

COMMISSION 46: TEACHING OF ASTRONOMY (L'ENSEIGNEMENT DE L'ASTRONOMIE)

Report of meetings, 19 and 23 August, 1994

PRESIDENT: L. Gouguenheim

SECRETARY: C. Iwaniszewska

1. MEMBERSHIP

The National Representatives for 1994-1997 are:

Argentina: E.F. Arias; Australia: A. Rodgers; Austria: H. Maitzen; Belgium: A. Noels; Brazil: W. Maciel; Bulgaria: A.S. Nikolov; Canada: R. Bochonko; Chile: J. Maza; China Nanjing: Zhonwei Li; China Taipei: C.S. Shen; Colombia: E. Brievea; Denmark: H.J. Fogh Olsen; Finland: H. Oja; France: L. Gouguenheim; Germany: J. Feitzinger; Greece: L.N. Mavridis; Hungary: G. Szecsenyi-Nagy; India: N.C. Rana; Indonesia: W. Sutantyo; Italy: S. Delli Santi; Japan: S. Isobe; Korea Rep.: S.U. Choe; Malaysia: M. Othman; Mexico: S. Torres-Peimbert; Netherlands: E. Braes; New Zealand: E. Budding; Nigeria: L.I. Onoura; Norway: J.E. Solheim; Paraguay: A.E. Troche-Boggino; Poland: C. Iwaniszewska; Portugal: C. Osorio; Romania: G. Vass; South Africa: A. Fairall; Spain: R.M. Ros; Sweden: Aa. Sandqvist; United Kingdom: D. Clarke; Uruguay: J. Fernandez; USA: J. Pasachoff; Vatican City State: M.F. McCarthy; Venezuela: N. Calvet; Yugoslavia: J. Milogradov-Turin.

The following previous National Representative becomes a regular member: A. Catala-Poch.

The following are new regular members: M.L. Aguilar, F. Andrews, M. Bobrowski, M.M. Dworetzky, R. Havlen, T. Huang, B.W. Jones, K.C. Leung, Ma Xing Yuan, I. Nicolson, T. Oswald, M. Penston, G.A. Ponce, J. Quamar, R. Szostak, C. Tolbert, P. Whitelock.

The following are consulting members for 1994-1997: L. Abati, P.S. Bretones, N.M. Tung, G. Vincino, P. Viet Trinh.

The following have resigned from the Commission: S. Ferraz-Mello, R. West.

2. INTERNATIONAL SCHOOL FOR YOUNG ASTRONOMERS (ISYA)

Donat Wentzel, secretary for ISYA reported on the last ISYA's held during the triennium: that of 1992 in China, that of 1993 (in reality in January, 1994) in India, and the next one in September, 1994 in Egypt. All of them have been organized by Donat Wentzel with the assistance of Michèle Gerbaldi, while the first 18 schools that the IAU organized since 1966 were conducted by Josp Kleczek.

The speaker commented on the importance of having faculty members able to stay for the whole

duration of the school, in order to give participants the opportunity of many informal scientific individual discussions; another important factor is to always choose the school's participants from different countries, of different background, to get the discussions more lively. He then stressed the advantages of organizing schools at more developed institutions with a good access to local libraries, computers, as well as an observatory. For that reason it would not be practical to have schools in places which are far away from astronomical centres, even if it would mean that participants would have had smaller distances to cover when coming to a school. Travel costs of all faculty and of some participants are always covered by the IAU, while the local costs, which are of the order of ten to twenty thousand US dollars must be covered by the host institution or by some local sponsors. That is the reason that not all institutes can apply for an ISYA, since they must have some local funding.

The next ISYA will probably be held in Brazil, in September 1995, at the invitation of Renato Las Casas from Belo Horizonte. There had also been a proposal from Colombia, but it had not been followed by more detailed information.

Turkey, which also made a proposal, should wait for some time, since it is just too near the area where an ISYA will take place this year (Egypt). Nigeria for the time being has no local sponsors to help with the organizing of an ISYA.

Donat Wentzel then read the new rules for ISYA adopted by the IAU Executive Committee in 1992, and thanked Michèle Gerbaldi warmly for all her painstaking work in the past 3 years.

Jayant Narlikar then expressed his gratitude for the very conscientious and able job that Donat Wentzel and Michèle Gerbaldi had undertaken at his Institute, the IUCAA in Pune, during the last school in January, 1994.

3. VISITING LECTURERS' PROGRAM (VLP); TEACHING FOR ASTRONOMY DEVELOPMENT (TAD).

Donat Wentzel, the coordinator of the VLP, reported on the last visiting professors in Paraguay in 1994, and then presented another proposal: to change the VLP into a new project, called "Teaching for Astronomy Development" (TAD).

Recalling how he had been extremely impressed by the great number of persons connected with astronomy teaching (even in a small country) at the meeting in Uruguay in 1991, Don Wentzel was of the opinion that by remodelling the VLP into TAD, we should be able to reach a wider range of persons connected with astronomy teaching in developing countries.

The idea of this new project is to aim for the formation of a small core of indigenous astronomers interested in teaching and research. Such a goal could be obtained by having astronomy courses possibly integrated in the physics curriculum, as well as by training a few selected students abroad. The budget that was planned for the VLP should be used for the TAD project.

He then presented to the members proposed rules for the new TAD project prepared by the President of Commission 46 Lucienne Gouguenheim and himself. After some minor corrections concerning

the appointment of a local coordinator of the program, as well as the student's tuition costs while abroad, the project got the approval of Commission 46.

The President of Commission 46 Lucienne Gouguenheim announced that Donat Wentzel will act as coordinator of TAD, with the assistance of Derek McNally.

The new project has been presented to the IAU Executive Committee which approved it.

4. ASTRONOMY EDUCATION MATERIAL (AEM)

It was generally agreed that the publication of long lists of textbooks and various teaching devices in 4 groups of languages, as has been done in the past, should be stopped. Instead of this, Robert Robbins who had been preparing the English part of AEM, presented the following possibilities for the future:

1. To print in the Commission 46 Newsletter a list of publishers, from whom one can obtain, upon request extensive publications lists.
2. To draw the attention of members to review articles in many astronomical periodicals.
3. To prepare for the use of members a shorter list of useful textbooks, which would mean taking a greater responsibility when assessing the degree of "usefulness".
4. To publish in the Newsletter a copy of the list prepared by the Astronomical Society of the Pacific "The Universe in the Classroom".

Perhaps it would be useful to include in the Newsletter some shorter book lists or lists of book reviews. Julieta Fierro announced that any person interested in AEM published in the Spanish language, may obtain such a list from her.

5. TRAVELLING TELESCOPE (TT)

John Percy, the coordinator of the TT reported on the present situation of this project. The modern equipment of this instrument is now attached to a local telescope and is still used in photometric work by Paraguayan students, as a result of the VLP course of Armando Arellano Ferro. But the original TT (an 8-inch Celestron) is still in Canada, and it appears that its shipping costs are so high, that one must be very careful how to make the best use of this instrument. It would be advisable to get some sponsors to save these costs.

6. NEWSLETTER AND TRIENNIAL REPORT

Six issues of the NL (#33-38) were published during 1991-94. The Editor of the Newsletter, John Percy, stated that he got about half of the National Reports for the epoch 1991-1993 in due time; others came later. They have been published in successive issues of the Newsletter. In view of the growing costs of printing and sending off this publication one should discuss the future possibilities

of sending such a Newsletter: (i) only to National Representatives - about 50 copies; (ii) to all Commission 46 members - about 150 copies; (iii) to all Commission 46 members and a few other addresses - about 300 copies; (iv) to all Commission members, by means of e-mail.

After some discussion it was decided to form a group: Chairman - Armando Arellano Ferro (Mexico); Members: Lucette Bottinelli (France), Sung Urn Choe (Korea), Julieta Fierro (Mexico), Terry Oswalt (USA), N.C. Rana (India), who should explore the possibilities for future e-mail sending.

John Percy announced that he would be willing to continue the editing and printing of the paper, Newsletter, as it has been done before, for the next 3 years.

7. ICSU COMMITTEE ON THE TEACHING OF SCIENCE

Jay Pasachoff reported on the meeting of the ICSU-CTS in Paris. He is of the opinion that the Committee is evolving more towards bureaucratic work, so that there seems to be no need for a contact with scientific union representatives.

8. JD4: RECENT DEVELOPMENTS IN ASTRONOMY EDUCATION

The President, Lucienne Gouguenheim reported on the Joint Discussion on education which took place on August 18, 1994. About twenty papers were presented, while more than twenty posters were prepared. The papers will be included in the volume of IAU Highlights of Astronomy of 1994. The President was asked to explore the possibility of having extra copies prepared from the whole volume so that it would be possible to prepare a small booklet (perhaps with the abstracts of posters) for every Commission member.

9. FUTURE MEETINGS ON ASTRONOMY EDUCATION

John Percy stated that two proposals have been sent to the Commission 46: (i) to be held in London in July 1996, a colloquium on Astronomy Teaching, at the invitation of Derek McNally and Barrie Jones; (ii) to be held in Japan in 1996 or 1997, a symposium by Commission 46 and Commission 50 on "Preserving the Astronomical Windows: Amateur-Professional Collaboration", at the invitation of Syuzo Isobe.

The first proposal got a favourable response, but the second one brought some discussion. On one hand, it was stated that such a wide topic should receive more attention and support from other IAU Commissions like Commission 21 (Light of the Night Sky), Commission 27 (Variable Stars), Commission 40 (Radio Astronomy). On the other hand, it was recalled that a joint meeting of many scientific organizations, one of them the IAU, on light pollution etc., had been organized in Paris in 1991, while the IAU Colloquium on "Contribution of Amateurs to Astronomy" was held in Paris in 1987. In the end members agreed to support the proposal to have in Japan, in conjunction with the next IAU General Assembly in 1997, a Joint Discussion proposed by Commission 50, co-sponsored by Commission 40, Commission 21, as well as others, and Commission 46. (Note from John Percy: there is also a proposal to hold a Symposium on Professional-Amateur Cooperation, as part of the 1997 IAU GA in Japan. Commission 46 should support this.)

10. MISCELLANEOUS

John Percy announced that before IAU Colloquium 155 in Cape Town (South Africa) a one day meeting with teachers has been planned. A similar meeting will take place after the Latin America Regional Astronomy Meeting in Uruguay in 1995. The next Vatican Summer School for Young Astronomers will take place in July 1995; the local organizer is Richard Boyle. Finally Commission members agreed that having a Joint Discussion on teaching problems during each IAU General Assembly should become a normal procedure.

11. ORGANIZING COMMITTEE

The President Lucienne Gouguenheim presented the list of future O.C. members and their various tasks:

President: John Percy (Canada) - Newsletter and TT
Vice-President: Julieta Fierro (Mexico)
ISYA Secretary and TAD coordinator: Donat Wentzel (USA)
ISYA Assistant Secretary: Michèle Gerbaldi (France)
TAD Assistant Coordinator: Derek McNally (UK)
Asian Pacific region: Syuzo Isobe (Japan)
IUCAA: Jayant Narlikar (India)
Past President: Lucienne Gouguenheim (France)
Working Group for the Worldwide Development of Astronomy: Alan Batten (Canada)
Chairman of e-mail group: Armando Arellano Ferro (Mexico)

12. ONE DAY MEETING WITH SCHOOL TEACHERS

The traditional School Teachers Meeting took place on August 26. It was very successful, with 180 participants, thanks to the good organization of Professor Henny Lamers and his colleagues. Due to this large unexpected attendance it had to move to the University of Utrecht. Four scientific lectures and 6 workshops (two of them by Commission 46 members) were held both in Dutch and English.

The audience concluded the business meeting by expressing their thanks to Lucienne Gouguenheim for her excellent work as President.