

# Register list for 4 new names including Pangiarchaeum gen. nov.

Submitted by Hua, Zhengshuang

## Order *Pangiarchaeales*

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### Etymology

[Pan.gu.i.ar.chae.a'les] N.L. neut. n. *Pangiarchaeum*, type genus of the order; *-ales*, ending to denote an order; N.L. fem. pl. n. *Pangiarchaeales*, the Pangiarchaeum order

### Nomenclatural type

Genus *Pangiarchaeum*

### Description

A novel lineage branching within *Korarchaeia*.

### Classification

*Archaea* » “Korarchaeota” » “Korarchaeia” » *Pangiarchaeales*

### References

Proposed: Qu et al., 2023

### Registry URL

<https://seqco.de/i:23991>

## Family *Pangiarchaeaceae*

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### Etymology

[Pan.gu.i.ar.chae.a.ce'ae] N.L. neut. n. *Pangiarchaeum*, type genus of the family; *-aceae*, ending to denote a family; N.L. fem. pl. n. *Pangiarchaeaceae*, the Pangiarchaeum family

### Nomenclatural type

Genus *Pangiarchaeum*

### Description

The family description is the same as that of the only species assigned to the family, *Pangiarchaeum symbiosum*.

### Classification

*Archaea* » “Korarchaeota” » “Korarchaeia” » *Pangiarchaeales* » *Pangiarchaeaceae*

### References

Proposed: Qu et al., 2023

### Registry URL

<https://seqco.de/i:23990>

## Genus *Pangiarchaeum*

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### Etymology

[Pan.gu.i.ar.chae'um] N.L. n. *Pangu*, creation figure in Chinese mythology who separated heaven from Earth; N.L. neut. n. *archaeum*, ancient archaeon; N.L. neut. n. *Pangiarchaeum*, an archaeon created by Pangu

### Nomenclatural type

Species *Panguiarchaeum symbiosum*<sup>Ts</sup>

### Description

The genus description is the same as that of the nomenclatural type *Panguiarchaeum symbiosum*.

### Classification

*Archaea* » “Korarchaeota” » “Korarchaeia” » *Panguiarchaeales* » *Panguiarchaeaceae* » *Panguiarchaeum*

### References

Proposed: Qu et al., 2023

### Registry URL

<https://seqco.de/i:23984>

## Species *Panguiarchaeum symbiosum*<sup>Ts</sup>

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### Etymology

[sym.bi.o'sum] Gr. masc. or fem. adj. *symbios*, companion; N.L. neut. adj. *symbiosum*, living together with, referring to the proposed symbiotic lifestyle

### Nomenclatural type

[NCBI Assembly: GCA\\_024720975.1](#)<sup>Ts</sup>

### Description

Archaea that inhabit circumneutral, terrestrial geothermal systems and are likely hyperthermophiles. Genomes of this species lack annotated pathways for synthesis of membrane lipids, many amino acids, vitamins, and purines, suggesting they are likely to be symbiotic. Predicted to be obligately anaerobic and fermentative.

### Classification

*Archaea* » “Korarchaeota” » “Korarchaeia” » *Panguiarchaeales* » *Panguiarchaeaceae* » *Panguiarchaeum* » *Panguiarchaeum symbiosum*<sup>Ts</sup>

### References

Proposed: Qu et al., 2023

### Registry URL

<https://seqco.de/i:23983>

## References

1. Qu et al. (2023). *Panguiarchaeum symbiosum*, a potential hyperthermophilic symbiont in the TACK superphylum. *Cell Reports*. DOI:10.1016/j.celrep.2023.112158

## Register List Certificate of Validation

On behalf of the *Committee on the Systematics of Prokaryotes Described from Sequence Data* (SeqCode Committee), we hereby certify that the Register List [seqco.de/r:d51mzlo9](https://seqco.de/r:d51mzlo9) submitted by **Hua, Zhengshuang** and including 4 new names has been successfully validated.

**Date of Priority:** 2023-05-19 01:24 UTC

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