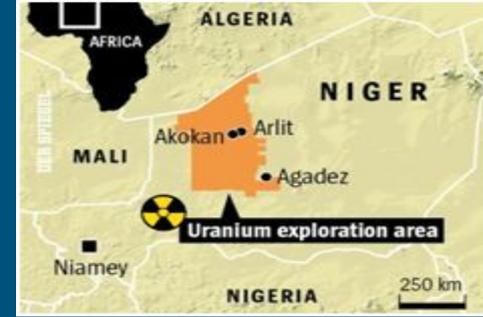


How it is Extracted

Uranium can be extracted in three ways open pit, underground and in-situ leach (ISL). when you open pit mine it is usually because what your mining is closer to the surface. Underground mining is used to get higher concentrations of uranium that are too deep for an open pit. In-Situ Leach is a way to extract uranium that is more environment friendly and good for the Earth.



The Relationship



The cultural relationship between Niger and uranium is that because different people are mining the uranium in Niger people are getting sick from working in the mine and the carbon footprint. The economic relationship is the fact that people in Niger work to mine uranium and they give it to places like France. The political relationship is that it was their duty to give uranium to France. The social relationship is that Niger is a poor country that gives uranium to other countries.

The Future of Niger



I think that eventually the uranium is going to run out and that will leave a lot of countries in need of ways to power energy and different nuclear things. I feel that countries will conserve uranium for future generations. The government will also have ways to make use of all the mines and the uranium. In Niger they will still be very poor and in poverty.



Conclusion



I learned a lot of things about Niger and uranium that I never knew before. I learned that even though Niger has the fourth largest supply of uranium they still are very poor and live in poverty. Though they were freed from French rule they still speak french and they give most of their uranium to France.



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