# IMA COMMISSION ON NEW MINERALS, NOMENCLATURE AND CLASSIFICATION (CNMNC)

## **ANNUAL REPORT FOR 2009 TO IUGS**

(Prepared by the Secretary, Stuart Mills)

# 1. COMMISSION ON NEW MINERALS, NOMENCLATURE AND CLASSIFICATION

## Officers

Chairman: Peter Williams (Sydney, Australia) Vice-Chairmen: Frédéric Hatert (Liège, Belgium); Marco Pasero (Pisa, Italy). Secretary: Stuart Mills (Vancouver, Canada)

## 2. OVERALL OBJECTIVES

This commission (CNMNC) was established in 1959 (under the former title of Commission on New Minerals and Mineral Names, or CNMMN) to deal with all nomenclature matters in mineralogy. Its main roles are to ensure that strict procedures are followed before new mineral species can be established and before redefinitions and changes to nomenclature can be applied. The CNMNC also coordinates the procedures for classification of minerals and groups.

#### **3. ORGANISATION**

#### Officers for 2009

Officers are listed above and the full membership of CNMNC is given in 8 (below).

#### **Business meetings**

The CNMNC holds its business meetings every two years, when its members participate in IMA General Meetings and Mineralogy & Museums Conferences, each of which are held every four years. The CNMNC last met in Golden, Colorado in September 2008. The next meeting will be during the IMA General Meeting in 2010.

#### Main activities

The CNMNC partitions its workload amongst the four officers. The Chairman prepares the new mineral proposals, the Vice-Chairmen handle proposed changes to existing nomenclature (discreditations and redefinitions) and classification issues (including groups), and the Secretary coordinates the subcommittees created to examine the nomenclature of mineral groups. The 34 voting Members of the CNMNC represent national mineralogical organisations affiliated with the IMA. The members evaluate all nomenclature proposals (new minerals, changes in existing minerals, mineral groups) and cast their votes on a monthly basis for the new mineral proposals and as they come for the other proposals.

#### **Financial support**

The distribution of proposals and the subsequent rounds of comments and voting are carried out solely via the internet. The IMA covers the Chairman's costs for office supplies, while the costs of Members' emailing and internet time are borne by their respective institutions.

# 4. INVOLVEMENT WITH IMA AND INTERNATIONAL PROJECTS

Vice Chairman Frédéric Hatert is currently a member of the IMA-OC (Outreach Committee). In collaboration with Bob Downs, he is involved in the updating of the RRUFF database of minerals.

# 5. CHIEF ACCOMPLISHMENTS IN 2009

# Activities

By December 08 2009, the CNMNC will have dealt with 91 new-mineral proposals, and most likely the number will end up being ~100 by the end of the year. 2009 has seen a substantial increase in the number of new mineral submissions as well as nomenclature proposals over previous years (70 new mineral proposals in 2008; 66 in 2007; 63 in 2006).

Members will also have deliberated on and approved seven proposals involving mineral nomenclature revisions and are currently deliberating on another. 2009 has also seen the approval of a mineral group hierarchy which has been debated on numerous occasions over the past decade. A proposal on the release of mineral names is currently being dealt with.

Seven CNMNC subcommittees were operational during 2009:

- 1. Pyrochlore (Chairman: Daniel Atencio, Brazil)
- 2. Tourmaline (Chairman: Milan Novák, Czech Republic)
- 3. Alunite (Chairman: Peter Bayliss, Australia)
- 4. Amphibole (Chairpersons, Frank Hawthorne, Canada and Roberta Oberti, Italy)
- 6. Lovozerite (Chairman: Igor Pekov, Russia)
- 7. Apatite (Chaiman: Marco Pasero, Italy)
- 8. Hydrotalcite (Chaiman: Stuart Mills, Canada)

# New members

The Commission added substantially to its membership through an approach by the Secretary to the Mineralogical Societies who were unrepresented. This resulted in new Members from Argentina, Bulgaria, Greece, India, Ukraine and Uzbekistan. In many cases these are the first delegates on the CNMNC from these countries in CNMNC history.

# Outreach

The ex-Chairman and current Secretary regularly participate in discussion on minerals and their nomenclature in the Message Board of the website <u>www.mindat.org</u>, a forum aimed at collectors and amateur mineralogists, but also used by professionals to discuss mineralogical issues.

Updated versions of the official IMA–CNMNC list of mineral names were uploaded onto the Commission's website, as well as newer versions of valid unnamed minerals, invalid unnamed minerals, and references for unnamed minerals.

Also published on the CNMNC website was a complete list of all CNMNC decisions made in 2008, as well as monthly summaries of the most recent new minerals approved by the Commission.

## **Technical meetings**

No technical meetings were held in 2009.

#### **Publications**

Several papers dealing with decisions of the CNMNC were submitted for publication in the scientific literature during the year:

Grew, E., Hålenius, U., Pasero, M. & Barbier, J. (2008) Recommended nomenclature for the sapphirine and surinamite groups (sapphirine supergroup). *Mineralogical Magazine*, **72**, 839–876.

Hatert, F. & Burke, E.A.J. (2008) The IMA-CNMNC dominant-constituent rule revisited and extended. *Canadian Mineralogist*, **46**, 717-728.

Mills, S. J., Hatert, F., Nickel, E. H. & Ferraris, G. (2009) The standardisation of mineral group hierarchies: application to recent nomenclature proposals. *European Journal of Mineralogy*, **21(5)**, 1073–1080.

Pekov, I. V., Krivovichev, S. V., Zolotarev, A. A., Yakovenchuk, V. N., Armbruster, T. & Pakhomovsky, Y. A. (2009) Crystal chemistry and nomenclature of the lovozerite group. *European Journal of Mineralogy*, **21**(5), 1061–1071.

The reports of the alunite and tourmaline committees are due to be published shortly.

## 6. PROBLEMS ENCOUNTERED IN 2008

Generally the work of the Commission proceeded smoothly in 2009. However, the office-bearers continue to be concerned about the low participation rate of some Commission Members. This seems to be a continuing problem partly related to the heavy work load of the Commission. This problem was partly solved by recruiting new enthusiastic Members.

## 7. WORKPLAN FOR 2010

#### Activities

It is anticipated that the number of new mineral proposals, nomenclature revisions and discreditations will continue to be high. New subcommittees are being established to replace the ones that have completed their work and several are near completion. It continues to be a very active period in mineralogical sciences.

## 8. OFFICERS AND NATIONAL REPRESENTATIVES

# Officers

## Peter (Pete) A. Williams, Chairman

School of Natural Sciences University of Western Sydney Locked Bag 1797 Penrith South DC, NSW 1797 Australia Phone +61 2 9685 9977

p.williams@uws.edu.au

# Frédéric Hatert, Vice-Chairman (changes in existing nomenclature)

Laboratoire de Minéralogie Université de Liège B-4000 Liège Belgium Phone +32 4 366 2143 Fax +32 4 366 2202

fhatert@ulg.ac.be

# Marco Pasero, Vice-Chairman (general classification matters)

Dipartimento di Scienze della Terra Università degli Studi di Pisa Via Santa Maria 53 I-56126 Pisa Italy Phone +39 050 221 5761 Fax +39 050 221 5830 pasero@dst.unipi.it

## **Stuart J. Mills, Secretary**

Department of Earth and Ocean Sciences University of British Columbia Vancouver, BC Canada V6T 1Z4 Fax +1 604 822-6088 smills@eos.ubc.ca

## **Chairmen Emeritus**

#### Ernst A.J. Burke (Chairman 2003-August 2008)

Faculty of Earth and Life Sciences Vrije Universiteit Amsterdam De Boelelaan 1085 1081 HV Amsterdam Netherlands Phone + 31 475 510 499

ernst.burke@xs4all.nl

## Joel D. Grice (Chairman 1995-2002)

Mineral Science Division Canadian Museum of Nature P.O. Box 3443, Station D Ottawa, Ontario K1P 6P4 Canada Phone +1 613 364 4057 Fax +1 613 364 4027

jgrice@mus-nature.ca

Akira Kato (Chairman 1975-1982)

Division of Mineralogy National Museum of Nature and Science 3-23-1 Hyakunin-cho Shinjuku-ku Tokyo 169-0073 Japan

#### Members

## **Daniel Atencio**

Instituto de Geociências Universidade de São Paulo Rua do Lago 562 CEP 05508-900 São Paulo, SP Brasil Phone +55 11 3091 4030 Fax +55 11 3091 4258 <u>datencio@usp.br</u>

#### **Alfons Berger**

Department of Geography and Geology University of Copenhagen Øster Voldgade 10 DK-1350 Copenhagen Denmark Phone + 45 3 532 2439 Fax +45 3 532 2440 <u>Ab@geo.ku.dk</u>

## Vladimir Bermanec

Faculty of Science University of Zagreb Horvatovac BB HR-4100 Zagreb Croatia Phone +385 1 422 136 Fax +385 1 428 610

vberman@public.carnet.hr

#### **Elena Bonaccorsi**

Dipartimento di Scienze della Terra Università degli Studi di Pisa Via Santa Maria 53 I-56126 Pisa Italy Phone +39 050 221 5704 Fax +39 050 221 5830 elena@dst.unipi.it

#### Andrei G. Bulakh

Department of Mineralogy St. Petersburg University Universitetskaya 7/9 199034 St. Petersburg Russia Phone +7 812 314 3360

andreygleb@mail.ru

Jianhui Cai

Institute of Mineral Resources Chinese Academy of Geological Sciences Baiwanzhuang Road 26 Beijing 1000037 People's Republic China Phone +86 10 6899 9082 Fax +86 10 6832 7263 caijh cags@163.com

# Andrew G. Christy

Research School of Earth Sciences Building 47, Daley Road Australian National University Canberra, ACT 0200 Australia Phone +61 2 6125 0561 Fax +61 2 6125 5544 andrew.christy@anu.edu.au

# Fernando Colombo

Cátedra de Geología General Facultad de Ciencias Exactas, Físicas y Naturales Universidad Nacional de Córdoba Vélez Sarsfield 1611 (X5016GCA) Córdoba Argentina Phone +54 351 434 4980 ext. 113 Fax +54 351 433 4139 <u>fcolombo@com.uncor.edu</u>

# Mohamed A. El-Sharkawy

Faculty of Science, Geology Department Cairo University Giza Egypt <u>maelsharkawi@yahoo.com</u>

# T. Scott Ercit

Mineral Science Division Canadian Museum of Nature P.O. Box 3443, Station D Ottawa, Ontario K1P 6P4 Canada Phone +1 613 364 4058 Fax +1 613 364 4027 <u>sercit@mus-nature.ca</u>

## **Cristiano Ferraris**

Chargé de conservation de la Collection de Minéralogie Département "Histoire de la Terre" USM-CNRS 7202 Laboratoire de Minéralogie et Cosmochimie Muséum National d'Histoire Naturelle - CP52 61, Rue Buffon F-75005 Paris France Phone +33 (0)140793528 Fax +33 (0)140793876 <u>ferraris@mnhn.fr</u>

# André-Mathieu Fransolet

Laboratoire de Minéralogie Université de Liège B-4000 Liège Belgium Phone +32 4 366 2206 Fax +32 4 366 2202 <u>amfransolet@ulg.ac.be</u>

#### Stefan Graeser

Naturhistorisches Museum Augustinerstrasse 2 CH-4001 Basel Switzerland Phone +41 61 266 5585 Fax +41 61 266 5546 <u>Stefan.Graeser@unibas.ch</u>

## **Ulf Hålenius**

Department of Mineralogy Naturhistoriska Riksmuseet Box 50007 SE-104 05 Stockholm Sweden Phone +46 8 519 54033 Fax +46 8 519 54031 <u>ulf.halenius@nrm.se</u>

# Anthony R. Kampf

Mineral Sciences Natural History Museum of Los Angeles County 900 Exposition Boulevard Los Angeles, California 90007 USA Phone +1 213 763 3328 Fax +1 213 749 4107 <u>akampf@nhm.org</u>

# Paul Keller

Institut für Mineralogie und Kristallchemie Universität Stuttgart Pfaffenwaldring 55 D-70569 Stuttgart Germany Phone +49 711 685 4112 Fax +49 711 685 4107 <u>paul.keller@mineralogie.uni-</u> <u>stuttgart.de</u>

## **Ruslan I. Kostov**

Faculty of Geology and Prospecting University of Mining and Geology "St. Ivan Rilski" Sofia 1700 Bulgaria Phone +359 2 8060385 Fax +359 2 9624940 rikostov@yahoo.com rikostov@gmail.com

## Andrzej Manecki

Department of Mineralogy, Petrography and Geochemistry AGH - University of Mining and Metallurgy al. Mickiewicza 30 PL-30-059 Kraków Poland Fax +48 12 617 2374

manecki@geol.agh.edu.pl

# Satoshi Matsubara

Division of Mineralogy National Museum of Nature and Science 3-23-1 Hyakunin-cho Shinjuku-ku Tokyo 169-0073 Japan Phone +81 3 3364 7112 Fax +81 3 3364 7104 <u>matubara@kahaku.go.jp</u>

# Jeffery Mauk

Geology Department University of Auckland Private bag 92019 Auckland New Zealand Phone +64 9 373 7599 ext. 7419 Fax +64 9 373 7435 j.mauk@auckland.ac.nz

# **Gabor Papp**

Department of Mineralogy and Petrology Hungarian Natural History Museum H-1431 Budapest, PF. 137 Hungary Phone +36 1 333 0655 Fax +36 1 210 1086

pappmin@ludens.elte.hu

# **Franz Pertlik**

Institut für Mineralogie und Kristallographie Universität Wien Geozentrum - Althanstrasse 14 A-1090 Wien Austria Phone +43 1 4277 53267 Fax +43 1 4277 9532 <u>franz.pertlik@univie.ac.at</u>

# **Gunnar Raade**

Østbyfaret 6 D NO-0687 Oslo Norway

gunn-ra@online.no

# Jiri Sejkora

Department of Mineralogy and Petrology National Museum Prague Václavské nám. 68 CZ-115 79 Praha 1 Czech Republic Phone +420 2 244 97111 Fax +420 2 242 26488 jiri.sejkora@nm.cz

# **Triantaffylos Soldatos**

Department of Mineralogy, Petrology and Economic Geology University of Thessaloniki 54124 Thessaloniki Greece Phone +30 2310 998 497 Fax +30 2310 998 549 soldatos@geo.auth.gr

## **Chick Srikantappa**

Department of Geology University of Mysore Manasagangotri Mysore 570 006 India Phone +91 821 251 4144 <u>srikantappa@googlemail.com</u>

# Chris J. Stanley

Department of Mineralogy The Natural History Museum Cromwell Road London SW7 5BD United Kingdom Phone +44 20 7942 5627 Fax +44 20 7942 5537 <u>c.stanley@nhm.ac.uk</u>

## **Ragnar Törnroos**

Department of Geology University of Helsinki PO Box 64 FIN-00014 Helsinki Finland Phone +358 9 191 50835 Fax +358 9 191 50826 <u>ragnar.tornroos@helsinki.fi</u>

## **Gheorghe Udubasa**

Geological Institute of Romania Caransebes Str., 1 RO-78344 Bucharest-32 Romania Phone +40 1 224 2093 Fax +40 1 224 0404

udubasa@geo.edu.ro

#### **Pavel Uher**

Department of Mineral Deposits The Comenius University, Faculty of Natural Sciences Mlynská dolina G 842 15 Bratislava Slovakia Phone +421 2 602 96282

puher@fns.uniba.sk

#### Nicolás Velilla Sánchez

Departamento de Mineralogía y Petrlogía, Faculdad de Ciencias Universidad de Granada Campus Fuentenueva s/n E-18002 Granada Spain Phone +34 958 246615 Fax +34 958 243368 <u>velilla@ugr.es</u>

## Anton A. Valter

Malyshko str. 3 Apt. 449 Kiev Ukraine 02192 Phone +38 044 5250320 Fax +38 044 5250320 <u>avalter@iop.kiev.ua</u>

## Sabine M.C. Verryn

Department of Geology University of Pretoria Pretoria 0002 Republic of South Africa Phone +27 12 420 2137 Fax +27 12 420 2661 <u>sabine.verryn@xrd.co.za</u>

# Rustam G. Yusupov

Geological Museum Geological Survey of Republic of Uzbekistan Furkat Street 4 100021 Tashkent Uzbekistan Phone +99871 245 0866 Fax +99871 245 1337 <u>r.g.yusupov@bk.ru</u> <u>erkin.67@inbox.ru</u>