METEORITE CURATION AND RESEARCH IN BELGIUM

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The Royal Belgian Institute of Natural Sciences (RBINS) has held meteorites in its collections since the nineteenth century. Among them are four meteorites that are documented falls in Belgium between 1855 and 1934. In the last few years a new interest in meteorites arose for different reasons. In 2006 a newly discovered mass of the Mont Dieu iron meteorite, weighing 435 kg, was purchased. It is now part of the permanent exhibit of the museum. In 2009, a collection of 361 pieces was acquired from a private collector, including many Saharan meteorites found after 1995.

At present, the RBINS holds 511 pieces fom 307 different meteorites, 72 of which, all from the Sahara, have not yet officially been described.

In a separate development, an agreement was signed between Belgian and Japanese scientists to search for meteorites in Antarctica from 2009 to 2014, in the larger neighborhood of the Belgian Princess Elisabeth Station, which was opened in 2009 near the Sor Rondane Mountains. The first field season yielded 635 new meteorites, the second one 218 new meteorites; several ureilites and at least one carbonaceous chondrite were identified on macroscopic inspection. After a first characterisation at the Japanese National Institute of Polar Research, half the collected meteorites will be transferred to the RBINS in Belgium for curation.

Starting in 2001, two universities in Brussels carry out research on meteorites and impact structures. Several master students have been at work, notably on the IIE iron Mont Dieu, and on chondrites from the Sahara. One PhD work was concluded this year, and ongoing research at PhD and postdoc level includes research on meteorites from the RBINS collection, both chondrites and achondrites.

At the RBINS itself a fifth Belgian meteorite, Hautes Fagnes, a LL5 chondrite, was studied in collaboration with other institutions, and at present analytical facilities are being upgraded to produce accurate microanalyses. Research themes include classification of chondrites from the Sahara, magnetic susceptibility measurements, and bulk analyses on chondrites in collaboration with university laboratories. In addition, occasionally genuine meteorites are submitted for identification by the public, and some research has started on these.

Given the perspective of a growing collection through the Antarctic prospection programme, the RBINS is gradually improving its research infrastructure and its curation facilities for meteorites.