Dashkovaite $Mg(HCO_3)_2 \cdot 2H_2O$

Crystal Data: Monoclinic. *Point Group:* $2/m$. Fibrous, to 3 mm, in porous aggregates.

Physical Properties: *Fracture:* Uneven. *Tenacity:* Sectile. Hardness = 1 D(meas.) = n.d. D(calc.) = 1.74

Optical Properties: Semitransparent. *Color:* White, colorless in transmitted light. *Luster:* Vitreous.
Optical Class: Biaxial (+). *Orientation:* X = elongation. $\alpha = 1.465(3)$ $\beta = 1.486(3)$ $\gamma = 1.516(3)$ 2V(meas.) = n.d. 2V(calc.) = 81(5)°

Cell Data: *Space Group:* $[P2_1/c]$ (by analogy to synthetic). $a = 8.64(1)$ $b = 7.15(1)$ $c = 9.38(1)$ $\beta = 98.0(1)°$ Z = 4

X-ray Powder Pattern: Korshunovskoye deposit, Russia.
3.40 (10), 4.90 (9), 4.64 (8), 3.68 (8), 4.30 (7), 5.45 (4), 4.56 (4)

Chemistry:

	(1)	(2)
C	16.2	13.17
Mn	0.2	
Mg	16.4	13.33
H	3.9	3.32
O	[63.3]	70.18
Total	[100.0]	100.00

(1) Korshunovskoye deposit, Russia; by electron microprobe, average of two analyses, C and H by high-temperature sorption in oxygen, O by difference; corresponding to $(Mg_{1.00}Mn_{0.01})_{\Sigma=1.01}(H_{1.00}C_{1.00}O_{3.00})_2 \cdot 1.87H_2O$. (2) $Mg(HCO_3)_2 \cdot 2H_2O$.

Occurrence: Rare, in hydrothermal veinlets in serpentine in dolomite marble.

Association: Shabynite, iowaite, ekaterinite, korshunovskite, halite, hydromagnesite.

Distribution: From the Korshunovskoye iron–boron skarn deposit, Irkutsk district, Siberia, Russia.

Name: To honor Ekaterina Romanova Dashkova (1744–1810), Director of the St. Petersburg Academy of Sciences and President of the Russian Academy of Sciences.

Type Material: A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 81597.

References: (1) Chukanov, N.V., D.I. Belakovskiy, S.V. Malinko, and N.I. Organova (2000) Dashkovaite $Mg(HCO_3)_2 \cdot 2H_2O$ – a new formate mineral. Zap. Vses. Mineral. Obshch., 129(6), 49–53 (in Russian with English abs.). (2) (2001) Amer. Mineral., 86, 1534 (abs. ref. 1).