

## **A CHUVA CONDRÍTICA DE LAJEADO IPIRANGA, PARANÁ, BRASIL**

(The chondritic shower of Lajeado Ipiranga, Paraná, Brazil)

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Em 27 de dezembro de 1972 uma chuva de meteoritos, 17 pedaços, caiu na localidade de Lajeado Ipiranga no oeste do Paraná. Dois meses mais tarde nós coletamos quatro corpos principais e vários fragmentos, num total de 3.467 gramas. Contudo diversos outros pedaços estão na propriedade do Departamento de Geologia da Universidade do Rio de Janeiro e do Jornal "Folha de Londrina". O peso total conhecido é certamente maior do que 7 kg. O Meteorito Lajeado Ipiranga mostra uma estrutura claramente condritica, com cõndrulos variando entre 0,2 a 2 mm em diâmetro. Os minerais mais abundantes são a olivina (Fo<sub>79</sub>) e a bronzita (En<sub>82</sub>) com uma composição muito uniforme; subordinariamente temos kamacita, taenita, troilita e plagioclásio facilmente visível. Minerais acessórios incluem cromita, pentlandita e oldhamita. A composição química é: Fe 14,51; Ni 1,75; Co 0,09; FeS 3,79; SiO<sub>2</sub> 36,58, TiO<sub>2</sub> 0,26; Al<sub>2</sub>O<sub>3</sub> 2,94; CrO<sub>3</sub> 0,10; FeO 12,68; MnO 0,50; MgO 23,61; CaO 1,36; Na<sub>2</sub>O 0,84; K<sub>2</sub>O 0,16; P<sub>2</sub>O<sub>5</sub> 0,36; H<sub>2</sub>O<sup>+</sup> 0,32; H<sub>2</sub>O<sup>-</sup> 0,36; C 0,08. O meteorito é um condrito ordinário que é bastante equilibrado (H5). A característica mais interessante é a presença de diversos cõndrulos de vidro turvo com evidente efeito de colisões.

<http://articles.adsabs.harvard.edu/full/1975Metic..10Q.380C/0000380.000.html/>

strike is roughly radial to the center of the island and whose dip is generally steep. A few quartz bearing fragments are present in the breccia. Several of the quartz grains show one and occasionally more sets of deformation lamellae. These observations suggest strongly that the Ile Rouleau structure is the elevated central part of an astrobleme, the rest of which is under water. The age is unknown within wide limits: post-Aphebian (1650 m.y.) and pre-Wisconsinian (100,000 y.).

Moyer, P.T. Jr., 1900. Guyon Area Mistassini Territory. *Quebec Dept. Mines Prelim. Rep.* 427.

### THE CHONDRITIC SHOWER OF LAJEADO IPIRANGA, PARANÁ, BRAZIL

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On December 27th 1972 a meteorite shower, 17 pieces, fell at Lajeado Ipiranga in western Paraná; two months later, we collected four main bodies and various fragments, 3467 g total mass. However several other pieces are the property of the Dept. of Geology of the Rio de Janeiro University and of the newspaper "Folha de Londrina." The total known weight is surely greater than 7 kg. The Lajeado Ipiranga meteorite shows a clearly chondritic structure, with chondrules ranging from 0.2 to 2 mm in diameter. The most abundant minerals are olivine (Fo<sub>79</sub>) and bronzite (En<sub>82</sub>) with a quite uniform composition; subordinate are kamacite, taenite, troilite and a readily visible plagioclase: accessory minerals include chromite, pentlandite and oldhamite. The chemical composition is: Fe 14, 51; Ni 1, 75; Co 0, 09; FeS 3, 79; SiO<sub>2</sub> 36, 58; TiO<sub>2</sub> 0, 26; Al<sub>2</sub>O<sub>3</sub> 2, 94; Cr<sub>2</sub>O<sub>3</sub> 0, 10; FeO 12, 68; MnO 0, 50; MgO 23, 61; CaO 1,36; Na<sub>2</sub>O 0, 84; K<sub>2</sub>O 0, 16; P<sub>2</sub>O<sub>5</sub> 0, 36; H<sub>2</sub>O<sup>+</sup> 0, 32; H<sub>2</sub>O<sup>-</sup> 0, 36; C 0, 08. The meteorite is an ordinary chondrite that is quite equilibrated (H5). Its most interesting feature is the presence of several turbid glass chondrules with evident shock effects.

### SOME PRIMORDIAL LEAD INVESTIGATIONS

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The U, Th and Pb concentrations and the isotopic composition of Pb were determined on total rock samples of two H3 chondrites, Sharps and Bremervoerde, and the glass phase of an LL chondrite, Bhola. The Bhola sample contained equal amounts of glass and olivine. The Pb concentrations varied from 2.4 ppm in Sharps to 0.38 ppm in Bremervoerde. The U