

| <b>Sample No.; Location</b>  | <b>Description</b>  | <b><math>\delta^{13}\text{C}</math> (‰ PDB)</b> | <b><math>\delta^{18}\text{O}</math> (‰ PDB)</b> |
|--|---|---|---|
| <b>Cryogenic Cave Pearls – Slovakia</b>  |   |   |   |
| KD-1; Demänovská Ice Cave, Kmeťov Hall   | Polygonal, approximately 5 mm large white irregular pearl with very fine grained surface layer (about 0.5 mm thick); the inner part is yellowish and coarse crystalline   | <b>-4.29</b>                                    | <b>-5.14</b>                                    |
| KD-3; Demänovská Ice Cave, Kmeťov Hall   | Fine-grained cryogenic material, irregular aggregates with various shapes, plates and micro-pearls, diameter from several tenths to 3 mm  | <b>-1.30</b>                                    | <b>-4.82</b>                                    |
| KD-4a; Demänovská Ice Cave, Kmeťov Hall  | Smaller irregular pearl with very fine-grained surface (pearl diameter 4 mm)  | <b>-5.19</b>                                    | <b>-5.42</b>                                    |
| KD-5; Demänovská Ice Cave, Kmeťov Hall   | Fine-grained cryogenic material, irregular white to yellowish-white particles of various shapes, crusts, plates, size from several tenths to 3 mm)  | <b>-1.95</b>                                    | <b>-4.67</b>                                    |
| BD-1; Demänovská Ice Cave, Belov Hall  | White-grey pearl/nodule (diameter 7 mm); fine crystalline inner part with concentric structure; surface is also fine crystalline  | <b>-2.63</b>                                    | <b>-5.05</b>                                    |
| BDch-1; Demänovská Ice Cave, Belov Hall, branching corridor                    | Regular white micro-pearls (diameter up to 1 mm); with well visible crystalline surface   | <b>-0.27</b>                                    | <b>-4.97</b>                                    |
| KN-1; Demänovská Ice Cave, at Book of Visitors                                 | Slightly irregular, light grey (on surface) and yellowish-white (inside) pearl with diameter of 8 mm; crystalline inner part with concentric structure; compact (smooth) surface                                    | <b>-5.66</b>                                    | <b>-5.84</b>                                    |
| Hch-2/A; Demänovská Ice Cave, Upper Corridor                                   | Fine-grained cryogenic material with micro-pearls; the sample contains two types of different grains; in this subsample A there are separated only very small, white to grey micro-pearls, with crystalline surface | <b>-1.62</b>                                    | <b>-4.97</b>                                    |
| Hch-2/B; Demänovská Ice Cave, Upper Corridor; the same field sample as Hch-2/A | The same sample as above, larger (up to 2 mm) white, sometimes slightly yellowish pearls, frequently of irregular shape   | <b>-2.40</b>                                    | <b>-5.17</b>                                    |
| SCHJ-1; Suchá Cave, the main pearl accumulation                                | Pearls sized up to 2 mm, often clustered in larger aggregates; yellowish-white, slightly irregular, with very fine crystalline surface  | <b>-0.87</b>                                    | <b>-5.38</b>                                    |
| SCHJ-2; Suchá Cave, the main pearl accumulation                                | Larger pearl of grey-white color; diameter up to 4 mm; surface is more coarse crystalline   | <b>-1.42</b>                                    | <b>-5.47</b>                                    |
| SCHJ-3; Suchá Cave, the main pearl accumulation                                | Fine-grained cryogenic material; regular, white to yellowish-white micro-pearls (size from several tenths to 2 mm); with crystalline surface  | <b>3.83</b>                                     | <b>-4.59</b>                                    |
| DLJ-2010-6; Demänovská Ice Cave, Kmeťov Hall                                   | Accumulation of fine-grained cryogenic material below a small, 25 cm high ice stalagmite; contains small aggregates, micro-pearls   | <b>-2.10</b>                                    | <b>-4.65</b>                                    |

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|---|---|--------------|--------------|
| DLJ-2010-10; Demänovská Ice Cave, Upper Corridor                                  | Thick accumulation of small (< 3 mm) white pearls, sampled from a shallow excavation below fallen limestone blocks; today inactive site | <b>2.85</b>  | <b>-5.23</b> |
| SCHJ-2010-3; Suchá Cave, the main pearl accumulation                              | The largest accumulation of CCP in the Suchá Cave, partly covered by younger speleothem, inactive site                                  | <b>-2.04</b> | <b>-5.21</b> |
| MSJ-2010-1; Malá Stanišovská Cave, 40 m from the entrance                         | Small (< 2 mm) white pearls, site with active pearl formation, each winter are the pearls uplifted by growing ice                       | <b>-4.46</b> | <b>-5.66</b> |
| MSJ-2010-2; Malá Stanišovská Cave, 40 m from the entrance                         | Fine-grained cryogenic precipitate, micro-pearls, similar to the previous sample  | <b>-0.93</b> | <b>-4.62</b> |
| <b>Cryogenic cave powders from surfaces of large ice accumulations – Slovakia</b> |   |              |              |
| KD08-1; Demänovská Ice Cave, Kmeťov Hall  | Fine-grained recent cryogenic powder on the surface of the main ice block, 2008 sampling  | <b>-1.62</b> | <b>-4.48</b> |
| DLJ-2010-1; Demänovská Ice Cave, Kmeťov Hall                                      | Fine-grained cryogenic powder, redeposited over the surface of the main ice block by flowing melt-water, 2010 sampling                  | <b>0.69</b>  | <b>-4.53</b> |
| DLJ-2010-2; Demänovská Ice Cave, Štrkový Hall                                     | Fine-grained cryogenic powder, redeposited over the ice surface by melt-water, 2010 sampling  | <b>3.66</b>  | <b>-3.18</b> |
| SCHJ-2010-2; Suchá Cave, surface of large ice stalagmite near cave entrance       | Fine-grained cryogenic powder, at a site of very high cave ventilation, influenced by water and ice evaporation; yellow color           | <b>11.18</b> | <b>-4.17</b> |