

University of Bergen (UiB) Unveils Yuri Gagarin Sculpture

The sculpture commemorates the first manned flight to Space, now 55 years ago, and a subsequent scientific visit by Yuri Gagarin to Bergen in 1964. The bust was donated by the International Charitable «Dialogue of Cultures – United World» Fund and the Embassy of the Russian Federation, with Minister-Counsellor Svetlana V. Ozhegova present, at a ceremony September 14 in Bjørn Trumphy's square between the Physics & Technology and Geophysics buildings. UiB Rector Dag Rune Olsen welcomed the gift. Academia Europaea's Bergen Hub was present, by Rector and other members including the Hub Director. More than twenty countries have now received the Gagarin sculpture. This year the honor was also bestowed on Smithsonian's National Air and Space Museum in the US.

Responsible for Gagarin's invitation to lecture at UiB in Bergen during his goodwill visit to Norway in 1964, was Docent (Assoc. prof.) Guro Gjellestad at Institute of Geophysics. Trained as a physicist, she and her group were scientifically interested in the new physical measurements now becoming available with space technology in the nearby space of planet Earth. Gagarin's lecture was a success, gathering an overwhelming audience of town people.

Mankind's visions for leaving planet Earth or travelling around the World were amplified in the industrial age, stimulated by technology driven (steamships, trains, balloons) science fiction literature such as Jules Verne's 'From the Earth to the Moon' (1865) and in particular the 'bet driven' race 'Around the World in Eighty Days' (1872). Russia has in particular had outstanding rocket theorist and visionaries, such as the pioneer Nikolai Fyodorov (1829-1903) and his student Konstantin Tsiolkovskii, referred to as the Grandfather of Soviet Rocketry.

Yuri Gagarin in his Vostok1 spacecraft was ejected in a flight path beyond the Karman height of 100 km commonly used to define the boundary between Earth's atmosphere and Outer Space. This trip was the first manned Space flight. It encircled the Earth at an average altitude of about 300 km, lasting close to 2 hours, i.e. 1 permille of Verne's bet for ground travel. Although defined as a Space Flight, Gagarin's orbit was Earth bound (by gravitation) within a thin shell at the surface of planet Earth. In 1986, for comparison, the US aircraft Rutan Voyager became the first aircraft to fly around the World without stopping or refueling. At an average altitude of 1/100 that of Vostok1, the flight took about 9 days, i.e. 100 times that of Gagarin.



Gagarin's pioneering space travel was a step for mankind that took place during critical years of the Cold War (Berlin Crisis of 1961, Cuban Missile Crisis of 1962, ...), and was certainly not without political overtones within the concept of mutual destruction. Half a year later, on October 30, 'Tsar Bomba' was detonated at Novaya Zemlya, the most powerful nuclear weapon ever detonated, 10 times the energy of all conventional explosives used in World War II, one quarter of the estimated yield of the 1883 explosion of Krakatau. The test and its fallout was certainly also noticed in Norway and Finland, leading to strong protests.

Tsar Bomba demonstrated (unintentionally) the madness of these monstrous fusion bombs, inducing a termination of such programmes both in the USSR and in USA. Andrei Sakharov, one of the bomb designers, started to speak up against nuclear weapons. We like to see Gagarin's visit as a precursor to warmer winds. In 1964, joint international non-military nuclear BIG science was running also in Europe, at CERN (Geneva) and at JINR (Dubna). In particle physics, Bergen developed early collaboration with JINR. Twenty years later, with perestroika and glasnost, East-West collaboration picked up, in particular in nuclear heavy-ion physics, putting its clear imprint also on the staff of the Department of Physics at UiB.