

My graduation in 1915 just witnessed the beginning of the First World War after several generations of world peace. The British Empire was unchallenged in world prestige and power. Communism was but a philosophy. Freedom under democracy was believed to have been established for all time. Would anyone in my year have dare to prophecy that conflicts, both active and passive, would have continued for the next 42 years?

Graduates, you enter a world described by Adlai Stevenson in words that do not exaggerate:

"The First and Second Planetary Wars have helped to make this half-century the most barbaric interlude of the Christian era, branded with the restoration of slavery and torture, by the destruction of whole cities and the extermination of tens of millions of our fellow-men, far more indeed than in the past 1000 years."

Science by discovery and research has made it possible for mankind to live as never before, or to die. Since the end of the Second World War scientific changes have taken place with kaleidoscopic regularity, and have their latest manifestation and the beginnings of a new world in the launching of the "little moon". These graduation ceremonies take place at a time when everywhere in the world men are scanning the skies at the sunrise and the coming of the dusk to catch a glimpse of the first man-made moon circling the earth; or are twisting the dials of their radio sets to hear its sound.

The unrealities of space fiction have now become reality and it is not beyond the imagination that having succeeded in launching this earth satellite at the rate of 18,000 miles per hour the time may not be far distant when the "escape velocity" of 25,000 miles per hour will be attained, at which speed the chains of gravity which hold man to the earth will be broken.

The launching of an artificial earth satellite by the Soviets presents a challenge to you who are graduating today, and to the Free World. It is a particular challenge to the universities. For this achievement was won not by a lone scientist pouring over his books or working with a few associates in a laboratory - as your Lord Rutherford did when he made his great discoveries at this University. It is the result of the work of a vast combination of scientific institutes and factories, carrying out the ideas of an army of the most highly trained scientists, engineers and technicians.

It does the Free World no disservice to acknowledge this triumph of technology and pay tribute where it is due. The scientists of the Free World have won many other firsts. In this case the Russian scientists have won one race in the field of peaceful competition. We must gird ourselves for the future and not shrink from fair competition in scientific research.