

Recent Activities of the ICSP

International Committee on Systematics of Prokaryotes (ICSP) Symposium

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What are the duties of the ICSP?

Within IUMS, ICSP is tasked with prokaryotic nomenclature

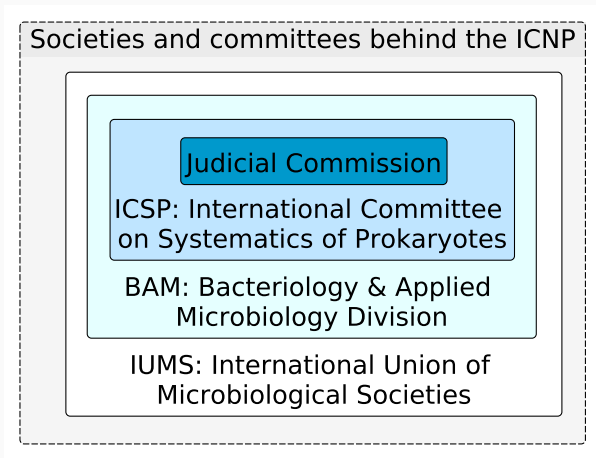


Figure 1: The ICSP belongs to the BAM subdivision of IUMS. The ICNP [1] is published by the ICSP. The Judicial Commission belongs to the ICSP.

The ICSP Statutes define the ICSP's function

The function is to ensure the proper application of the code

- “**Article 3. Functions of the ICSP** (b) To write, edit, interpret and disseminate the *International Code of Nomenclature for Prokaryotes* (ICNP). ... (j) To take other actions that ensure the proper application of the Code.”
- → The purpose of duties (b) to (j) is to *ensure the proper application of the code*.

The function is to represent different microbiological disciplines

- “**Article 3. Functions of the ICSP** (a) To represent the diversity of interests of different microbiological disciplines on matters concerning the nomenclature of prokaryotes”.
- → E.g., the ICSP is *not a lobbying organisation for taxonomists*.

The ICSP Statutes define the Executive Boards's function

The EB-ICSP's function is to ensure the functioning of the ICSP

- See <https://doi.org/10.1099/ijsem.0.003117>
- **“Article 5(b). Functions of the EB-ICSP ... (9) To ensure the proper functioning of the organizations and officers of the ICSP.”**
- → That's why the EB-ICSP has organised this session.

**The ICSP's “routine” activities have
continued successfully**

The IJSEM remained the major journal for taxon descriptions

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RESEARCH ARTICLE

Imachi et al., *Int. J. Syst. Evol. Microbiol.* 2024;74:006435
DOI 10.1099/ijsem.0.006435



Promethearchaeum syntrophicum gen. nov., sp. nov., an anaerobic, obligately syntrophic archaeon, the first isolate of the lineage 'Asgard' archaea, and proposal of the new archaeal phylum *Promethearchaeota* phyl. nov. and kingdom *Promethearchaeati* regn. nov.

Figure 2: Recent proposal of names from species up to the kingdom.

The number of validly published names per year is still increasing

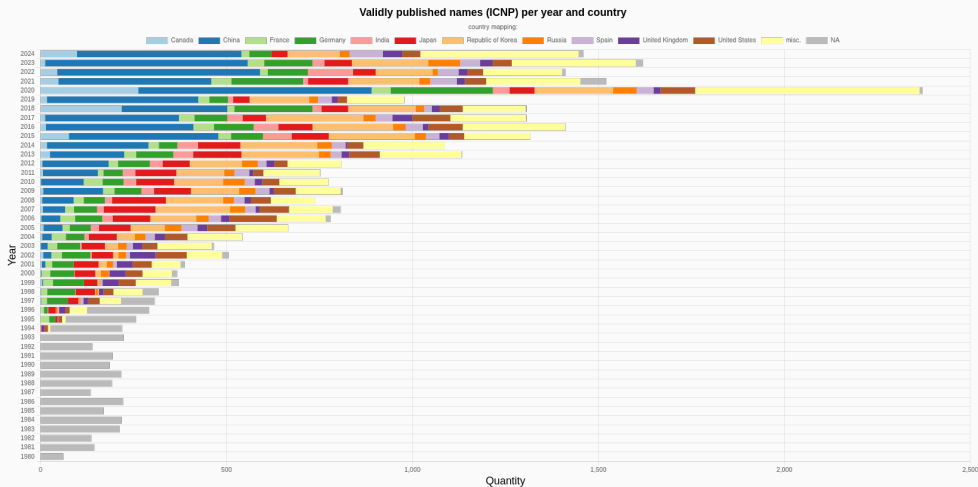


Figure 3: Number of validly published names per country and year. Figure from LPSN.

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NOTIFICATION LIST

Oren and Göker, *Int. J. Syst. Evol. Microbiol.* 2023;73:005910

DOI 10.1099/ijsem.0.005910



Notification that new names of prokaryotes, new combinations,
and new taxonomic opinions have appeared in volume 73, part 3
of the IJSEM

Aharon Oren^{1,*} and Markus Göker^{2,*}

Figure 4: IJSEM Notification List for IJSEM Volume 2023, March issue.

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VALIDATION LIST

Oren and Göker, *Int. J. Syst. Evol. Microbiol.* 2023;73:005845

DOI 10.1099/ijsem.0.005845



Validation List no. 211. Valid publication of new names and new combinations effectively published outside the IJSEM

Aharon Oren^{1,*} and Markus Göker^{2,*}

Figure 5: Validation List No. 211.

The number of validly published names per year is still increasing

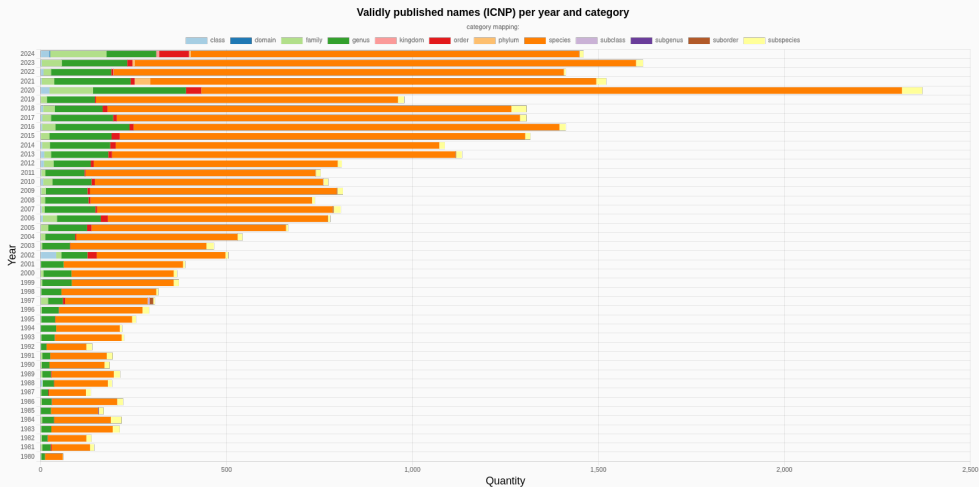


Figure 6: Number of validly published names per category and year. Figure from LPSN.

Candidatus Lists appear every six months

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NOTIFICATION LIST

Oren and Göker, *Int. J. Syst. Evol. Microbiol.* 2023;73:005821
DOI 10.1099/ijsem.0.005821



Candidatus List. Lists of names of prokaryotic *Candidatus* phyla

Aharon Oren^{1,*} and Markus Göker^{2,*}

Figure 7: List of prokaryotic *Candidatus* phyla.

**Special publications on
nomenclature have been published
in the IJSEM whenever needed**

INTERNATIONAL JOURNAL OF
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EDITORIAL

Göker *et al.*, *Int. J. Syst. Evol. Microbiol.* 2022;72:005754
DOI 10.1099/ijsem.0.005754



Status of the SeqCode in the *International Journal of Systematic and Evolutionary Microbiology*

Markus Göker^{1,*}, Edward R. B. Moore², Aharon Oren³ and Martha E. Trujillo⁴

Figure 8: An IJSEM Editorial published by the Editor-in-Chief, the List Editors, and the head of the ICSP Publications Committee.

Guidelines on nomenclature are published in the IJSEM

INTERNATIONAL JOURNAL OF
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ICSP MATTERS

Arahal et al., *Int. J. Syst. Evol. Microbiol.* 2023;73:005782
DOI 10.1099/ijsem.0.005782



Guidelines for interpreting the International Code of Nomenclature of Prokaryotes and for preparing a Request for an Opinion

David R. Arahal¹, Carolee T. Bull², Hans-Jürgen Busse³, Henrik Christensen⁴, Maria Chuvochina⁵, Svetlana N. Dedysh⁶, Pierre-Edouard Fournier⁷, Konstantinos T. Konstantinidis⁸, Charles T. Parker⁹, Ramon Rossello-Mora¹⁰, Antonio Ventosa¹¹ and Markus Göker^{12,*}

Figure 9: Guidelines for interpreting the ICNP (International Code of Nomenclature of Prokaryotes) issued by the Judicial Commission of the ICSP.

Proposals to emend the ICNP are published in the IJSEM

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ICSP MATTERS

Göker and Oren, *Int. J. Syst. Evol. Microbiol.* 2023;73:005650

DOI 10.1099/ijsem.0.005650



Proposal to include the categories kingdom and domain in the International Code of Nomenclature of Prokaryotes

Markus Göker^{1,*} and Aharon Oren²

Figure 10: Proposal to emend the ICNP (include two additional categories).

Proposals to emend the ICNP are published in the IJSEM

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ICSP MATTERS

Pallen, *Int. J. Syst. Evol. Microbiol.* 2024;74:006233
DOI 10.1099/ijsem.0.006233



Formation of prokaryote names from personal names: a review of current practice and a proposal to emend Appendix 9 of the International Code of Nomenclature of Prokaryotes

Mark J. Pallen^{1,2,*}

Figure 11: Proposal to emend the ICNP (restructure the part that explains how to form prokaryotic names from names of persons, e.g., Ann Patricia Wood → *Annwoodia*).

Requests for an Opinion are published in the IJSEM

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ICSP MATTERS

Pallen, *Int. J. Syst. Evol. Microbiol.* 2023;73:005933

DOI 10.1099/ijsem.0.005933



Request for an Opinion on the standing and retention of *Firmicutes* as a phylum name

Mark J. Pallen^{1,2,3,*}

Figure 12: Requests for an Opinion are directed to the Judicial Commission.

Requests for an Opinion are published in the IJSEM

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ICSP - REQUEST FOR AN OPINION

Li, *Int. J. Syst. Evol. Microbiol.* 2024;74:006434

DOI 10.1099/ijsem.0.006434



Request for an Opinion: conservation of the illegitimate prokaryotic generic name *Proteus* Hauser 1885 (Approved Lists 1980)

Meng-Syun Li*

Figure 13: Requests for an Opinion are directed to the Judicial Commission.

**The ICSP has continued to process
special enquiries on nomenclature**

The Judicial Commission reacts to every Request for an Opinion

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ICSP - OPINION

Arahal et al., *Int. J. Syst. Evol. Microbiol.* 2023;73:005797
DOI 10.1099/ijsem.0.005797



Judicial Opinion 128

David R. Arahal¹, Carolee T. Bull², Henrik Christensen³, Maria Chuvochina⁴, Svetlana N. Dedysh⁵, Pierre-Edouard Fournier⁶, Konstantinos T. Konstantinidis⁷, Charles T. Parker⁸, Ramon Rossello-Mora⁹, Antonio Ventosa¹⁰ and Markus Göker^{11,*}

Figure 14: Judicial Opinion No. 128, issued by the Judicial Commission of the ICSP.

The Judicial Commission reacts to every Request for an Opinion

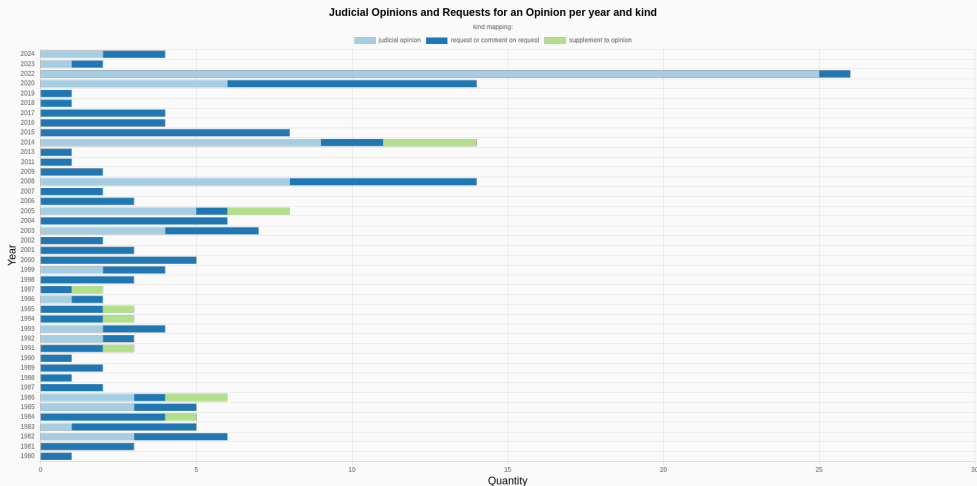


Figure 15: A huge backlog of Requests for an Opinion has been cleared in 2022.

The Judicial Commission reacts to every Request for an Opinion

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ICSP MATTERS

Arahal et al., *Int. J. Syst. Evol. Microbiol.* 2024;74:006414

DOI 10.1099/ijsem.0.006414



Judicial Opinion 130

David R. Arahal¹, Carolee T. Bull², Henrik Christensen³, Maria Chuvochina⁴, Christopher Dunlap⁵, Maria del Carmen Montero-Calasanz⁶, Charles T. Parker⁷, Peter Vandamme⁸, Antonio Ventosa⁹, Stefano Ventura¹⁰, Peter Young¹¹ and Markus Göker^{12,*}

Figure 16: Judicial Opinion No. 130, issued by the ICSP's Judicial Commission: Conservation of *Rhodococcus* Zopf 1891 (Approved Lists 1980) over *Rhodococcus* Hansgirg 1888.

The 2022 revision of the ICNP has compiled many ratified changes

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ICSP MATTERS

Oren *et al.*, *Int. J. Syst. Evol. Microbiol.* 2023;73:005585
DOI 10.1099/ijsem.0.005585



International Code of Nomenclature of Prokaryotes. Prokaryotic Code (2022 Revision)

Aharon Oren¹, David R. Arahal², Markus Göker³, Edward R. B. Moore⁴, Ramon Rossello-Mora⁵ and Iain C. Sutcliffe⁶
(Editors)

Figure 17: 2022 revision of the ICNP (International Code of Nomenclature of Prokaryotes).

A variety of ICNP emendations have been debated and ratified since then

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ICSP MATTERS

Oren, *Int. J. Syst. Evol. Microbiol.* 2023;73:006070
DOI 10.1099/ijsem.0.006070



Emendation of Rules 8, 15, 22, 25a, 30(3)(b), 30(4), 34a, and Appendix 7 of the International Code of Nomenclature of Prokaryotes

Aharon Oren*

Figure 18: Official announcement of a variety of emendations of the ICNP ratified in 2023.

**ICSP Subcommittees on Taxonomy
have remained active and new
subcommittees have been formed**

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ICSP MATTERS

Cui *et al.*, *Int. J. Syst. Evol. Microbiol.* 2024;74:006290
DOI 10.1099/ijsem.0.006290



Proposed minimal standards for description of new taxa of the class *Halobacteria*

Heng-Lin Cui¹, Jing Hou¹, Mohammad Ali Amoozegar², Mike L. Dyll-Smith³, Rafael R. de la Haba⁴, Hiroaki Minegishi⁵, Rafael Montalvo-Rodriguez⁶, Aharon Oren^{7,*}, Cristina Sanchez-Porro⁴, Antonio Ventosa⁴ and Russell H. Vreeland⁸

Figure 19: The last minimal standards issued by a Subcommittee on Taxonomy at the time of writing.

New Subcommittees on Taxonomy have been established

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ICSP - MINUTES

Hahnke *et al.*, *Int. J. Syst. Evol. Microbiol.* 2023;73:005846
DOI 10.1099/ijsem.0.005846



International Committee on Systematics of Prokaryotes: subcommittee on the taxonomy of Myxobacteria (Myxococcota). Minutes of the closed online meeting, 21 September 2022.

Richard L. Hahnke^{1,*},†, Rolf Müller^{2,3,4,5}†, David Whitworth⁶†, Joachim Wink³† and Ronald Garcia^{2,3,4,5}†

Figure 20: The first meeting minutes issued by the most recent Subcommittee on Taxonomy.

New Ad Hoc Subcommittees have been established

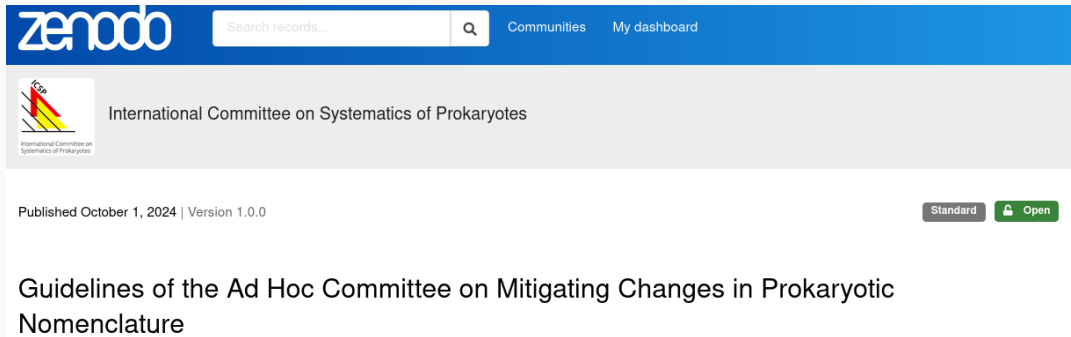


Figure 21: The Ad Hoc Committee on Mitigating Changes in Prokaryotic Nomenclature (CoMiCProN) has been initiated in early 2024.

**The ICSP Executive Board has
initiated various activities**

The Executive Board has compiled ICSP Frequently Asked Questions

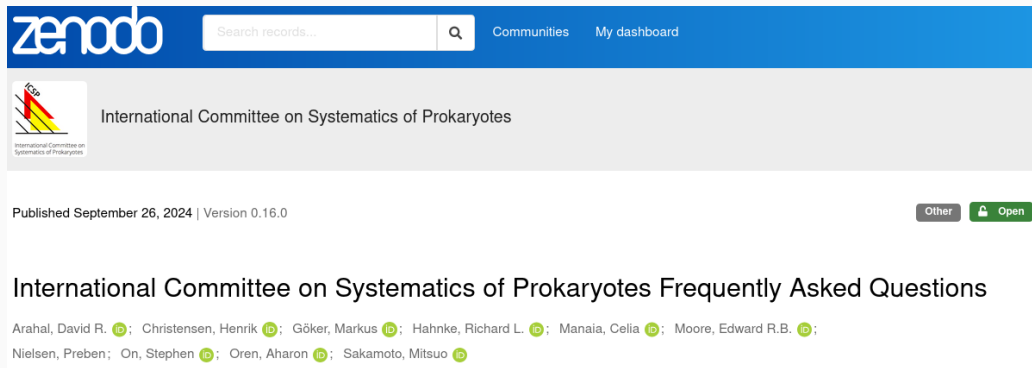


Figure 22: ICSP FAQ in the ICSP Community on Zenodo. There are other outreach activities: social media, ICSP website, special courses, live talks etc.

The Executive Board has organised various ballots

Kinds of votes conducted by the ICSP

- candidates for the Executive Board
- candidates for members of the Judicial Commission
- candidates for co-option into the ICSP
 - → ICSP has become considerably more diverse
- Judicial Opinions
- proposals to emend the ICNP
- proposals to emend the ICSP Statutes

The Executive Board has initiated a revision of the ICSP Statutes

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REQUESTS FOR AN OPINION

Whitman *et al.*, *Int J Syst Evol Microbiol* 2019;69:584–593
DOI 10.1099/ijsem.0.003117



Request for revision of the Statutes of the International Committee on Systematics of Prokaryotes

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ICSP MATTERS

Arahal *et al.*, *Int. J. Syst. Evol. Microbiol.* 2024;74:006291
DOI 10.1099/ijsem.0.006291



Proposals to revise the Statutes of the International Committee on Systematics of Prokaryotes

Figure 23: Five years after the publication of the last revision, a proposal was published to revise the ICSP Statutes, mainly by members of the Executive Board.

**Summary: What has the ICSP
achieved in recent years?**


What has the ICSP achieved in recent years?

Fulfilling its duties

- assigning officers, commissioners and responsibilities for other tasks
- publishing the IJSEM itself and nomenclature-related papers
- processing Requests for an Opinion and proposals to emend the ICNP

Ensuring the sustainability of the work

- becoming considerably more diverse and rejuvenating the committee
- establishing new institutions and responsibilities within the ICSP
- expanding its outreach activities
- revisiting and improving the basis of the ICSP's work
- remaining the state-of-the-art institution for prokaryotic nomenclature

 A. Oren, D.R. Arahal, M. Göker, E.R.B. Moore, R. Rossello-Mora, and I.C. Sutcliffe.

International Code of Nomenclature of Prokaryotes. Prokaryotic Code (2022 Revision).

Int J Syst Evol Microbiol, 73:5585, 2023.