



Country: Canada

Committee: International Atomic Energy Agency (IAEA)

Topic: Technology infrastructure for prevention, detection and responses regarding nuclear security.

Canada is the largest country in the western hemisphere, and a sovereign state, a member of UN. Canada's government is a blend of constitutional monarchy, with Prince Charles holding the crown, which points to its still remaining ties of the Commonwealth; and a parliamentary democracy, a shining light of freedom in the New World. Formerly inhabited by Indigenous peoples, or by another term the First Nations, fundamentals of Canada's existence was set in the 15th century, with European expeditioners discovering North America. After a tug of war between France and the United Kingdom for dominance on the geography, Canada had its first self governing state in 1791, with the Constitutional Act. Since then, Canada remains as an economic and political force in the region. It is a diverse nation with traces of British, French and Indigenous language and culture; with a rich country with lots of abundant natural resources, primarily wood, and a well-developed standard of living.

The kickstarting of nuclear science and industry has been with discoveries of radioactive elements, such as Uranium in 1789, and more in depth research on radioactivity and its properties, such as in 1896 by Curie and in 1902 by Rutherford. After a few years more of research on the topic by a series of scientists, there were important developments by Hahn and Strassmann following 1939, which confirmed Einstein's paper written in 1905 about the equivalence between mass and energy. Following 1939, the majority of nuclear research was made on nuclear bombs and weaponry under the Manhattan Project. After the results, two bombs, which were made with the radioactive isotopes studied and developed under Oppenheimer's command, were dropped on Japanese cities of Hiroshima (6 August) and Nagasaki (9 August.) The bombs were named Little Boy and Fat Man, which contained U-235 and Pu-239 respectively. These bombings were catastrophic, as they added up to more than 200,000 casualties total. These bombings have let the Japanese Empire's surrender after a week on 15 August 1945, which ended the Second World War. Due to their inhuman damage, there have been a continuous effort to limit these weapons's usage and stockpiling by several peace conventions and international committees.

Today, the effects of nuclear science in our lives is undoubtful; and the looming threat of nuclear armageddon following the rising tensions around the World, primarily Ukraine, is indisputable. The subject of nuclear power and weapons is not specific to any country alone just because they have the resources to have so, but it is bestowed upon every living being on the planet as the aftermath of any nuclear topic could prevent us from going further in civilization. To give an example, the Chernobyl Disaster in 1986 contaminated not only the Ukrainian SSR, but the radioactivity spreaded to Belarus SSR, Russia SSR, and to other independent countries like Romania, Turkey and Poland. Thankfully, humanity have been taking steps to ensure that no more accidents or bombs wiping out cities are possible. Such as Nuclear Non-Proliferation Treaty in 1968 which seeks to reduce the production of nuclear armament; or the Geneva Convention, which strictly prohibits the usage of Nuclear Bombs on civilians under Article 35. Together, we can make the world safer from nuclear threats, and can build a better world.