Bulletin nº 196

Décembre 1975

# U. R. S. I.

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#### **CHANGE OF ADDRESS**

From 1 February 1976, the address of the URSI Secretariat will be as follows :

#### URSI,

rue de Nieuwenhove 81, B-1180 Brussels, Belgium. Telephone : 343.76.78 Cables : URSISEC BRUSSELS.

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#### CHANGEMENT D'ADRESSE

A partir du 1er février 1976, l'adresse du Secrétariat de l'URSI sera :

#### URSI,

rue de Nieuwenhove 81 B-1180 Bruxelles, Belgique. Téléphone : 343.76.78 Adresse télégraphique : URSISEC BRUXELLES.

### MEMBER COMMITTEES OF URSI

It was intended to follow the usual custom of publishing a full list of names and addresses in the December issue of the Bulletin. However, since only a few Committees have, as yet, designated their Official Members for the new Commissions, it has been decided to defer publication of this list until the March 1976 issue.

Secretaries are requested to notify the Secretary General in Brussels of any changes in the President or Secretary of their respective Committees, and also of the names and addresses of their Official Members for the new Commissions. For inclusion in the March issue, these notifications should reach Brussels by 15 February 1976.

#### **URSI BOARD OF OFFICERS**

1. — Outgoing Board.

1.1. — The outgoing Board met in Lima on 8 August 1975, mainly in order to review the arrangements for the General Assembly.

1.2. URSI Awards. — It is proposed to revise the rules for the URSI awards. Since the number of candidates proposed by Member Committees has been disappointingly small, a suggestion has been made for the creation of a Nominating Committee authorised to add its candidates to those submitted by the Member Committees. This Committee would then submit a short list of selected candidates to the Board of Officers which, as at present, would make the final awards.

2. — Incoming Board.

2.1. — The new Board met in Lima on 19 August, and designated Prof. W. E. Gordon as Treasurer for the period 1975-1978.

2.2. Teaching of Telecommunication Science. — It was agreed to invite Prof. H. G. Booker to submit a report to the Board on the establishment of closer links between URSI and the Universities throughout the world that are engaged in teaching those aspects of telecommunications science in which URSI is interested.

2.3. URSI Secretariat. — It was agreed that the President, Treasurer and Secretary General should review the situation following the expiry of the lease of the URSI offices at Place Emile Danco in November 1975.

*Note* : Since the meeting, less expensive office accommodation has been rented not far from the present offices. The new address of the URSI Secretariat, from 1 February 1976, will be :

Rue de Nieuwenhove 81, B-1180 Brussels, Belgium.

2.4. XIX General Assembly, Helsinki 1978. — The superposition of the open symposia on the normal scientific programme of the Commissions in Lima created some problems which require study. Prof. Stumpers was invited to give further consideration to these and to the coordination of the programme for the 1978 Assembly. The Chairmen of the Commissions have been invited to submit their tentative views on the planning of the scientific programme in Helsinki.

2.5. *Membership Committee.* — Prof. Migulin will supervise the activities of the Standing Committee on Membership which was set up by the Council. The members of the Committee have since been asked to suggest what steps should be taken, in their respective regions, to encourage the formation of URSI Committees in countries which do not yet adhere to the Union.

2.6. Next Meeting. — The Board will meet in Brussels for its normal annual meeting on 16 and 17 March 1976.

#### **IONOGRAM INTERPRETATION AT HIGH LATITUDES**

Ionospheric workers are already familiar with the URSI Handbook on Ionogram Interpretation and Reduction (1), the second edition of which appeared in 1972.

The *High Latitude Supplement* (2) to the Handbook has recently been published and will be of interest especially to workers concerned with studies of ionospheric data from the Antarctic continent and from the stations in the northern polar regions.

The new volume consists mainly of reproductions of selected ionograms and of comments on the particular characteristics illustrated, including those peculiar to stations at high latitudes. For the northern hemisphere, ionograms are grouped by region or country (USSR, Scandinavia, Greenland, Canada and USA). For Antarctica, the ionograms reproduced were obtained at Casey, Terre Adélie, Mawson, Byrd, Syowa Station, Belgrano and Halley Bay.

A separate section deals with the slant-E condition, lacuna and the identification of the auroral oval.

An appendix contains an important list of corrections and additions to the second edition of the Handbook.

- (1) URSI Handbook of Ionogram Interpretation and Reduction. Ed. W. R. Piggott and K. Rawer (Second edition, November 1972). Price US\$ 2.50 plus postage.
- (2) High-latitude Supplement to the URSI Handbook of Ionogram Interpretation and Reduction. Ed. W. R. Piggott (October 1975). Price US\$ 4.00 plus postage.

Both volumes are published by the US Department of Commerce as Report UAG-23 (Handbook) and Report UAG-50 (Supplement). Enquiries should be addressed to :

> National Climatic Center, (attention Publications), Federal Building, Asheville (NC) 28801, USA.

#### **RADIOFREQUENCY MEASUREMENTS**

The BIPM Working Group on radiofrequency measurements met in Sèvres, France, on 19 and 20 May 1975. Dr. Altschuler (USA), Mr. Bailey (UK) and Mr. Lundbom (Sweden) attended as representatives of their national laboratories and Mr. Lundbom reported on the meeting in URSI Commission I in Lima.

The Group reviewed the progress made in the various measurement comparisons at present in hand, and recommended other comparisons for the future. The situation can be summarised as follows :

Comparisons completed since previous meeting	5:	3	
Comparisons now in hand	:	13	
Comparisons planned to begin in 1976-79	:	21	

The comparisons refer to voltage, attenuation, power and other parameters in waveguides and coaxial lines in various parts of the radio spectrum. Further information on these can be obtained from Dr. Altschuler (Chairman, URSI Commission A) or the Secretary General of URSI.

#### L'ÉLECTRONIQUE ET LA MESURE

Un colloque international sur l'électronique et la mesure a eu lieu à Paris du 26 au 30 mai 1975. Le colloque, qui a été organisé dans le cadre des cérémonies du Centenaire du Bureau International des Poids et Mesures (BIPM), était patronné par le BIPM ainsi que par plusieurs organisations françaises et des organisations internationales dont l'URSI. Plus de 70 contributions ont été présentées par des conférenciers venus de France, de Belgique, du Canada, des Etats-Unis d'Amérique, d'Italie, de Grande-Bretagne, de Hongrie, des Pays-Bas, de la République fédérale d'Allemagne, d'URSS et de Yougoslavie.

Les textes (en français ou en anglais) des contributions ont été reproduits dans un volume de 634 pages mis à la disposition des participants. Ils traitent les sujets suivants :

- la détermination précise des grandeurs fondamentales,
- la mesure électrique de précision,
- les capteurs de mesure physiques,
- le traitement du signal électrique,
- les systèmes d'acquisition des données.

#### SATELLITE BEACON OBSERVATIONS

COSPAR is organising a Symposium on the *Geophysical Use of Satellite Beacon Observations* which will be held from 1-4 June 1976 at Boston University, USA. The main topics will be (1) Ionospheric structure and dynamics; (2) The plasmasphere; (3) The disturbed F region; (4) Specification of trans-ionospheric functions for engineering purposes; (5) Equipment and future plans for satellite beacon studies. Each session will include at least one invited review paper.

Abstracts of 200 words or less should be submitted, by 1 February 1976, to :

Professor M. Mendillo, Department of Astronomy, Boston University, Boston (Mass.) 02215, USA.

Information about hotels, etc. is also available from Prof. Mendillo.

## ACTIVE EXPERIMENTS IN SPACE PLASMAS

In recent years, several different types of controlled active experiments have been conducted in the ionosphere and magnetosphere. Plans for further such experiments are being made at present and it is timely to hold a Symposium on Active Experiments in Space Plasmas during 1976. The probable location and the dates are NOAA, Boulder, Colorado, USA, from 3 to 5 June, 1976. The topics to be discussed will range from the results of such experiments already undertaken to detailed considerations of the plasma physics problems which may be studied in the future using active experiments. Apart from the presentation of several invited review papers, contributed papers will be presented. Papers on definitive experiments that may be conducted in space plasmas and which cannot be performed in terrestrial laboratories will be particularly welcomed by the Programme Committee.

Further details may be obtained from either

Prof. K. Rawer,
Institut für Physikalische Weltraumforschung,
Heidenhofstrasse 8,
D-78 Freiburg-im-Breisgau,
Federal Republic of Germany. Dr. M. J. Rycroft, Department of Physics, The University of Southampton, Southampton SO9 5NH, England.

Scientists are also invited to contact either Prof. Rawer or Dr. Rycroft with suggestions for topics which they feel should be included in the Symposium programme.

or

### THE MAGNETOSPHERE AND ITS ENVIRONMENT

The Royal Society of New Zealand, in conjunction with the Institute of Physics in New Zealand, is organising a Regional Symposium on the *Magnetosphere and its Environment* from 24-28 January 1977 at the University of Canterbury, Christchurch, New Zealand.

The objective will be to discuss problems of the system comprising the solar wind, the magnetosphere and the ionosphere, and the lower atmosphere and to exchange information on the initial results of the IMS.

The main topics will be (1) Solar wind (origin, properties and interaction with the geomagnetic field); (2) Dynamics of the magnetosphere-ionosphere system; (3) The influences of solar particles on the lower atmosphere and the weather.

Intending contributors are invited to say to which topic their paper will refer. Abstracts will be called for about the middle of 1976. The sessions will also include some invited review papers and time for discussion.

Further information is available from :

The Executive Officer, Royal Society of New Zealand, P.O. Box 12249, Wellington, New Zealand.

#### INTERNATIONAL GEOPHYSICAL CALENDAR 1976

The operational edition of the Calendar for 1976 has been issued by the International Ursigram and World Days Service and copies are available on request from :

Dr. P. Simon, Ursigrammes Observatoire, F-92190 Meudon, France:

or Miss J. V. Lincoln, WDC-A (Solar-Terrestrial Physics), Boulder (Col.) 80302, USA.

On the back of the Calendar, there is a summary of the recommended observational programmes in various branches of atmospheric physics and in studies of certain interplanetary phenomena.

## **International Geophysical Calendar for 1976**

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NOTES:

 In 1976 the Antarctic and Southern Hemisphere Aeronomy Year (ASHAY) will have special periods of observations: Mar 21-Apr. 3; June 17-30; Sept. 15-29; Dec. 8-23. Contact is S. Radicella, Observatorio Astronomico ''Felix Aguilar' U.N.S.J., San Juan, Argentina.

 N-MAC (noon-midnight auroral correlations) periods are: Oct. 29-Nov. 13, 1975; Nov. 26-Dec. 10, 1975; Dec. 24, 1975-Jar 7, 1976; Jan. 20-Feb. 4, 1976; Nov. 16-Dec. 1, 1976; Dec. 15-Dec. 29, 1976; Jan. 12-Jan. 26, 1977.