

Volume 14

March 2006

*METEORITE NEWSLETTER*

JAPANESE COLLECTION OF ANTARCTIC METEORITES

EDITED BY  
HIDEYASU KOJIMA

Antarctic Meteorite Research Center  
National Institute of Polar Research (NIPR)  
Tokyo

## Sample Request Deadline

Sample requests that are received by the curator before **April 25, 2006**, will be reviewed by the Committee on Antarctic Meteorite Research (CAMR), which will meet in May. Requests that are received after the April 25 deadline may be delayed for review until the CAMR meeting in autumn, **2006**.

All sample requests should be made in writing to:

Dr. Hideyasu Kojima  
Meteorite Curator  
Antarctic Meteorite Research Center  
National Institute of Polar Research (NIPR)  
9-10, Kaga 1-chome, Itabashi-ku, Tokyo 173-8515  
Japan  
FAX: 81-3-3962-5711  
E-mail: [curator@nipr.ac.jp](mailto:curator@nipr.ac.jp)

NIPR Sample Allocation Policies and the Request Form are also available in the following web site.

**<http://yamato.nipr.ac.jp/AMRC/index.html>**

Sample Name: Yamato 000027

Location: Yamato Mountains

Dimensions (cm): 2.0x2.0x1.6

Weight (g): 9.68

Weathering: A

Fracturing: A

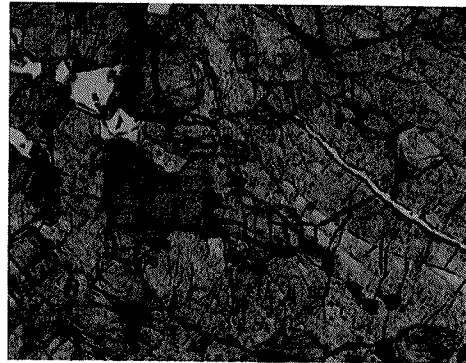
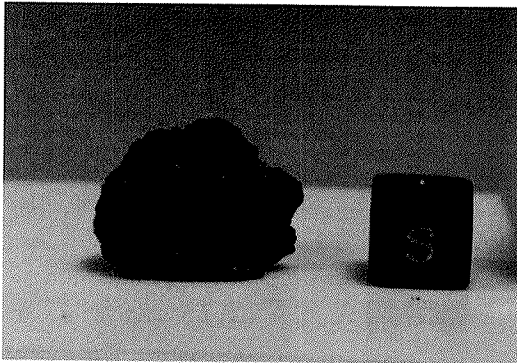
Meteorite Type: Lherzolithic shergottite

#### Macroscopic description

This is a subrounded stone. A small patch of shiny black fusion crust remains on one plane surface. Exposed interior shows fine-grained granular texture. Thick (2mm) black shock vein penetrates the stone.

#### Petrographic Description

The section shows a typical poikilitic texture. Large oikocrysts of pyroxene enclose olivines and oxide minerals. Minor maskelynites are observed. Low-Ca pyroxene has a mean composition of  $\text{Fs}_{23.1}\text{Wo}_{3.6}$ . Olivine has a mean composition of  $\text{Fa}_{32.6}$ . Mean composition of maskelynite is  $\text{An}_{56.9}$ . The oxygen isotopic composition (analyzed by I. Franchi) of a bulk rock sample that is  $\delta^{18}\text{O}=4.129$ ,  $\delta^{17}\text{O}=2.446$ ,  $\Delta^{17}\text{O}=0.299$ , indicates that the meteorite is martian origin.



2mm in width

Sample Name: Yamato 000047

Location: Yamato Mountains

Dimensions (cm): 2.2x1.7x1.5

Weight (g): 5.34

Weathering: A

Fracturing: A

Meteorite Type: Lherzolic shergottite

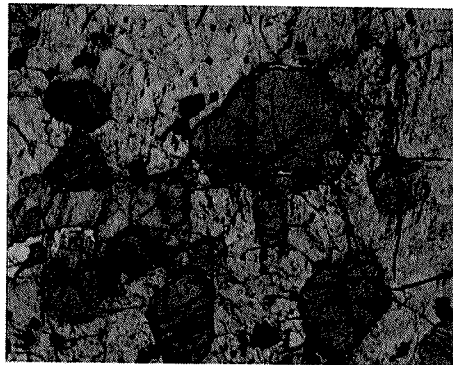
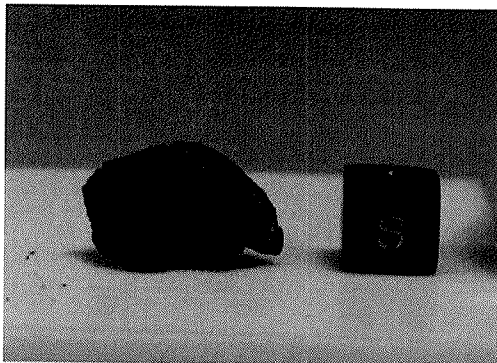
#### Macroscopic description

This is a subrounded, 1/2 to 1/3 of complete stone. 40% of surface is covered by shiny black fusion crust. Exposed interior shows fine-grained granular texture.

#### Petrographic Description

The section shows a typical poikilitic texture. Large oikocrysts of pyroxene enclose olivines and oxide minerals. Minor maskelynites are observed. Low-Ca pyroxene has a mean composition of  $\text{Fs}_{22.5}\text{Wo}_{3.4}$ . Olivine has a mean composition of  $\text{Fa}_{30.1}$ .

The oxygen isotopic composition (analyzed by I. Franchi) of a bulk rock sample that is  $\delta^{18}\text{O}=4.178$ ,  $\delta^{17}\text{O}=2.481$ ,  $\Delta^{17}\text{O}=0.308$ , indicates that the meteorite is martian origin.



2mm width

Sample Name: Yamato 000097

Location: Yamato Mountains

Dimensions (cm): 3.5x3.3x1.7

Weight (g): 24.48

Weathering: A

Fracturing: A

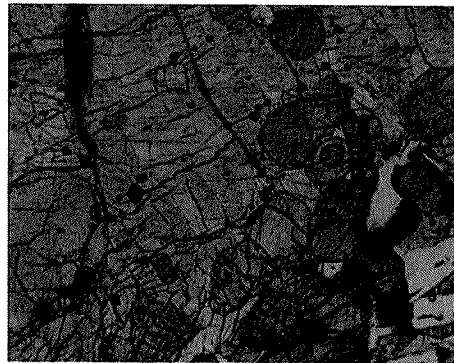
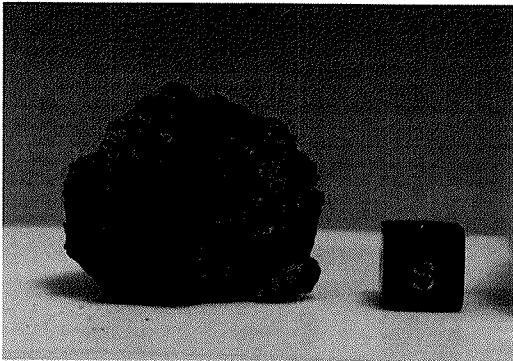
Meteorite Type: Lherzolic shergottite

#### Macroscopic description

This is a platy-shaped nearly complete stone. 50% of stone is covered by shiny black fusion crust. Exposed interior shows fine-grained granular texture.

#### Petrographic Description

The section shows a typical poikilitic texture. Large oikocrysts of pyroxene enclose olivines and oxide minerals. Minor maskelynites are observed. Low-Ca pyroxene has a mean composition of  $Fs_{22.0}Wo_{3.1}$ . Olivine has a mean composition of  $Fa_{33.0}$ . Composition of maskelynite is  $An_{61.2}$ . The oxygen isotopic composition (analyzed by I. Franchi) of a bulk rock sample that is  $\delta^{18}O=4.178$ ,  $\delta^{17}O=2.471$ ,  $\Delta^{17}O=0.298$ , indicates that the meteorite is martian origin.



2mm width