

Andrija Mohorovičić – an all-around Croatian geophysicist

On the occasion of the 150th anniversary of his birth

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Andrija Mohorovičić, geophysicist of the world renown and one of the greatest Croatian scientists of all times, was born 150 years ago, on 23 January 1857 in Volosko near Rijeka, Croatia. In 1875 he enrolled into the Prague University to study mathematics and physics. In the year 1892 he became director of the Meteorological Observatory in Zagreb. He was elected the corresponding member of the Academy in 1893, and the full member in 1898. Mohorovičić retired in 1922, and died in 1936.

In the beginning of his career, Mohorovičić is engaged in meteorology. His interests lay in the explanation of various meteorological phenomena – atmospheric dynamics and observations of rare events. Mohorovičić was probably the first to describe atmospheric rotors with the horizontal axis. He is also recognized for the unification of the meteorological service in Croatia and Slavonia, and was the first in Croatia to publish weather forecasts in daily papers.

About the turn of the centuries Mohorovičić's scientific interest focused almost exclusively to seismology. The meticulous analyses of the seismograms of the Kupa Valley earthquake of 8 October 1909 enabled him to prove the existence of the crust-mantle boundary, which later became known as the Mohorovičić discontinuity. This discovery – recognized as one of the milestones of science in the beginning of the 20th century – places him among the founding fathers of the modern seismology. It is the *most important scientific contribution ever published in a Croatian journal*. He founded the Zagreb seismological station in 1906 and equipped it with the best instruments of the time.

Andrija Mohorovičić was a careful, pedantic and diligent scientist, who enjoyed to search for explanations of observations in theory, but never favoured theory over observations. He is recognized as the founder of the Zagreb seismological school, the Croatian seismological and meteorological surveys, and of the public time service. Owing to the tradition he initiated, University of Zagreb is among the few in the world awarding a degree in seismology at the undergraduate level. His thoughts and ideas were truly visionary, often decades before his time. In 1970 one of the craters on the dark side of the Moon was named after him, as was the asteroid No. 8422 in 1996. Since recently, the crust-mantle boundary on the Moon as well as on the Mars is also known as the Mohorovičić discontinuity. *Andrija Mohorovičić, as only very few Croatian scientists of the international reputation ever, made his whole career in his homeland. He is undoubtedly one of the greatest Croatian scientists ever, and the world geophysical community considers him as one of the great geophysicists of the 20th century.*