DAR AL GANI 876, A FURTHER FRAGMENT OF THE DAG-SHERGOTTITE. R. BARTOSCHEWITZ\textsuperscript{1} and D. ACKERMANN\textsuperscript{2}, \textsuperscript{1} BML, Lehmann 53, D-38518 Gifhorn, Germany (Bartoschewitz.Meteorite-Lab@t-online.de), \textsuperscript{2} Inst. für Geowissenschaften der Univ., Olshausenstr. 40, D-24098 Kiel, Germany

On May 7\textsuperscript{th}, 1998 a meteorite suspected small stone of 6.216 g was found in the Upper Serir al Qattusah, south of Al Fugha in Fezzan/Libya. The exact find site is not known. The stone was brought to a meteorite dealer, who send a sample for investigation.

A polished thin section shows porphyric olivine up to 2 mm in a matrix of pyroxene and maskelynite, accompanied by several opaque minerals, reflecting a basaltic shergottite with relations to the lherzolitic shergottites. The parent body of this meteorite group is most probably the planet Mars.

Microprobe measurements with an Cameca Camebase Microbeam 15 kV 15nA were made from the various minerals with following results:

- Olivine FA37-38
- Pigeonite En59-66Wo8-14
- Augite En52-45Wo33-37
- Maskelynite An56-74Or0.2-1.2
- Chromite (Fe\textsubscript{0.83}Mg\textsubscript{0.17})(Cr\textsubscript{0.85}Al\textsubscript{0.15}Fe\textsubscript{0.01}Ti\textsubscript{0.01})\textsubscript{2}O\textsubscript{4}
- Ti-Cr-spinel (Fe\textsubscript{0.77-0.84}Mg\textsubscript{0.23-0.16}
                            (Cr\textsubscript{0.49-0.15}Fe\textsubscript{0.18-0.45}Ti\textsubscript{0.18-0.30}Al\textsubscript{0.14-0.07})\textsubscript{2}O\textsubscript{4}
- Ilmenite (Fe\textsubscript{0.80}Mg\textsubscript{0.18}Cr\textsubscript{0.02}Mn\textsubscript{0.01})TiO\textsubscript{3}
- Pyrrhotite Fe\textsubscript{0.8}S

The Ti-Cr-spinels showing the complete range from Ti-chromite to Ti-magnetite with 13 to 21 \% TiO\textsubscript{2} (fig. 1). Ilmenite with about 2.5 \% MgO is accompanying these spinels. The observed pyrrhotite bears 0.5 to 2.5 \% Ni.

Petrological data and mineral-chemistry of Dar al Gani 876 meet those of the four former published olivine-shergottites, discovered in the Upper Serir al Qattusah between 1996 and 2000 within an area of approximately 30 x 5 km [1, 2, 3, 4], so DaG876 is most probably paired with them:

- DaG 476 2015 g 27°21.16' N, 16°12.04' E
- DaG 489 2146 g ~27°8' N, 16°25' E
- DaG 670 1619 g 27°10' N, 16°10' E
- DaG 735 588 g ~27°30' N, 16°30' E
- DaG 876 6.2 g ~27°30' N, 16°30' E

Petrological very similar are also the olivine-shergottite finds of Sayh al Uhaymir 005, 008, 051 and 094 [4, 5] about 4200 km east, in Oman. It was discussed, whether they are also paired with the DaG shergottite finds. In the meantime, investigation of terrestrial ages of the Libyan and Oman shergottites confirm, that they are different falls [6].