INTERNATIONAL MINERALOGICAL ASSOCIATION COMMISSION ON NEW MINERALS, NOMENCLATURE AND CLASSIFICATION

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3 January, 2023

Dear Atali A. Agakhanov,

Congratulations on your new mineral, NACARENIOBSITE-(Y) (2022-105)!

The attached summary will appear in my next memorandum to the members of the Commission on New Minerals, Nomenclature and Classification. You should consider the comments of the members when you write your final description.

Although the Commission has no strict rule dealing with publication, I would ask that you ensure that the first published record of your mineral is in the scientific literature.

The CNMNC has decided to announce new minerals (with or without their name, depending upon the authors' wishes) with some data on the CNMNC website, one month after their approval. The text that will appear is attached below.

One of the rules of our Commission is that the description of a new mineral must be published within **two years** of notification of the approval. If publication does not take place during that time, approval of the mineral and its name will be withdrawn.

Proof of receipt of the type specimen(s) by the curator of the collection in which the type specimen(s) have been deposited must be sent to me as soon as possible to ensure approval.

The Commission strongly disapproves of the practice of providing specimens of new species to mineral dealers prior to the full description of the new species being published in the scientific literature.

Please send a copy of this letter with the manuscript of your description when you submit the paper for publication. This will indicate to the editor of the journal that the mineral and its name have been approved by the Commission on New Minerals, Nomenclature and Classification of the International Mineralogical Association.

Please send a reprint of the description to me when it is published.

Best regards,

Ferdinando Bosi, Chairman CNMNC

Ferdinand Boni

Encl.

Monthly announcement of new minerals on the CNMNC website and in the *Mineralogical Magazine* and *the European Journal of Mineralogy* with or without their name, with a limited number of data.

The Commission on New Minerals, Nomenclature and Classification decided in January 2010 (Proposal 09-D: the early publication of new mineral names) that additional data would be published <u>one month</u> after the approval date on the CNMNC website. This data will also be published in the *Mineralogical Magazine* and in the *European Journal of Mineralogy*, under the heading of a CNMNC Newsletter.

For your newly approved mineral, the following data will be published in line with the above, unless you wish the mineral name to remain confidential until the full description is published. If this is the case, the name will be removed from the data listed below. **NOTIFY ME BY E-MAIL IF YOU DO NOT WISH TO HAVE THE NAME OF YOUR MINERAL RELEASED PRIOR TO PUBLICATION.**

IMA No. **2022-105**

Nacareniobsite-(Y)

Na₃Ca₃YNb(Si₂O₇)₂OF₃

Symbol?

Darai-Pioz alkaline massif, upper reaches of the Darai-Pioz River, Tajikistan (39°30' N, 70°40' E)

Atali A. Agakhanov*, Maxwell C. Day, Elena Sokolova, Vladimir Y. Karpenko, Frank C. Hawthorne, Leonid A. Pautov, Igor V. Pekov, Anatoly V. Kasatkin and Vitaliya A.

Agakhanova

*E-mail: atali99@mail.ru Seidozerite supergroup

Monoclinic: $P2_1/c$; structure determined

 $a = 7.408(3), b = 5.665(2), c = 18.817(16) \text{ Å}, \beta = 101.37(5)^{\circ}$

5.44(31), 3.591(26), 3.068(100), 2.944(45), 2.801(23), 2.707(32), 2.023(25), 1.853(29)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5488/1

How to cite: Agakhanov, A.A., Day, M.C., Sokolova, E., Karpenko, V.Y., Hawthorne, F.C., Pautov, L.A., Pekov, I.V., Kasatkin, A.V. and Agakhanova, V.A. (2023) Nacareniobsite-(Y), IMA 2022-105. CNMNC Newsletter 71, Eur. J. Mineral., 35, https://doi.org/.....

2022-105 **NACARENIOBSITE-(Y)**

	Yes	No	Abstain
Mineral	20		
Name	20		

Consequently, both the mineral and the name have been approved.

COMMENTS ON THE MINERAL:

Those who voted **YES** made the following comments:

- Found in peralkaline pegmatite.
- 2. The optical properties are very incomplete. The lack of a measured 2V suggests that conoscopic observation was not possible, so how was the dispersion determined? Can even partial optical orientation be given? Was there any evidence of pleochroism? Please specify the direction of elongation of crystals. The calculated PXRD intensities should be included in Table 2.
- 3. Very good description.
- [100] twinning by metric merohedry (twin index 1, obliquity 0°); in fact, the lattice is metrically C orthorhombic with cell parameters 7.408, 36.895, 5.665, 90.00, 90.00, 89.98.
- 5. Good quality data of a further member of the seidozerite supergroup. Form the BSE image reported in Fig.1 it seems that nacareniobsite-(Y) alters to leucophanite and fluornatropyrochlore, in a Be-rich fluid depleting REE. It would be useful to find some further explanation of the geological origin of these particular pegmatites in the publication of the description.
- 6. *Name*: by analogy with nacareniobsite-(Ce).

Occurrence/Paragenesis: crystals in reedmergnerite, in an extremely prolific peralkaline pegmatite.

Chemical Analysis/Formula: AOK.

Physical Properties: OK. Optical Properties: AOK.

XRD data/Crystal Structure: AOK.

Rinkite structure. Other data: n/a.

Type material location: OK.

Relationship to other minerals: A new member of the rinkite group of sorosilicates, Y analogue of nacareniobsite-(Ce) and related to rinkite itself by the exchange (NaNb)(CaTi)-1.

References: OK

- Enough information to establish a new mineral, good job. 7.
- 8. The microprobe standards for Eu, Tm and Yb should be checked.

Those who voted **NO** made the following comments:

Those who **ABSTAINED** made the following comments:

COMMENTS ON THE NAME:

Those who voted **YES** made the following comments:

3 (4)

1. In agreement with the classification of the seidozerite supergroup approved by IMA-CNMNC.

Those who voted \mathbf{NO} made the following comments:

Those who **ABSTAINED** made the following comments:

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