Minutes

Russell H. Vreeland Secretary
Antonio Ventosa Chairman

International Committee on Systematics of Prokaryotes

Subcommittee on the taxonomy of the *Halomonadaceae*

Minutes of the inaugural meetings, 31 July 2002, Paris, France

Session 1. Closed meeting

Minute 1. Call to order. The inaugural meeting of the subcommittee was held on 31 July 2002 at the Palais de Congrès in Paris, France. The meeting was called to order at 14:32 by the chairman, Dr Antonio Ventosa.

Minute 2. Record of attendance. The members present were Drs A. Ventosa (Acting Chairman), R. H. Vreeland (Acting Secretary), D. R. Arahal, C. D. Litchfield, M. K. Mormile and B. J. Tindall. Apologies were received from A. Gambacorta, W. D. Grant, Y. Park and E. Quesada. Dr V. Bejar attended as proxy for E. Quesada.

Minute 3. Description of committee function. Since this represented the inaugural meeting of the subcommittee, Dr Ventosa presented a brief description of the functions and responsibilities of the subcommittee. This included discussion of Article 9 of the ICSP Statutes [In *International Code of Nomenclature of Bacteria* (1990 Revision), pp. 152–155]. All subcommittee members were urged to obtain a copy of the Code or the newest edition, once it becomes available. Subcommittee members were reminded that the subcommittee does not enforce a particular taxonomic view or idea. The subcommittee is to function as a group of experts offering advice to others through the use of minimal standards and lists of validly published names for taxa described within the family *Halomonadaceae*.

Minute 4. Approval of the agenda. The agendas for both the closed and open meetings were approved by voice vote.

Minute 5. Minutes of the previous meeting. Since this was the inaugural meeting, there were no previous minutes.

Minute 6. Elections of chairman and secretary. Dr Litchfield nominated (seconded by Dr Tindall) Dr A. Ventosa as subcommittee Chair and Dr R. Vreeland as Secretary. These individuals were elected by acclamation of the subcommittee.

Minute 7. Nomination of new members. Dr V. Bejar (Granada, Spain) was nominated for election to membership.

Minute 8. Current membership. The current membership of the subcommittee is A. Ventosa (Chairman; Seville, Spain), R. H. Vreeland (Secretary; West Chester, USA), D. R. Arahal (Valencia, Spain), A. Gambacorta (Pozzuoli, Italy), W. D. Grant (Leicester, UK), C. D. Litchfield (Fairfax, USA), M. R. Mormile (Rolla, USA), Y. H. Park (Taejon, Korea), E. Quesada (Granada, Spain) and B. J. Tindall (Braunschweig, Germany).

Minute 9. Date of next meeting. The subcommittee discussed several potential options. The subcommittee members preferred the next International Conference on Halophilic Micro-organisms, scheduled for Ljubljana, Slovenia, in September 2004.

Minute 10. Adjournment. The closed meeting was adjourned at 15:00 on 31 July 2002.

Session 2. Open Meeting

Minute 11. Call to order. The open meeting was held on 31 July 2002 at the Palais de Congrès in Paris, France. The meeting was called to order at 15:03 by the Chairman, Dr A. Ventosa.

Minute 12. Record of attendance. All subcommittee members who attended the closed meeting were present for the open meeting. Additional attendees included Drs M. Kamekura (Chiba-Ken, Japan) and A. Oren (Jerusalem, Israel).

Minute 13. Discussion of validly published names of taxa within the family. Dr Arahal presented the subcommittee members with a list of correct names of genera and species based on the validly published names of members of the genera *Halomonas*, *Chromohalobacter*, *Zymobacter* and *Carnimonas*, together with other misnamed taxa that obviously belong within this family.

Dr Arahal also provided a list of applicable 16S and 23S rDNA gene sequences. This presentation led to a short discussion of material to be included in the subcommittee's web page. It was agreed that the secretary will contact Dr Aidan C. Parte to begin to set up this web page.

Minute 14. Discussion of minimal standards. The subcommittee had a spirited discussion of minimal standards and the impact of gene sequence information on all members of the taxon. Members did agree on the following points: (i) minimal standards for the *Halomonadaceae* will be patterned after currently available minimal standards for other taxa; (ii) the minimal standards will incorporate sufficient flexibility to allow for new developments; (iii) the standards should make use of a variety of techniques, including those that are relatively simple to carry out and allow quick differentiation of taxa; (iv) the standards should be polyphasic; (v) the standards will stress the importance of using type strains of the taxon and keeping adequate track of the culture collection numbers, sources etc.; (vi) due to the adaptability of members of this taxon, optimal growth conditions should be determined as part of the minimum standards. A working group consisting of Drs Arahal, Bejar, Litchfield and Mormile was established to prepare the standards.

Minute 15. Treatment of the *Halomonadaceae* in *Bergey's Manual*. Dr Vreeland reported that the galley proofs for the chapter on the *Halomonadaceae* in the 2nd edition of *Bergey's Manual of Systematic Bacteriology* have been examined. This chapter now contains a description of all recognized taxa within the family as of the end of 2001. There are currently no species *incertae sedis* listed in this chapter.

Minute 16. Phylogeny of the *Halomonadaceae*. Dr Arahal reported on phylogenetic inferences for the family based upon comparisons of currently available 16S and 23S rDNA sequences, stressing the importance of using reliable full or almost-full sequences to achieve sound phylogenetic analyses. The application of different treeing methods provides a deeper insight into the information content of the rRNA genes. Although the 23S rDNA

sequence is not available for all recognized taxa within the *Halomonadaceae*, its determination was recommended since it can be used to confirm 16S rDNA-based phylogenies and to extend the probability of success in probe searches. At present, most members of the genus *Halomonas* can be delineated into two well-defined rRNA groups (rRNA group 1 comprises the species *Halomonas elongata*, *Halomonas eurihalina*, *Halomonas halmophila*, *Halomonas salina*, *Halomonas halophila* and the recently proposed species *Halomonas maura*; rRNA group 2 includes *Halomonas aquamarina*, *Halomonas meridiana*, *Halomonas magadiensis*, *Halomonas venusta*, *Halomonas variabilis*, *Halomonas subglaciescola* and *Halomonas halodurans*) while, for some others, the relative order of evolution can not be fully ascertained (*Halomonas pacifica*, *Halomonas alimentaria*, *Halomonas halodenitrificans*, *Halomonas cupida*, *Halomonas pantelleriensis*, *Halomonas campisalis* and *Halomonas desiderata*). Dr Arahal also shared a preprint of a proposal to establish a new genus within the taxon, '*Cobetia marina*' [name effectively published by Arahal *et al.*, *Syst Appl Microbiol* 25 (2002), 207–211; validly published in *Int J Syst Evol Microbiol* 52 (2002), 1915–1916], to include the species *Halomonas marina*, which represents a deeper branching with respect to the *Halomonas*–*Chromohalobacter* group.

Minute 17. New species. Dr Bejar described *Halomonas maura*, an exopolysaccharide-producing species. Other possible new species include '*Halomonas ventosa*' and '*Halomonas mucosa*'.

Minute 18. Other business. Dr Vreeland told subcommittee members about a new project to begin ribotyping all recognized members of the family.

Minute 19. Adjournment. The meeting was adjourned at 17:55 on 31 July 2002.