

COMMISSION 21

LIGHT OF THE NIGHT SKY / LUMIERE DU CIEL NOCTURNE

Report of the Business Session, den Haag, August 22, 1994

President: Martha S. Hanner
Vice-President: Michael F. Hauser

The President opened the meeting by welcoming the members present. She requested a moment of silence in remembrance of the members who have died during the triennium: Prof. Franklin Roach, Sir David Bates, Prof. Luisa Fishkova, Prof. U. Haug, and Dr. T. G. Megrelshvili.

I. ACTIVITIES DURING THE PAST TRIENNIUM

The President summarized the activities of the Commission:

Commission 21 co-sponsored IAU Symposium 160, *Asteroids, Comets, Meteors*, held in Belgrade, June 1993.

At this General Assembly, Commission 21 sponsored two meetings:

Symposium 168, *Examining the Big Bang and Diffuse Background Radiations* (with Commission 47)

Joint Discussion 17, *Dust Around Young Stars: How Related to Solar System Dust?* (with Commission 34)

IAU Colloquium 150, *Physics, Chemistry, and Dynamics of Interplanetary Dust* is planned for August 14-18, 1995 at Gainesville, Florida, USA.

The triennial report for the IAU Transactions was prepared, covering the period July 1990 - June 1993. Copies were sent to Commission members with the January 1994 newsletter.

A revised edition of the basic reference book *Astrophysical Quantities* is being prepared. A summary of the zodiacal light and zodiacal emission was submitted, with the help of several Commission 21 members. A copy of the summary was sent to members with the January 1994 newsletter.

II. ELECTION OF OFFICERS

The following officers, proposed by the Organizing Committee, were elected:

President: Christoph Leinert (Germany)
Vice-President: Stuart Bowyer (USA)

Organizing Committee: Yu. Galperin (Russia), Bo A. Gustafson (USA), M. S. Hanner (USA), M. F. Hauser (USA), S. S. Hong (Korea), Ph. Lamy (France), A. C. Levasseur-Regourd (France), T. Matsumoto (Japan)

III. MEMBERSHIP

During the past triennium, a questionnaire was sent to all Commission members, asking whether they wish to remain as members of Commission 21. 12 members responded that their interests have changed and they no longer wish to be members. 18 members did not respond; of these 5 remain active and will be retained, while 13 have apparently either retired or have left the field and/or their addresses have been lost; these are classified as inactive members. It was voted to drop the 13 inactive members from the membership list.

The following new members were voted upon and added to the membership: E. Dwek (USA), M. Hurwitz (USA), D. Lemke (Germany), I. Mann (Germany), J. S. Mikhail (Egypt), M. Sykes (USA)

The following Consultants were added. These are colleagues working in the domain of Commission 21 who are not IAU members: D. Backman (USA), S. Jayaraman (USA), S. H. Moseley (USA), W. Reach (USA), J. B. Renard (France)

IV. RESTRUCTURING OF THE IAU

The President reported on the proposal from the Executive Committee presented to the Commission Presidents. The present Commission structure remains intact and a new Division structure is introduced, representing broad areas of astronomy. Each Commission will decide with which Division to affiliate.

The Division structure has to remain flexible, so that interdisciplinary Commissions such as ours have full freedom to cooperate with any other Commission for such purposes as sponsoring symposia and other meetings.

After considerable discussion, the members present voted to join Division 3, to be called Planetary System Sciences. A poll of the full membership regarding Division affiliation will be conducted.

V. STANDARD MEASUREMENTS OF THE NIGHT SKY BRIGHTNESS

The President reported that two organizations have expressed interest in measurements of the night sky brightness. M. Gadsden, of the International Union of Geodesy and Geophysics (also a member of Comm. 21) is suggesting a repeat of the airglow monitoring conducted during IGY and IQSY, in order to document changes in the night sky brightness.

H. Tanabe pointed out that the Tokyo Observatory carried out an airglow monitoring program for many years, until 1990. These data contain a record of any long-term trends.

P. Murdin, President of Commission 50, has emphasized the need for standard tables of the natural night sky brightness for use by lighting engineers. These engineers often have the task of designing lighting that contributes no more than a fixed percent of the natural night sky brightness. Since most modern research is concerned with separating the components of the diffuse radiation, often using satellite data from above the atmosphere, standard data on the total night sky brightness are not readily available.

Ch. Leinert, incoming President of Commission 21, will pursue these topics.