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MINORU ODA AND HIS PIONEERING ROLE IN SPACE SCIENCE IN JAPAN

Abstract

Minoru Oda was born in Sapporo, Japan, in 1923, when Japan's space science was to step on the springboard to jump onto international stage of world science which had started a revolutional leap. Oda spent most of his boyhood in Taiwan, and began to love mountains and 'research'. Oda entered Osaka University in 1942, a year before the beginning of World War II. He started his research in physics under a suspicious atmosphere of the war, especially in nuclear physics which Masashi Kikuchi, Oda's counselor, was engaged in. But the group Oda joined was an academic one which included Shin-ichiro Tomonaga and Hideki Yukawa, later winners of Nobel Prize in physics. Following winter days in physics after the War, Oda was bitten by the bug of space. He became the father of radio astronomy by making a telescope for radio wave from the sun, and then shifted to cosmic rays. The research in cosmic rays triggered the encounter with Bruno Rossi, patriarch for X-ray astronomy. During his stay in MIT, Oda invented a historical 'Modulation Collimater', which displayed a great performance in identifying the precise direction of X-ray sources. On the occasion of establishment of ISAS (The Institute of Space and Aeronautical Science, University of Tokyo), Oda came back to Japan, and started X-ray astronomy in Japan. Oda took the leadership of identifying the position of Scorpion X-1, made X-ray astronomy and visible astronomy shake hands, joined Japan's first satellite "OHSUMI". He made a great contribution to the birth of X-ray astronomy satellites, "HAKUCHO", "TENMA", and "GINGA", and took an important role to pull up Japan's space science onto an international level. Oda became Director of ISAS (the Institute of Space and Astronautical Science) to lead its Halley's comet exploration, and, after ISAS, was inaugurated as President of RIKEN. Heart failure was the death of Minoru Oda in 2001.