

Judicial Commission of the International Committee on Systematic Bacteriology

IXth International (IUMS) Congress of Bacteriology and Applied Microbiology

Minutes of the meetings, 14, 15 and 18 August 1999, Sydney, Australia

Session 1

Minute 1. Call to order. Chairman H. G. Trüper called the meeting to order at 09:00 on 14 August 1999 in the Sydney Convention and Exhibition Centre, Sydney, Australia.

Minute 2. Record of attendance. Present were P. De Vos [Editorial Secretary, International Committee for Systematic Bacteriology (ICSB)], M. Goodfellow (Secretary for Subcommittees, ICSB), P. A. D. Grimont, R. M. Kroppenstedt, D. P. Labeda (Executive Secretary-Treasurer, ICSB), H. G. Trüper (Chairman, Judicial Commission), L. Sly (Vice-Chairman, ICSB), E. Stackebrandt [Chairman, ICSB, and Editor of *International Journal of Systematic Bacteriology* (IJSB)], J. M. Young. Apologies for absence were received from R. R. Colwell, H. Prauser, J. T. Staley, N. Weiss and G. A. Zavarzin. Also absent were: D. Jones and F. Portaels. No alternates had been proposed for absent members.

Minute 3. Minutes of the 1996 meeting. The minutes of the 1996 meeting, held in Jerusalem, Israel, were accepted as published [*Int J Syst Bacteriol* **47** (1997), 240–241].

Minute 4. Adoption of agenda. The agenda was adopted as circulated.

Minute 5. Matters arising from the minutes of the 1996 meeting. The membership on the Rules Revision Committee was not established in Jerusalem; this needs to be done in order to implement the proposals of the Judicial Commission on the matters concerning the International Code of Nomenclature of Bacteria (ICNB).

The proposed *ad hoc* Committee on the Impact of Genome Sequencing on Systematics has not been established since the Jerusalem meeting of 1996. It was the general opinion of the Judicial Commission members that scientific data were still too scarce for relevant discussions on the impact of overall genome sequencing on bacterial (prokaryotic) taxonomy. E. Stackebrandt stressed the attention of the Judicial Commission on the effect of additional information on genome sequencing becoming available in a very fast way, on the delineation of higher taxa. It is the task of the ICSB to indicate the interest of the taxonomists in this field. M. Goodfellow indicated that a workshop (see also below) is probably the best way to unite both the data handling people and taxonomists.

Minute 6. Appointment of a nominating committee. The chairman appointed a nominating committee consisting of D. Labeda, E. Stackebrandt and H. G. Trüper to search for replacements for the members of the 18th Class who will have completed their terms at the end of the Sydney meeting.

Minute 7. Action on proposals to amend the Bacteriological Code. Several notes published in IJSB [Euzéby, *Int J Syst Bacteriol* **48** (1998), 611–612; Tindall, *Int J Syst Bacteriol* **49**

(1999), 1309–1312; Tindall, *Int J Syst Bacteriol* **49** (1999), 1317–1319; Tindall, *Int J Syst Bacteriol* **49** (1999), 1321–1322] and letters (from J. P. Euzéby, T. Ezaki and H. G. Trüper) received by the Chairman and distributed to the members of the Judicial Commission were thoroughly discussed and led to the following proposals for amending the International Code of Nomenclature of Bacteria:

(1) Amendment to Rule 61. The Judicial Commission accepted the proposed amendment to Rule 61 [Euzéby, *Int J Syst Bacteriol* **48** (1998), 611–612] and decided that the Note for Rule 61 be modified as follows:

‘Note. The liberty of correcting a name or epithet under Rules 61, 62a and 62b must be used with reserve, especially if the change affects the first syllable and above all the first letter of the name or epithet. Except for changes of gender in specific epithets when species are transferred to other genera (nov. comb.) no grammatical or orthographic corrections will be accepted for names on the Approved Lists of Bacterial Names, the Validation Lists and the Notification Lists.’

The Judicial Commission noted that the stabilization of nomenclature of well-established taxa deserves priority above orthographic correctness, which would only introduce confusion (e.g. to correct *Bifidobacterium* to ‘*Bifidibacterium*’ and *Lactobacillus* to ‘*Lactibacillus*’). A stringent control system is needed to filter out orthographic mistakes in the future and therefore a paragraph will be added to ‘Guidelines for Authors’ of IJSB to require authors to submit the orthography and etymology of new names to N. Weiss and/or H. G. Trüper. Names published outside IJSB will be corrected for orthographic and etymological mistakes before publication in the Validation Lists.

(2) Replacement of the term Bacteria (in the sense of the ICNB) by the term Prokaryotes. The Judicial Commission decided unanimously to propose the change of the name of the ICNB to ‘International Code of Nomenclature of Prokaryotes’ (ICNP). Consequently, General Consideration 5 shall receive the wording:

‘This *Code of Nomenclature of Prokaryotes* applies to all Prokaryotes. The nomenclature of eukaryotic microbial groups is provided for by other codes: fungi and algae by the International Code of Botanical Nomenclature, protozoa by the Zoological Code. The nomenclature of viruses is provided for by the Virological Code when it is approved (see Appendix 1).’

As a logical consequence, the complete text of the Bacteriological Code as well as the Statutes of the ICSB and the name of the ICSB (in the future ICSP) have to be revised accordingly.

(3) Explanatory Note to General Consideration 5. In concordance with the proposal of Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] the Judicial Commission

proposed that the following Note be added to General Consideration 5 to define the term 'Prokaryotes':

"Note. 'Prokaryotes' covers those organisms that are variously recognized as e.g. *Schizomycetes*, *Bacteria*, *Eubacteria*, *Archaeobacteria*, *Archaea*, *Schizophycetes*, *Cyanophyceae* and *Cyanobacteria*."

Due consideration has been given to including 'Cyanobacteria' which are traditionally covered by the International Code of Botanical Nomenclature; this question has been elaborately discussed elsewhere.

(4) Amendment to Principle 1. The Judicial Commission, in concordance with Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312], proposed unanimously to add the following sentence to Principle 1:

'(4) Nothing in this Code may be construed to restrict the freedom of taxonomic thought or action.'

(5) Change of Principle 2. The Judicial Commission proposed, in consideration of Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] the replacement of Principle 2 by:

'The nomenclature of Prokaryotes is not independent of botanical and zoological nomenclature. When naming new taxa in the rank of genus or higher, due consideration is to be given to avoiding names which are regulated by the Zoological Code and the International Code of Botanical Nomenclature.'

Further, the addition of the following Note to Principle 2 is proposed:

'Note. This principle takes effect with publication of acceptance of this change by the ICSB and is not retroactive. Although not complete, an extensive list of names of zoological taxa is maintained by the Zoological Record, a list of botanical taxa, including higher plants, algae and cyanobacteria, botanical protists and fungi is maintained by the *Index Nominum Genericorum* (ING), the Names in Current Use and the International Mycological Institute (Bioscience index of fungi).'

(6) Minimal Standards. The Judicial Commission unanimously supported the suggested addition [Tindall, *Int J Syst Bacteriol* **49** (1999), 1309–1312] of the following Note *b* to Recommendation 30b under retention of the current Note as Note *a*:

'Note b: It is the aim of minimal standards to provide guidance on the description of taxa for taxonomists seeking such advice. However, these standards are not to be applied in such a way as to contradict Principle 1(4).'

(7) The term 'published'. The Judicial Commission proposes in concordance with Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] the following changes of the Code to avoid misunderstanding of the term 'published' when effective and/or valid publication is meant. These changes concern Rules 12a, 18b, 20b, 20e(1), 20f, 24b(1) and (2), 25a, 27 Note, 28a Notes 1 and 2. The Commission agreed further to accept a proposal of Tindall to replace 'a more familiar language' by 'English' in Recommendation 25a:

Rule 12a: 'If the words were not joined in the effective publication ...'

Rule 18b: 'If the author in the effective or valid publication ...'

Rule 20b: 'If the author of the effective or valid publication ...'

Rule 20e: '(1) If none of the species named by an author in the effective or valid publication ...'

Rule 20f: 'The valid publication of a new generic name ...'

Rule 24b: '(1) ... the priority shall be determined by the date of the effective publication ...'

Rule 24b: '(2) ... priority is determined by the date of valid publication of the name ...'

Recommendation 25a: '... it is recommended that the author(s) include in the effective publication a description in English.'

Rule 27, Note, Paragraph 1: 'The date of valid publication is that of publication in the IJSB (now IJSEM). The name may be mentioned in a previous effective publication ...'

Paragraph 2: 'If the initial proposal of a new name or a new combination is not effectively published in the IJSB (now IJSEM), valid publication (announcement in a Validation List) ...'

Paragraph 3: '... a type must be designated in the effective or valid publication.'

Rule 28a, Note 1: 'Valid publication of a new name is not invalidated by previous effective publication ...'

Rule 28a, Note 2: '... they require valid publications, and the date of priority of publication of a revived name is that of valid publication in the IJSB (now IJSEM) (see Rule 27).'

(8) Union of two subsections of the Code to the subsection 'Priority, effective and valid publications of names'. Up to now, Section 5 of the Code is divided into two subsections, 5A and 5B, with the respective headings 'Priority of Names' and 'Publication of Names'. Because Rule 24b of the Code also deals with priority of names, the Judicial Commission supports the proposal of Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] to unite both subsections under one heading 'Priority, effective and valid publication of names.'

It is further recommended that Rules 24b and 27 are reworded once the question of 'priority and registration of names' has been discussed and ratified in the 'International Code of Botanical nomenclature.'

(9) Ambiguous description. The change of Rule 31a as proposed by Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] is supported by the Judicial Commission (with one abstention) as follows:

'The name of a species or a subspecies is not validly published if the description is demonstrably ambiguous and cannot be critically identified for purposes of the precise application of the name of a taxon. (Examples: '*Methanobacillus omelianskii*', whose description included all component species, was treated as a single species and was thus illegitimate. *Syntrophobacter wolinii* (Boone and Bryant 1984) is legitimate, because the species description applies to one member of the syntrophic association with a hydrogen-producing organism.'

A discussion as to whether the accompanying proposal of a Note to Rule 31a should be carried by the Judicial Commission was postponed in order to collect more detailed information from Dr Tindall.

(10) Introduction of a 'protologue' for descriptions of taxa. The proposal of Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] to standardize the format of descriptions of new taxa is supported by the Judicial Commission. Action should be taken to start with this so-called 'Protologue' directly

after publication of these Minutes in IJSEM. Therefore, it is proposed that the following paragraphs are added to Rule 27(2):

‘*a*: The new name or new combination should be clearly stated and indicated as such (i.e. fam. nov., gen. nov., sp. nov., comb. nov., etc.).’

‘*b*: The derivation (etymology) of a new name (and if necessary of a new combination) must be given.’

‘*c*: The properties of the taxon being described must be given directly after (a) and (b). This may include reference to tables or figures in the same publication, or reference to previously effectively published work.’

‘*d*: All information contained in (c) should be accessible.’

The Judicial Commission further agreed to propose a change of Rule 27(3) as follows:

‘(3) The type of the taxon must be designated. In the case of species or subspecies the culture collection numbers of at least two publicly accessible service collections in different countries where a subculture of the type strain has been deposited must be indicated.’

(11) Inclusion of Recommendation 25a in Rule 25a. The Judicial Commission proposed that Recommendation 25a with the wording given above (7) becomes part of Rule 25a.

(12) Type designation. The Judicial Commission in concordance with Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] proposes to add the following Note to Rule 16 of the Code:

‘Note. If a previous effective publication does not designate a type then the type must be designated at the time of valid publication in IJSB (now IJSEM), in accordance with the Rules of this Code.’

(13) The term ‘strain’. Likewise it is proposed by the Judicial Commission to add the following Note to Rule 18c of the Code:

“Note. The term ‘strain’ refers to the culture or subcultures of it, described in the original description. This is not restricted to the strain bearing the culture collection number mentioned in the valid publication, but refers to any culture knowingly derived from the original strain.”

(14) Terms ‘homotypic’ and ‘heterotypic’. The Judicial Commission supports the changes proposed by Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] for the Notes to Rule 24a (1 abstention) and agreed to propose the following changes:

Note 2. The parentheses in sentence 1 should contain ‘homotypic synonyms, formerly subjective synonyms.’

Note 3, Sentence 1: ‘Synonyms may be homotypic synonyms (i.e. more than one name has been associated with the same type) of heterotypic (formerly subjective) synonyms ...’

Note 3, Sentence 2: ‘The synonym first published is known as the earlier (senior) synonym, and the later synonyms are known as later (junior) synonyms.’

The rest of the text of Rule 24a is changed accordingly as well as the text of Rule 11.

(15) Priority. Changes to Rules 24b(1) and 24b(2) as proposed by Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] are also accepted by the Judicial Commission (one abstention/unanimously):

Rule 24b(1), add after sentence 1: ‘Should the two names bear the same date, then priority shall be determined by page number. If this fails to determine priority then it shall be determined by the order of publication in the effective publication.’

Example: *Caulobacter halobacteroides* (Poindexter 1964) and *Caulobacter maris* were described on the same page.’

Rule 24b(2), replace last sentence by: ‘Should the page number not determine priority, this shall be determined by the order of valid publication of the names in original articles in IJSB. When two names effectively published in other journals, are validly published by announcement on the same Validation List in IJSB, priority is established by the sequence number on the list.’

It was also accepted to add a second Note to this Rule:

‘Note 2. Should priority not be resolved by applying Note 1, the order of priority will be determined by page number followed by order of publication in the effective publication.’

(16) Valid/invalid publication. The Judicial Commission supported the proposal of Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] to add a second Note to Rule 27 of the Code:

‘Note 2. When a new species or a new combination results in the proposal of a new genus, both the genus name and the new species name or new combination must be validly published. Valid publication of the new species or new combination alone does not constitute valid publication of the new genus.’

(17) Relocation of Rule 46 as Rule 40d. The Judicial Commission proposes to relocate Rule 46 of the Code as Rule 40d under the ‘Division of a Species into Species or Subspecies, and of a Subspecies into Subspecies’. This is in concordance with the remark made by Tindall [*Int J Syst Bacteriol* **49** (1999), 1309–1312] about the matter of coordinate status of the other Codes of Nomenclature.

(18) Retroactive consequences of formerly accepted changes. The Judicial Commission supports in general the proposal to change Rule 18a, Rule 18f and Rule 30 to limit the retroactive consequences of the changes formerly accepted by the ICSB [Labeda (1997a, b)] as proposed by Tindall [*Int J Syst Bacteriol* **49** (1999), 1321–1322].

Rule 18a should now be read as follows:

‘Whenever possible, the type of a species or a subspecies is a designated strain. The type strain is made up of living cultures of an organism, which are descended from a strain designated as the nomenclatural type. The strain should have been maintained in pure culture and should agree closely to its characters with those in the original description (see Chapter 4C). The type strain may be designated in various ways (see Rules 18b, 18c and 18d).

(1) Until the publication of the acceptance of these Minutes by the ICSB, for a species which has not so far been maintained in laboratory cultures or for which a type does not exist, a description, preserved specimen, or illustration (see also Rule 18f) may serve as the type.

Example: Non-cultivated, *Oscillospira guilliermondii* Chatton and Perard 1913.

(2) As from the publication of the acceptance of these Minutes by the ICSB, a description, preserved (non-viable) specimen, or illustration may not serve as the type.’

Rule 18f is altered as follows:

‘If a description or illustration constitutes, or a dead preserved specimen has been designated as the type of a species [Rule 18a(1)] and a later strain of this species is cultivated, then the type strain may be designated by the person who isolated the strain or by a subsequent author. This type strain shall then replace the description, illustration or preserved specimen as the nomenclatural type. The designation of a type strain in this manner must be published in the IJSB, the authorship and date of priority of publication being determined by the effective and valid publication of the name by the original authors (Rule 24b).’

A similar problem affects Rule 30, which is proposed by the Judicial Commission to read as follows:

‘For the name of species to be validly published it must conform with the following conditions. (1) It must be published in conformity with the Rules 27 and 28b. (2) It must be published as a binary combination consisting of a genus name followed by a single species epithet (see Rule 12a). (3a) Up to the publication of the acceptance of these Minutes by the IJSB, before publication of the name of a new species, a culture of the type strain (or, if the species is non-cultivable, type material, a photograph or an illustration) should be deposited in at least one of the permanently established culture collections from which it would be readily available. The designation allotted to the strain by the culture collections should be quoted in the published description. (3b) As of the publication date of the acceptance of these Minutes by the IJSB, the description must include the designation of a type strain, and a viable culture of that strain must be deposited in at least two publicly accessible service collections in different countries from which subcultures must be available. The designations allotted to the strain by the culture collections should be quoted in the published description. (4) Patent strains may serve as type strains and must also be deposited as in (3a) or (3b). Patent strains must be clearly identified as such at the time of publication. If the patent is not yet awarded or not laid open, the publication of a name and the description has to be deferred until the patent is awarded or subcultures become available.’

Comment of the Judicial Commission: the Editor of IJSB (now IJSEM) has to check the availability of the type strain if a new species or a new combination is proposed.

Minute 8. Adjournment. Session 1 was adjourned at 12:15 on 14 August 1999.

Session 2

Minute 9. Call to order. The meeting was called to order at 09:00 on 15 August 1999.

Minute 10. Record of attendance. Present were: R. R. Colwell, P. De Vos [Editorial Secretary, International Committee on Systematic Bacteriology (ICSB)], M. Goodfellow (Secretary for Subcommittees, ICSB), P. A. D. Grimont, D. P. Labeda (Executive Secretary-Treasurer, ICSB), H. G. Trüper (Chairman, Judicial Commission), J. T. Staley (Vice-Chairman, Judicial Commission), E. Stackebrandt [Chairman, ICSB, and Editor of *International Journal of Systematic Bacteriology* (IJSB)], J. M. Young.

Minute 11. Unpublished proposals and remarks concerning the Code by J. Young, T. Ezaki and H. G. Trüper received in writing and distributed to the Commission by the Chairman.

(1) Type *versus* nominifer. The proposal of J. Young to replace ‘type’ by ‘nominifer’ or other fitting expression was discussed by the Judicial Commission. The Commission finally reached consensus, that this change would introduce confusion among bacteriologists. One would also have to wait what the future universal BioCode will contain with respect to this basic question. The proposal was unanimously denied.

(2) Letter of T. Ezaki. By far not all of the many valuable items raised by T. Ezaki could be discussed by the Judicial Commission, as the publications concerned were not available at the meeting. T. Ezaki’s remarks about pending Requests for Opinions or Requests that were denied in the past, were not discussed either.

(a) Several of the points raised in T. Ezaki’s letter to the Chairman were treated within other items on the agenda of this meetings (Minute 7).

(b) The Judicial Commission does not feel that the name of *Acidiphilum acidophilum* constitutes a case of tautonomy.

(c) The Judicial Commission agrees that *Rhizomonas* (Van Bruggen *et al.* 1990) by its rejection in Opinion 14 no longer has nomenclatural standing and has to be dealt with as a *nomen rejiciendum*.

(d) Taxa of higher rank: the Judicial Commission felt that discussion on this subject must be postponed until the ICSB *ad hoc* committee on this matter made its report. The Judicial Commission also came to the opinion that in the view of the BioCode, zoologists and botanists have to be involved in the discussion.

(3) Letter of J. P. Euzéby. In his letter to the Chairman, J. P. Euzéby raised a number of specific questions concerning cases of illegitimate names, missing type designations, formation of subspecies and other rearrangements of taxa. Most of them will have to be referred to the ICSB Subcommittees on Taxonomy. A few were briefly discussed by the Judicial Commission, but no action was taken. The question concerning a change of Rule 52(2) on the use of ordinal numbers as specific epithets was discussed in connection with H. G. Trüper’s letter.

(4) Letter of H. G. Trüper. Changes to the Code, mainly concerning etymology and language, are proposed, of which the Judicial Commission endorsed the following:

(a) Recommendation 6: Paragraph (3), change to:

‘(3) Words from languages other than Latin or Greek should be avoided as long as equivalents exist in Latin or Greek or can be constructed by combining word elements from these two languages. Exceptions: names derived from typical local items such as foods, drinks or geographical localities for which no Latin or Greek names exist.’

(b) New paragraphs to be included in recommendation 6:

‘(7) The Greek K and Z and the Medieval Latin J (for consonantic I) should be maintained to avoid confusion.

Examples: *Akinetobacter* instead of *Acinetobacter*, *Acidijanus* instead of *Acidianus*.’

“(8) The abbreviation M.L. stands for ‘Medieval Latin’ not ‘Modern Latin’. For the latter, N.L. (‘Neo Latin’) is to be used.”

“(9) When arbitrary names (cf. Rules 10a and 12c) are formed, this has to be indicated and such names have to be easy in spelling and pronunciation.”

‘(10) Authors should not name organisms after themselves or after co-authors. If genus names or specific epithets are formed from personal names they should contain only the untruncated family (rarely the first) name of one person.’

(c) Appendix 9. H. G. Trüper recommended to consider whether in the future Appendix 9 can receive a ‘Rule status’. It should then include regulations (with sufficient examples) for forming names and epithets from personal names, locality names, names of chemicals and pharmaceuticals as well as from names of other (symbiotic or host) biota. The Chairman agreed to write up a new version of Appendix 9 in this sense and present it at the meeting of the Judicial Commission at the next IUMS congress.

(d) The proposal by J. P. Euzéby and H. G. Trüper to change Rule 52(2) in order to allow ordinal numbers at least up to ten, did not find a majority in the Judicial Commission.

Minute 12. Report of the Rules Revision Committee. Since the Jerusalem meeting of the Judicial Commission, no report has been given by the Rules Revision Committee.

Minute 13. Comments by the Editor of IJSB. Erko Stackebrandt reported that SGM has taken over as publisher of the IJSB since the end of 1997. The new format of the Journal has been received by the community with enthusiasm. The first new formatted issue was published with a short delay of only two months. The number of submissions increased in 1998 with 12% compared to 1997 and this increase will continue in 1999. Contributions from scientists of 36 nations covering all continents were received. Ordering the contributions according to the corresponding authors, US and Japanese scientists had the lead (14% each), followed by French, German (12% each) and Australian (7%) researchers. As in previous years, Europe contributed most to accepted papers (53%), followed by East Asia (Japan, China, Korea and Malaysia) with 20% and North America with 16%. Polyphasic approach of taxonomic problems resulted in high levels of national (23%) and international (46%) collaboration. Scientists who were predominantly involved in these collaborations were from US, UK and Germany (each 18%), France (13%) and Belgium (8%). Most contributions contained at least four authors, which clearly show the complexity of modern microbial classification. It is interesting to note that more than one-third of the papers contained contributions from staff from biological reference centres, reference laboratories and public health centres. About 70% of all newly described bacterial species in 1998 were covered by contributions in IJSB. In total, 178 new bacterial species were validly described including the validated ones. This was as *status quo* compared to 1997.

In 2000 the name of the *International Journal of Systematic Bacteriology* will be changed to *International Journal of Systematic and Evolutionary Microbiology* and it will be published bimonthly.

Minute 14. Opinions awarded since the 1996 meeting in Jerusalem. Opinion 69 has been awarded since the 1996 Jerusalem meeting: the Judicial Commission rejected the name *Clostridium putrificum* while conserving *Clostridium botulinum* for toxigenic strains and *Clostridium sporogenes* for non-toxigenic strains [*Int J Syst Bacteriol* **49** (1999), 339].

Minute 15. Denied Requests for Opinions. No Requests for Opinions were denied.

Minute 16. Pending Requests for Opinions. (1) Request for an Opinion concerning irregularities in the validation of the

genus *Thermodesulfobacterium* and its species [Tao *et al.*, *Int J Syst Bacteriol* **46** (1996), 622]. The voting could be completed at the meeting and the Judicial Commission comes to the conclusion that the Request for an Opinion is accepted by a majority of the Judicial Commission. The conclusions will be formulated in Opinion 70.

(2) Request for an Opinion concerning the rejection of *Lactobacillus panis* [Dellaglio & Klein, *Int J Syst Bacteriol* **47** (1997), 910]. The Judicial Commission came to the following Opinion: ‘At the time that the species was described and that the type strain was deposited as DSM 6035, it was not in contradiction with the Code to deposit a patent strain as a type strain. Evidence has been presented to the Judicial Commission that the strain has been obtained by a third party. Therefore the taxon can be retained in its present nomenclatural status.’ The conclusion will be formulated as Opinion 71.

(3) Request for an Opinion on the priority of *Paenibacillus durum* (sic) versus *Paenibacillus azotofixans* [Logan *et al.*, *Int J Syst Bacteriol* **48** (1998), 325–326]. The Judicial Commission rejects the proposed priority of the Request because given argument that names should be informative is not regulated by the Code. The rejection of the Request will be formulated in Opinion 72.

(4) Request for an Opinion to reject the species *Methanothrix soehngenii* and the genus *Methanothrix* as *nomina confusa* [Boone & Komagata, *Int J Syst Bacteriol* **48** (1998), 1079–1080]. The Request could not be discussed because of a lack of all information at the meeting. The Request will be treated and decided upon in writing by the Judicial Commission in the near future.

(5) Request for an Opinion concerning the proposal of strain NCIMB 13488 as neotype of *Halorubrum trapanicum* [Grant *et al.*, *Int J Syst Bacteriol* **48** (1998), 1077–1078]. As it is stated in the Request, that strain NCIMB 13488 is derived from the original type NRC 34021, strain NCIMB 13488 can be regarded as a subculture of the original type and is hence not a neotype. This conclusion will be formulated in Opinion 73.

The following Requests for Opinions remained pending because the time between the meeting of the Judicial Commission in Sydney and the date of publication of the Requests was less than 2 years, which is the recommended period to allow the scientific community to react on the publication of the Request: Hatano [*Int J Syst Bacteriol* **49** (1999), 931–932]; Euzéby [*Int J Syst Bacteriol* **49** (1999), 927–930].

Minute 17. Comments of the Secretary for Subcommittees. The report presented by the Secretary M. Goodfellow was adopted. It gave an overview of the Minutes presented by the different Subcommittees. From the planned meetings of the Subcommittees it can be deduced that it is easier to get a good attention if meetings are organised at the occasion of specialist Symposia rather than with IUMS Congresses. An overview of the situation concerning the minimal standards has been given. Several reasons are mentioned why the Subcommittees have difficulties in motivating colleagues to draft the minimal standards. Concerning the requests for new Subcommittees, the merging of the Subcommittee on the taxonomy of *Arthrobacter* and related organisms and the Subcommittee on the taxonomy of *Microbacterium* was mentioned, as well as a request for a new Subcommittee on the taxonomy of *Halomonadaceae* (A. Ventosa). Different Chairs and Secretaries mentioned problems of delineating

genera (e.g. *Agrobacterium* and *Rhizobium*) and the insufficient application of the Rules of the Bacterial Code in an increasing number of papers published in IJSB. Finally the Secretary for Subcommittees raised the question of the necessity to rearrange the Subcommittees in the light of developments in prokaryotic systematics.

Minute 18. Adjournment. Session 2 was adjourned at 12:45 on 15 August 1999.

Session 3

Minute 19. Call to order. The Chairman called the third session of the Judicial Commission to order at 09:00 on 18 August 1999.

Minute 20. Record of attendance. Present were P. De Vos [Editorial Secretary, International Committee for Systematic Bacteriology (ICSB)], M. Goodfellow (Secretary for Subcommittees, ICSB), P. A. D. Grimont, R. M. Kroppenstedt, D. P. Labeda (Executive Secretary-Treasurer, ICSB), H. G. Trüper (Chairman, Judicial Commission), L. Sly (Vice-Chairman, ICSB), E. Stackebrandt [Chairman, ICSB, and Editor of *International Journal of Systematic Bacteriology* (IJSB)], J. M. Young.

Minute 21. New Commissioners. Announcement of the new Commissioners appointed by the ICSB. Members of the 21st Class of Commissioners have been elected by the ICSB. The new Judicial Commission takes office after this meeting and contains the 19th Class members R. R. Colwell, M. Goodfellow (Secretary for Subcommittees), H. Prauser and

J. T. Staley, the 20th Class members, P. A. D. Grimont, H. G. Trüper (Chairman), N. Weiss and J. M. Young and the newly elected 21st Class members J. P. Euzéby, T. Ezaki, G. Garrity and B. J. Tindall.

Minute 22. Rules Revision Committee. Members appointed for the Rules Revision Committee are M. Goodfellow, B. J. Tindall and H. G. Trüper. The Rules Revision Committee is expected to formulate the proposals of the Judicial Commission as formal adaptations of the Code. The committee is also expected to reconsider the statutes of ICSB (Bacteriological Code, pp. 139–158) for the next IUMS Congress in Paris in 2002. The Judicial Commission points out that as a consequence of the discussion reported in Minute 7, the ‘International Code of Nomenclature of Bacteria’ must be changed to the ‘International Code of Nomenclature of Prokaryotes’. This name change must be adopted throughout the Code.

Minute 23. Discharge of retiring 18th Class of Commissioners. The Commission thanks the 18th Class of Commissioners D. Jones, R. M. Kroppenstedt, F. Portaels and G. A. Zavarzin, for their service.

Minute 24. Other business. E. Stackebrandt will discuss with SGM the possibility of establishing an electronic version of the Code.

Minute 25. Final adjournment. The last session was adjourned at 09:30 on 18 August 1999.

Paul De Vos, *Editorial Secretary, ICSB*
Hans G. Trüper, *Chairman, Judicial Commission*