

From Mineral and Rock Collection of the Faculty of Mining and Geology in Belgrade, Serbia, six meteorite samples from the *Marquis de Mauroy collection* (01. Lancon, 02. Bath, 03. Powder Mill Creek, 04. Morrisyown Hamblen, 05. Merceditas and 06. Hex River, with numbers representing a handing number at the Open University) were used for polished thin- and thick-section preparation at the Open University, Milton Keynes, UK. Lancon and Bath are fragmented chondrite meteorites, Powder Mill Creek and Morrisyown Hamblen are mesosiderites, and Merceditas and Hex River are iron meteorites.

Since the meteorite samples belong to a very old collection, dating from 1899, due to inadequate equipment and unprecise preparation facilities in the laboratory of Faculty of Mining and Geology in Belgrade, those kind of samples were never used for utilizing cut and polishing preparations.

At the Open University, I followed the routine procedure for meteorite preparation lead by **Ms Michelle Higgins**. I actively participated especially at the beginning when determining the position of the cutting of the samples. Given that all six samples of meteorites are very small, it was very important to minimize weight loss while obtaining satisfactory polishing sections. All of the six cut pieces were then immersed in the epoxy (EpoFix Resin and Epofix Hardener 4:1) mixture, to form the thick polished section of a specimen. Additionally, in terms of transferring experience, it was useful to record all steps in the preparation procedure with details on the type of resin and grinding machines, types of diamond impregnated polishing discs of different grade and polishing methods. The laboratory in Serbia does not contain similar materials, so this was an important input to an out-dated list of consumables commonly used in that laboratory. The final preparation of thick-sections was performed on four samples of mesosiderites and iron meteorites (Powder Mill Creek, Morrisyown Hamblen, Merceditas and Hex River). The remaining two samples, contain small fragments of chondrite, that were aimed for polishing from the thick-section down to ~ 30 μm thin-section. However, this remained incomplete during my visit, due to a malfunction of the polishing machine and it remains to be completed within the next weeks.

The four thick-section preparation were investigated in the Laboratory for Scanning Microscopy (SEM-EDS laboratory), where **Dr Ana Černok** conducted the X-ray elemental mapping of the prepared thick-sections. The mapping took about 6 hours per sample.

In the meantime, I held a seminar titled "Meteorites in the Collection of Minerals and Rocks at the Belgrade University" in which I presented the facts about 52 old meteorite samples kept in the University Collection, most of which were collected in the end of the 19th century. Poor curatorial practice and war destructions have led to the disappearance of a large number of samples and information thereof. I presented meteorites that lack any labels and are still unclassified. I have received useful advice from the OU experts on the possible classification procedure of such samples.

In addition, I had the privilege to visit a collection of meteoric preparations at the OU guided by **Dr Richard Greenwood**, which is a very valuable experience in terms of keeping samples and the practice of their enumeration.

During my visit, the Virtual Microscope images acquisition of the meteorite sections, initially planned and agreed with **Dr Susanne Schwenger**, was unfortunately not possible due to a stage malfunction of the microscope. All six

samples remain to be processed with the Virtual Microscope high-quality imaging when the instrument is repaired.

This visit aimed at meteorite thin-section preparation was an important milestone for this Serbian collection. It was the first such opportunity to open and present the collection to an international scientific community. More importantly, those are the only thin sections of meteorite samples available at Belgrade University, and will therefore serve as precious teaching material for students educating, as well as for initiating meteorite research. The meteorites processed here are envisaged as a part of the forthcoming European Astrobiology Research and Infrastructure (EARI) project proposal, due to be submitted to the European Commission.