

## Catalogs and Inventories

### The meteorite collection of the Civico Planetario and the Museo Civico di Storia Naturale in Milan, Italy

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**Abstract**—The historical meteorite collection of Milan's Civico Planetario and Museo di Storia Naturale is presented in this catalogue. Started in 1838, the collection contains to date (March 2002) 231 samples of 77 individual falls, representing 118.935 kg (*i.e.*, the total weight is 118 kg and 935 g) of extraterrestrial material, including 5 carbonaceous chondrites, 38 ordinary chondrites, 3 achondrites, 7 stony-iron meteorites and 24 iron meteorites.

The Civico Planetario and Museo di Storia Naturale (MSNM) in Milan hold one of the oldest and richest historical meteorite collections in Italy, which developed in the last 164 years mostly through donations from private collectors.

The collection was initially entirely in the hands of the MSNM. The first two meteorites (Juvinas and L'Aigle) were already present at the time of the museum's founding in 1838, when the Milanese noblemen Giuseppe De Cristoforis and Giorgio Jan decided to gather their significant mineralogical collections in the Santa Marta Convent (de Michele, 1978). The collections were transferred to Palazzo Dugnani in 1863 and, according to an unpublished manuscript entitled "Le meteoriti" by Camillo Marinoni (assistant curator of mineralogy), 12 meteorites were present in 1870. In 1913, soon after the collection was moved to the Victorian building in Corso Venezia where it is still held, the number of meteorites increased to 22 thanks to the donation of the Borromeo's mineralogical and paleontological collections. Three meteorites were acquired in between the two world wars and a further 27 meteorites in 1950, through the donation of Francesco Mauro mineralogical collections. Ninety-two samples of 50 falls are documented by the former curator of the mineralogical collection, Vincenzo de Michele, in a catalogue published in 1965 (de Michele, 1965) which provides the first detailed account of the meteorite collection. In 1986, the number of meteorites increased to 64, according to the list given by de Michele in a general guide to meteorites (de Michele, 1986).

Since publication 37 years ago of the first and only existing catalogue (de Michele, 1965), several specimens and samples have been traded or donated and the Civico Planetario has become an active co-sponsor of the collection; we therefore felt that it was time to revise the collection and publish an

updated catalogue. Table 1 documents the 231 samples of 77 individual falls present to date (March, 2002) by providing the weight, a short macroscopic description, and the inventory number (*e.g.*, *PLM 104*). Additional information about specimens, such as means of acquisition, previous inventory numbers, treatments, *etc.* is available from the MSNM archive. Further details regarding circumstances of the fall or find, literature and distribution of each meteorite can be found in Grady (2000) or in *The Meteoritical Bulletin*. Samples are available for study.

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TABLE 1. Meteorites in the collection of the Civico Planetario and the Museo Civico di Storia Naturale in Milan.

| Meteorite name                 | Specimen  |
|--------------------------------|---|
| <b>Carbonaceous Chondrites</b> |   |
| <b>Allende</b>                 | 995 g; complete individual stone; fusion crust lost at corners. <i>PLM 027</i> .  |
| Mexico, Fall 1969              | 805 g; crusted end-piece; weathered interior surface; some calcium-aluminum-rich inclusions (CAIs) and chondrules still visible. <i>PLM 021</i> . |
| CV3.2                          | 778 g; individual stone; fusion crust locally lost on one side; abundant evaporites. <i>PLM 022</i> .   |
|                                | 586 g; 60% fusion crusted individual. <i>PLM 020</i> .  |
|                                | 583 g; 50% fusion crusted, angular fragment. <i>PLM 026</i> .   |
|                                | 577 g; 70% fusion crusted fragment; millimeter-sized chondrules visible on one side. <i>PLM 025</i> .   |
|                                | 414 g; fusion crusted, half of sawn-cut stone with polished surface; complementary to <i>PLM 031</i> . <i>PLM 030</i> .                           |
|                                | 388 g; almost complete, fusion crusted stone; arrow shape. <i>PLM 024</i> .   |
|                                | 360 g; flat angular fragment; fusion crusted on one side, fairly weathered. <i>PLM 023</i> .  |
|                                | 330 g; fusion crusted, half of sawn-cut stone with polished surface; complementary to <i>PLM 030</i> . <i>PLM 031</i> .                           |
|                                | 276 g; 85% crusted piece; truncated cone (apex chipped off). <i>PLM 015</i> .   |
|                                | 173 g; complete crusted stone; nearly cubic shape. <i>PLM 018</i> .   |
|                                | 164 g; angular fragment, crusted on two surfaces; weathered interior surfaces with one obvious centimeter-sized CAI. <i>PLM 017</i> .             |
|                                | 119 g; rounded individual stone; 70% fusion crusted. <i>PLM 029</i> .   |
|                                | 54 g; 30% fusion crusted fragment. <i>PLM 028</i> .   |
|                                | 44 g; 60% crusted fragment; apparently round-shape in origin. <i>PLM 019</i> .  |
|                                | 43 g; 15% fusion crusted, angular fragment. <i>PLM 034</i> .  |
|                                | 28 g; individual stone; 80% fusion crusted. <i>PLM 033</i> .  |
|                                | 26 g; individual stone; 80% fusion crusted. <i>PLM 032</i> .  |
|                                | 20 g; wedge-shaped, 35% crusted fragment; fresh. <i>PLM 016</i> .   |
|                                | 19 g; 20% fusion crusted, angular fragment. <i>PLM 035</i> .  |
| <b>Cold Bokkeveld</b>          | 2 g; seven irregular tiny fragments. <i>PLM 096</i> .   |
| South Africa, Fall 1838        |   |
| CM2                            |   |
| <b>Hammadah al Hamra 280</b>   | 8 g; irregular slice, 0.3 cm thick. <i>PLM 104</i> .  |
| Libya, Find 2000               |   |
| CK4                            |   |
| <b>Murchison</b>               | 81 g; complete fusion crusted stone. <i>PLM 162</i> .   |
| Australia, Fall 1969           | 6 g; 50% fusion crusted fragment. <i>PLM 163</i> .  |
| CM2                            |   |
| <b>Vigarano</b>                | 85 g; 0.7 cm thick part slab with polished surfaces. <i>PLM 234</i> .   |
| Italy, Fall 1910               |   |
| CV3                            |   |
| <b>Ordinary Chondrites</b>     |   |
| <b>Albareto</b>                | 8 g; irregular fragment devoid of fusion crust; rust patches on one surface. <i>PLM 038</i> .   |
| Italy, Fall 1766               |   |
| L4                             |   |
| <b>Alfianello</b>              | 2845 g; 20% crusted fragment. <i>PLM 039</i> .  |
| Italy, Fall 1883               | 380 g; 20%, crusted angular fragment with rust patches on interior surfaces. <i>PLM 009</i> .   |
| L6                             | 234 g; 25% crusted irregular fragment; thin dark vein on interior broken surface. <i>PLM 014</i> .  |
|                                | 64 g; complete crusted stone, chipped at two corners. <i>PLM 010</i> .  |
|                                | 40 g; angular, 5% crusted fragment; slightly weathered. <i>PLM 011</i> .  |
|                                | 21 g; angular, 15% crusted fragment; slightly weathered. <i>PLM 012</i> .   |
| <b>Assisi</b>                  | 123 g; 10% fusion crusted angular fragment; metal grains oxidized. <i>PLM 036</i> .   |
| Italy, Fall 1886               |   |
| H5                             |   |

TABLE 1. *Continued.*

| Meteorite name  | Specimen   |
|---|--|
| <b>Ordinary Chondrites (continued)</b>                    |  |
| <b>Aumieres</b><br>France, Fall 1842<br>L6                | 3 g; 15% fusion crusted angular fragment. <i>PLM 037.</i>  |
| <b>Barratta</b><br>Australia, Find 1845<br>L3.8           | 213 g; nearly rectangular end-slab with four sawn-cut surfaces, one polished. <i>PLM 041.</i>  |
| <b>Beaver Creek</b><br>Canada, Fall 1893<br>H4            | 57 g; nearly prismatic fragment with one crusted and one roughly polished surface. <i>PLM 042.</i>   |
| <b>Bechar 001</b><br>Algeria, Find 1998<br>L5             | 6000 g; 50% fusion crusted, weathered fragment. <i>PLM 244.</i>  |
| <b>Bur-Gheluai</b><br>Somalia, Fall 1919<br>H5 xenolithic | 166 g; 70% fusion crusted, angular fragment. <i>PLM 065.</i><br>56 g; 30% fusion crusted, irregular fragment; weathered. <i>PLM 067.</i><br>37 g; 70% fusion crusted, weathered fragment. <i>PLM 066.</i><br>4 g; four small irregularly flat, weathered fragments; one partially crusted. <i>PLM 068.</i>   |
| <b>Cobija</b><br>Chile, Find 1892<br>H6                   | 65 g; almost complete fresh stone; fusion crust chipped off at two corners. <i>PLM 092.</i>  |
| <b>Collescipoli</b><br>Italy, Fall 1890<br>H5             | 243 g; 40% fusion crusted fragment; fusion crust with aerodynamic ablative streamlets; metal grains oxidized. <i>PLM 093.</i><br>60 g; 50% fusion crusted angular fragment. <i>PLM 095.</i><br>26 g; 30% fusion crusted fragment. <i>PLM 094.</i>  |
| <b>Ergheo</b><br>Somalia, Fall 1889<br>L5                 | 186 g; irregular fragment; significantly weathered; millimeter-sized holes filled in with iron oxides on one sawn-cut surface. <i>PLM 030.</i>   |
| <b>Faith</b><br>USA, Find 1952<br>H5                      | 2 g; irregular, 30% fusion crusted, weathered fragment. <i>PLM 099.</i>  |
| <b>Forest City</b><br>USA, Fall 1890<br>H5 brecciated     | 106 g; almost rectangular, 1.5 cm thick slab; partially oxidized. <i>PLM 100.</i><br>8 g; complete fusion crusted individual. <i>PLM 101.</i>  |
| <b>Girgenti</b><br>Italy, Fall 1853<br>L6                 | 877 g; 40% crusted fragment; metal grains oxidized. <i>PLM 002.</i><br>814 g; angular fragment with two crusted surfaces; thin dark veins. <i>PLM 007.</i><br>410 g; angular fragment; 50% crusted; thin dark veins. <i>PLM 006.</i><br>184 g; angular fragment, fusion crusted on one side; thin dark veins. <i>PLM 005.</i><br>109 g; angular, uncrusted fragment; metal grains oxidized. <i>PLM 003.</i><br>78 g; angular, veined fragment; one surface crusted; metal grains oxidized. <i>PLM 004.</i> |
| <b>Gao-Guenie</b><br>Burkina Faso, Fall 1960<br>H5        | 1018 g; fusion crusted complete individual; weathered. <i>PLM 243.</i>   |

TABLE 1. *Continued.*

| Meteorite name   | Specimen   |
|--|--|
| <b>Ordinary Chondrites (continued)</b>                             |  |
| <b>Gretna</b><br>USA, Find 1912<br>L5                              | 5 g; 1 cm thick part slab with three orthogonal sawn-cut surfaces; fairly oxidized. <i>PLM 102.</i>  |
| <b>Hessle</b><br>Svezia, Fall 1869<br>H5                           | 25 g; 10% fusion crusted fragment. <i>PLM 118.</i><br>10 g; 70% fusion crusted end-piece. <i>PLM 119.</i>  |
| <b>Holbrook</b><br>USA, Fall 1912<br>L6                            | 246 g; complete, fusion crusted stone. <i>PLM 121.</i><br>31 g; complete individual; fusion crust lost in places. <i>PLM 120.</i>  |
| <b>Homestead</b><br>USA, Fall 1875<br>L5 brecciated                | 10 g; flat, 40% fusion crusted fragment. <i>PLM 122.</i>   |
| <b>Knyahinya</b><br>Ukraine, Fall 1866<br>L5 brecciated            | 36 g; complete fusion crusted stone. <i>PLM 128.</i><br>8 g; complete fusion crusted stone. <i>PLM 129.</i>  |
| <b>L'Aigle</b><br>France, Fall 1803<br>L6 brecciated               | 73 g; half of sawn-cut stone with polished surface; complementary to <i>PLM 135.</i> <i>PLM 136.</i><br>47 g; half of sawn-cut stone with polished surface; complementary to <i>PLM 136.</i> <i>PLM 135</i><br>16 g; angular, 5% fusion crusted fragment. <i>PLM 134.</i>    |
| <b>McKinney</b><br>USA, Find 1870<br>L4                            | 653 g; 3 cm thick, nearly rectangular slab; one surface polished showing shock blacking and centimeter-sized areas of metal. <i>PLM 139.</i>   |
| <b>Mező-Madaras</b><br>Romania, Fall 1852<br>L3.7 polymict breccia | 47 g; fragment with three orthogonal sawn-cut surfaces; one macrochondrule (1 cm in apparent diameter) visible. <i>PLM 146.</i>  |
| <b>Mocs</b><br>Romania, Fall 1882<br>L6                            | 140 g; complete stone; thin and discontinuous fusion crust on one side. <i>PLM 147.</i><br>108 g; 70% fusion crusted, angular fragment. <i>PLM 148.</i><br>33 g; 80% fusion crusted fragment. <i>PLM 149.</i>  |
| <b>Monte Milone</b><br>Italy, Fall 1846<br>L5 brecciated           | 302 g; 80% fusion crusted fragment with one sawn-cut surface. <i>PLM 150.</i>  |
| <b>Motta di Conti</b><br>Italy, Fall 1868<br>H4                    | 202 g; 30% fusion crusted, angular fragment; partially oxidized. <i>PLM 151.</i>   |
| <b>Mount Browne</b><br>Australia, Fall 1902<br>H6                  | 216 g; angular fragment, nearly tetrahedron shape; one surface fusion crusted. <i>PLM 152.</i>   |
| <b>New Concord</b><br>USA, Fall 1860<br>L6                         | 73 g; 20% fusion crusted, angular fragment. <i>PLM 167.</i><br>27 g; 10% fusion crusted fragment. <i>PLM 166.</i>  |
| <b>Nuevo Mercurio</b><br>Mexico, Fall 1978<br>H5                   | 325 g; 24 small (<32 g) crusted stones. <i>PLM 168.</i><br>85 g; complete, fusion crusted stone; round shape. <i>PLM 172.</i><br>60 g; 60% fusion crusted fragment. <i>PLM 173.</i><br>35 g; flat, almost complete stone; fusion crust chipped off one edge. <i>PLM 174.</i> |

TABLE 1. *Continued.*

| Meteorite name  | Specimen   |
|---|--|
| <b>Ordinary Chondrites (continued)</b>                        |  |
| <b>Nuevo Mercurio</b><br>(continued)                          | 30 g; complete fusion crusted stone; round shape. <i>PLM 171.</i><br>29 g; complete fusion crusted stone. <i>PLM 170.</i><br>29 g; 80% fusion crusted fragment. <i>PLM 169.</i>  |
| <b>Orvinio</b><br>Italy, Fall 1872<br>H6 brecciated           | 11 g; 30% fusion crusted angular fragment. <i>PLM 183.</i>   |
| <b>Ozona</b><br>USA, Find 1929<br>H6                          | 35 g; irregular fragment. <i>PLM 241.</i>  |
| <b>Pampa de Agua Blanca</b><br>Chile, Find 1916<br>L6 (S4)    | 9 g; weathered angular fragment. <i>PLM 184.</i>   |
| <b>Plainview (1917)</b><br>USA, Find 1917<br>H5 brecciated    | 133 g; complete stone. <i>PLM 185.</i><br>43 g; 0.5 cm thick part slab; one surface polished. <i>PLM 186.</i>  |
| <b>Pultusk</b><br>Poland, Fall 1868<br>H5 brecciated          | 274 g; almost complete, fusion crusted stone. <i>PLM 188.</i><br>94 g; fusion crusted end-piece with polished surface, partially oxidized. <i>PLM 190.</i><br>52 g; complete, fusion crusted stone. <i>PLM 187.</i><br>27 g; almost complete, fusion crusted stone; two pieces recomposed. <i>PLM 189.</i> |
| <b>Salaices</b><br>Mexico, Find 1971<br>H4                    | 1738 g; 18 weathered, angular fragments. <i>PLM 201.</i><br>470 g; three weathered, partially crusted, angular fragments individually weighing 200, 233 and 57 g. <i>PLM 198.</i><br>455 g; 38 weathered, angular fragments. <i>PLM 199.</i><br>315 g; 57 weathered, angular fragments. <i>PLM 200.</i>    |
| <b>Siena</b><br>Italy, Fall 1794<br>LL5 brecciated            | 65 g; broken, partially crusted end-piece with polished surface. <i>PLM 197.</i>   |
| <b>Trenzano</b><br>Italy, Fall 1856<br>H6                     | 85 g; 15% fusion crusted, angular fragment. <i>PLM 230.</i>  |
| <b>Valdinizza</b><br>Italy, Fall 1903<br>L6                   | 120 g; 70% fusion crusted, fresh stone. <i>PLM 233.</i>  |
| <b>Achondrites</b>  |  |
| <b>Hammadah al Hamra 285</b><br>Libya, Find 2000<br>howardite | 2 g; part slice, 0.3 cm thick. <i>PLM 103.</i>   |
| <b>Juvinas</b><br>France, Fall 1821<br>eucrite                | 102 g; irregular fragment devoid of fusion crust. <i>PLM 126.</i><br>41 g; irregular, 5% fusion crusted fragment. <i>PLM 127.</i>  |
| <b>Stannern</b><br>Czech Republic, Fall 1808<br>eucrite       | 135 g; 60% fusion crusted fragment. <i>PLM 205.</i>  |

TABLE 1. *Continued.*

| Meteorite name  | Specimen  |
|---|---|
| <b><i>Stony-Iron Meteorites</i></b>                                     |   |
| <b>Ahumada</b><br>Mexico, Find 1909<br>pallasite                        | 728 g; irregular shape, fusion crusted, partially oxidized piece. <i>PLM 001.</i>   |
| <b>Brenham</b><br>USA, Find 1882<br>pallasite                           | 348 g; piece of a 2 cm thick, oxidized slab; some olivines missing on one side; complementary to <i>PLM 058, 059, 060. PLM 061.</i><br>345 g; piece of a 2 cm thick, oxidized slab; apparently three pieces recomposed; complementary to <i>PLM 058, 059, 061. PLM 060.</i><br>228 g; piece of a 2 cm thick, oxidized slab; some olivines missing on one cut surface; complementary to <i>PLM 058, 060, 061. PLM 059.</i><br>198 g; irregular, 0.8 cm thick part slab. <i>PLM 062.</i><br>69 g; piece of a 2 cm thick, oxidized slab; few olivines missing on the larger cut surface; complementary to <i>PLM 059, 060, 061. PLM 058.</i><br>14 g; irregular oxidized fragment. <i>PLM 063.</i> |
| <b>Eagle Station</b><br>USA, Find 1880<br>pallasite                     | 96 g; 0.4 cm thick part-slab with one polished surface. <i>PLM 098.</i>   |
| <b>Huckitta</b><br>Australia, Find 1924<br>pallasite                    | 83 g; fairly oxidized fragment. <i>PLM 123.</i>   |
| <b>Imilac</b><br>Chile, Find 1822<br>pallasite                          | 9 g; highly irregular individual piece; oxidized. <i>PLM 125.</i>   |
| <b>Krasnojarsk</b><br>Russia, Find 1749<br>pallasite                    | 372 g; 10% fusion crusted fragment with many olivines in place; partially oxidized. <i>PLM 133.</i><br>220 g; sawn-cut piece, nearly prismatic. <i>PLM 130.</i><br>128 g; highly irregular, spongy piece with many olivines lost. <i>PLM 132.</i><br>14 g; highly irregular, spongy piece with many olivines lost. <i>PLM 131.</i>  |
| <b>Vaca Muerta</b><br>Chile, Find 1861<br>mesosiderite                  | 23 g; flat, oxidized fragment. <i>PLM 232.</i>  |
| <b><i>Iron Meteorites</i></b>   |   |
| <b>Bagnone</b><br>Italy, Find 1904<br>medium octahedrite                | 146 g; weathered fragment with two orthogonal sawn-cut surfaces, one polished and etched. <i>PLM 040.</i>   |
| <b>Barbianello</b><br>Italy, Find 1960 (or 1961)<br>ataxite (ungrouped) | 477 g; flat end-cut with polished surface; oxidized external surface with a centimeter-wide cavity. <i>PLM 238.</i>   |
| <b>Bendegó</b><br>Brazil, Find 1784<br>coarse octahedrite IC            | 44 g; oxidized, angular fragment; Widmånstatten structures in relief on external surface. <i>PLM 043.</i><br>38 g; irregular slab, polished on one side. <i>PLM 045.</i><br>24 g; nearly rectangular part slab; one fusion crusted surface and one polished sawn-cut surface. <i>PLM 044.</i>   |
| <b>Boxhole</b><br>Australia, Find 1937<br>medium octahedrite IIIAB      | 34 g; arrow-shaped, oxidized piece. <i>PLM 053.</i><br>33 g; oxidized, irregular piece. <i>PLM 054.</i><br>32 g; oxidized, complete piece. <i>PLM 056.</i><br>32 g; oxidized, irregularly flat piece. <i>PLM 049.</i><br>29 g; oxidized, irregular piece. <i>PLM 055.</i>   |

TABLE 1. *Continued.*

| Meteorite name                     | Specimen   |
|------------------------------------|--|
| <b>Iron Meteorites (continued)</b> |  |
| <b>Boxhole</b>                     | 29 g; oxidized, irregular piece. <i>PLM 052.</i>   |
| (continued)                        | 29 g; oxidized, irregular fragment. <i>PLM 050.</i>  |
|                                    | 27 g; oxidized, nearly flat, triangular piece. <i>PLM 051.</i>   |
|                                    | 14 g; oxidized, irregular piece; concave on one side. <i>PLM 057.</i>  |
|                                    | 9 g; complete piece. <i>PLM 047.</i>   |
|                                    | 8 g; complete piece. <i>PLM 048.</i>   |
|                                    | 8 g; complete piece. <i>PLM 046.</i>   |
| <b>Canyon Diablo</b>               | 2792 g; irregularly shaped, complete piece with regmaglypts. <i>PLM 076.</i>                                       |
| USA, Find 1891                     | 1732 g; irregular, nearly flat individual with regmaglypts. <i>PLM 079.</i>  |
| coarse octahedrite IAB             | 585 g; irregular fragment with polished and etched sawn-cut edge. <i>PLM 078.</i>                                  |
|                                    | 376 g; polished and etched fragment with Widmānstätten structures. <i>PLM 145.</i>                                 |
|                                    | 290 g; irregular individual. <i>PLM 072.</i>   |
|                                    | 215 g; irregular, complete individual. <i>PLM 086.</i>   |
|                                    | 181 g; irregular, flat individual; concave on one side. <i>PLM 073.</i>  |
|                                    | 180 g; nearly triangular, 0.8 cm thick slab with polished, etched and partially oxidized surfaces. <i>PLM 074.</i> |
|                                    | 128 g; irregular piece with polished and etched surface. <i>PLM 084.</i>   |
|                                    | 124 g; irregular, 0.5 cm thick slab with polished and etched surfaces. <i>PLM 075.</i>                             |
|                                    | 115 g; irregular individual. <i>PLM 071.</i>   |
|                                    | 112 g; end-piece with polished and etched surface. <i>PLM 082.</i>   |
|                                    | 102 g; nearly triangular, flat fragment; one surface polished and etched. <i>PLM 070.</i>                          |
|                                    | 101 g; end-piece with polished and etched surface. <i>PLM 085.</i>   |
|                                    | 60 g; irregular individual. <i>PLM 081.</i>  |
|                                    | 56 g; flat, irregular individual. <i>PLM 087.</i>  |
|                                    | 49 g; significantly weathered fragment. <i>PLM 140.</i>  |
|                                    | 46 g; significantly weathered fragment. <i>PLM 141.</i>  |
|                                    | 21 g; flat, irregular, strongly oxidized fragment. <i>PLM 083.</i>   |
|                                    | 12 g; flat, irregular individual; weathered. <i>PLM 088.</i>   |
|                                    | 9 g; irregularly shaped, complete individual. <i>PLM 089.</i>  |
|                                    | 4 g; irregular fragment. <i>PLM 069.</i>   |
|                                    | 4 g; irregular, oxidized piece with three orthogonal sawn-cut surfaces. <i>PLM 080.</i>                            |
|                                    | 2 g; oxidized piece. <i>PLM 143.</i>   |
|                                    | 2 g; oxidized piece. <i>PLM 142.</i>   |
|                                    | 1 g; flat, complete individual in vial. <i>PLM 090.</i>  |
| <b>Chupaderos</b>                  | 2 g; round, 0.2 cm thick slice in resin block; one surface polished and etched. <i>PLM 091.</i>                    |
| Mexico, Find 1852                  |  |
| medium octahedrite IIIAB           |  |
| <b>Cranbourne</b>                  | 3 g; partially oxidized piece. <i>PLM 097.</i>   |
| Australia, Find 1854               |  |
| coarse octahedrite IIICD           |  |
| <b>Gibeon</b>                      | 1790 g; 1 cm thick, irregular, oblong slab with one polished and etched surface. <i>PLM 155.</i>                   |
| Namibia, Find 1836                 | 744 g; complete fusion crusted irregular piece with regmaglypts. <i>PLM 159.</i>                                   |
| fine octahedrite IVA               | 444 g; 0.7 cm thick slab with polished and etched surfaces. <i>PLM 158.</i>  |
|                                    | 329 g; polished and etched sphere 4.5 cm in diameter. <i>PLM 160.</i>  |
|                                    | 307 g; rectangular, 0.5 cm thick slab; partially oxidized. <i>PLM 156.</i>   |
| <b>Henbury</b>                     | 681 g; complete individual; regmaglypts; side originally sitting in soil weathered. <i>PLM 108.</i>                |
| Australia, Find 1931               | 132 g; partially oxidized individual piece. <i>PLM 113.</i>  |
| medium octahedrite IIIAB           | 24 g; irregular, complete individual. <i>PLM 110.</i>  |
|                                    | 21 g; irregular individual piece; oxidized. <i>PLM 117.</i>  |

TABLE 1. *Continued.*

| Meteorite name  | Specimen  |
|---|---|
| <b>Iron Meteorites (continued)</b>  |   |
| <b>Henbury</b><br>(continued)   | 16 g; flat, irregular individual; oxidized. <i>PLM 107.</i>   |
|   | 15 g; irregular, flat fragment; oxidized. <i>PLM 112.</i>   |
|   | 7 g; irregular, weathered fragment. <i>PLM 116.</i>   |
|   | 5 g; 0.3 cm thick part slice. <i>PLM 111.</i>   |
|   | 5 g; irregular piece. <i>PLM 106.</i>   |
|   | 4 g; irregular piece. <i>PLM 105.</i>   |
|   | 4 g; irregular, weathered fragment. <i>PLM 175.</i>   |
|   | 4 g; irregular, weathered fragment. <i>PLM 115.</i>   |
|   | 2 g; three irregular, weathered fragment. <i>PLM 114.</i>   |
| <b>Himaes (iron)</b><br>Chile, Find 1870<br>medium octahedrite IIIAB                  | 2 g; highly irregular individual piece; oxidized. <i>PLM 124.</i>   |
| <b>Lenarto</b><br>Slovakia, Find 1814<br>medium octahedrite IIIAB                     | 22 g; nearly cubic, sawn-cut piece with one polished surface. <i>PLM 137.</i>                                   |
| <b>Mundrabilla</b><br>Australia, Find 1991<br>medium octahedrite IIICD                | 60 g; complete fusion crusted individual. <i>PLM 161.</i>   |
| <b>Nantan</b><br>China, Find 1958<br>medium octahedrite IIICD                         | 28500 g; oxidized piece with Widmānstätten structure in relief on surface. <i>PLM 165.</i>                      |
|   | 6000 g; oxidized piece. <i>PLM 164.</i>   |
| <b>Odessa (iron)</b><br>USA, Find 1922<br>coarse octahedrite IAB                      | 1271 g; partially oxidized individual piece with regmaglypts. <i>PLM 182.</i>                                   |
|   | 1022 g; oxidized piece with regmaglypts. <i>PLM 181.</i>  |
|   | 626 g; 0.6 cm thick, irregular slab with polished and etched surfaces. <i>PLM 176.</i>                          |
|   | 394 g; individual piece. <i>PLM 180.</i>  |
|   | 275 g; flat, partially oxidized individual piece. <i>PLM 177.</i>   |
|   | 120 g; 0.3 cm thick slice with polished and etched surfaces; some centimeter-sized inclusions. <i>PLM 179.</i>  |
| 71 g; end-piece with polished and etched surface; partially oxidized. <i>PLM 178.</i> |   |
| <b>Puquios</b><br>Chile, Find 1885<br>medium octahedrite IID                          | 17 g; part slab with polished and etched surfaces. <i>PLM 191.</i>  |
| <b>Rodeo</b><br>Mexico, Find 1852<br>medium octahedrite IID                           | 52 g; 0.3 cm thick part slice with one polished and etched surface. <i>PLM 192.</i>                             |
| <b>São Julião de Moreira</b><br>Portugal, Find 1883<br>coarsest octahedrite IIAB      | 391 g; irregular fragment with two orthogonal sawn-cut surfaces; partly oxidized. <i>PLM 194.</i>               |
|   | 338 g; almost rectangular part slab (0.8 cm thick). <i>PLM 195.</i>   |
|   | 72 g; 0.8 cm thick, irregular slab. <i>PLM 193.</i>   |
|   | 17 g; small, oxidized fragments and dust in vial. <i>PLM 196.</i>   |
| <b>Sikhote-Alin</b><br>Russia, Fall 1947<br>coarse octahedrite IIAB                   | 23476 g; highly irregular and oxidized fragment; Widmānstätten structures in relief on surface. <i>PLM 203.</i> |
|   | 47 g; oblong individual piece. <i>PLM 202.</i>  |
| <b>Tamarugal</b><br>Chile, Find 1903<br>medium octahedrite IIIAB                      | 22341 g; 1.3 cm thick irregular slab with polished and etched surfaces. <i>PLM 207.</i>                         |
|   | 118 g; nearly rectangular part slab (1 cm thick) with one polished and etched surface. <i>PLM 206.</i>          |



TABLE 1. *Continued.*

| Meteorite name                     | Specimen  |
|------------------------------------|---|
| <b>Iron Meteorites (continued)</b> |   |
| <b>Toluca</b>                      | 10570 g; irregular, partially oxidized piece. <i>PLM 229.</i>   |
| Mexico, Find 1776                  | 3651 g; partially oxidized individual piece. <i>PLM 224.</i>  |
| coarse octahedrite IAB             | 2298 g; partially oxidized individual piece. <i>PLM 227.</i>  |
|                                    | 1842 g; partially oxidized individual piece. <i>PLM 225.</i>  |
|                                    | 1740 g; partially oxidized individual piece. <i>PLM 226.</i>  |
|                                    | 1353 g; partially oxidized individual piece. <i>PLM 222.</i>  |
|                                    | 1315 g; partially oxidized individual piece. <i>PLM 212.</i>  |
|                                    | 1128 g; partially oxidized individual piece. <i>PLM 220.</i>  |
|                                    | 850 g; partially oxidized individual piece. <i>PLM 223.</i>   |
|                                    | 841 g; partially oxidized individual piece. <i>PLM 221.</i>   |
|                                    | 566 g; partially oxidized individual piece. <i>PLM 210.</i>   |
|                                    | 471 g; partially oxidized individual piece. <i>PLM 217.</i>   |
|                                    | 462 g; partially oxidized individual piece. <i>PLM 213.</i>   |
|                                    | 457 g; partially oxidized individual piece. <i>PLM 211.</i>   |
|                                    | 359 g; partially oxidized individual piece. <i>PLM 218.</i>   |
|                                    | 357 g; half of sawn-cut piece complementary to <i>PLM 216.</i> <i>PLM 215.</i>                            |
|                                    | 350 g; partially oxidized individual piece. <i>PLM 214.</i>   |
|                                    | 320 g; half of sawn-cut piece complementary to <i>PLM 215.</i> <i>PLM 216.</i>                            |
|                                    | 52 g; 0.3 cm thick, oblong slice with one polished surface. <i>PLM 228.</i>                               |
|                                    | 31 g; highly irregular fragment; drilled surface on one side. <i>PLM 209.</i>                             |
|                                    | 29 g; fractured, 0.4 cm thick slab with polished and etched surfaces; partially oxidized. <i>PLM 208.</i> |
|                                    | 4 g; five end-pieces. <i>PLM 219.</i>   |
| <b>Uegit</b>                       | 10 g; weathered, arrow shaped end-cut. <i>PLM 231.</i>  |
| Somalia, Find 1921                 |   |
| medium octahedrite IIIAB           |   |
| <b>Wichita County</b>              | 210 g; 0.4 cm thick part slab. <i>PLM 235.</i>  |
| USA, Find 1836                     |   |
| coarse octahedrite IIICD           |   |
| <b>Willamette</b>                  | 12 g; flat, oxidized fragment. <i>PLM 236.</i>  |
| USA, Find 1902                     |   |
| medium octahedrite IIIAB           |   |
| <b>Wolf Creek</b>                  | 191 g; oxidized, rounded fragment. <i>PLM 237.</i>  |
| Australia, Find 1947               |   |
| medium octahedrite IIIAB           |   |