Bulletin nº 192 Septembre 1974

U. R. S. I.

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STANISLAW RYZKO

1910-1974

We regret to announce the unexpected death, in Warsaw, of Professor Stanisław Ryżko, for many years Official Member for Commission I of the Polish National Committee of URSI.

Professor Ryżko was born in 1910 at Stanisławow in the Mazowsze area of Poland. He received the M.Sc. and Ph. D. degrees at the Warsaw Technical University (Politechnika Warszawska) in 1934 and 1948 respectively. He received the title of Professor in 1967 after having been Associate Professor since 1954. In 1967 he was elected as a corresponding member of the Polish Academy of Sciences.

Professor Ryżko was well known for his early research, before the war, on magnetron oscillators. After the war, among his various achievements, he invented a pulse-counting Q-meter and a pulse-counting synchronized oscillator.

Professor Ryżko was well known in URSI and was Official Delegate to the General Assemblies in Ottawa in 1969, and in Warsaw in 1972. He was also very active in CCIR, where he was Vice-Chairman of Study Group 1 (Spectrum Utilization and Monitoring).

At the time of his death, Prof. Ryżko was Director of the Institute of Radio Electronics of the Warsaw Technical University, and Chairman of the Electronics and Telecommunication Committee of the Polish Academy of Sciences. He was an extremely active and vigorous scientist and his death is a serious loss for both Polish and international science.

XVIII URSI GENERAL ASSEMBLY, LIMA, PERU

11-19 August 1975

The programme for the Assembly will comprise business and administrative meetings of the URSI Council and the Scientific Commissions, and also a series of scientific sessions and symposia which will deal with the various topics covered by the eight Commissions.

The usual procedure has been followed in the preparation of the scientific sessions for Commissions I, II, V, VI and VII. The respective Chairmen and Vice-Chairmen are responsible for the choice of topics and for inviting the speakers. The list of speakers is not yet complete but the selected topics for these Commissions are listed below (Annex 1).

As an experiment, following a decision of the Board of Officers, Commissions III, IV and VIII will not organise separate scientific sessions as in the past. Instead, a group of three open symposia is being arranged and these will deal with the most important parts of the field covered by the three Commissions. The choice of topics and speakers is the responsibility of three Programme Committees and the final programme will depend on the response to the Call for Papers which was circulated in August 1974 and which is reproduced below (Annex 2).

Several sessions on topics which are relevant to Commissions IV and VIII, but which are outside the scope of the Symposia, are listed in Annex 3.

The possibility of arranging group travel at reduced cost from Europe to Lima is being investigated. Further information is given in Annex 4.

Annex 1

Commission I on Radio Measurements and Standards.

— Quantum frequency standards, including optical standards (joint with Commission VII).
— Standard time and frequency transmissions.
— Laser measurements (joint with Commission VII).
— Measurements at radio frequencies and at mm and sub-mm wavelengths.
— Application of radio methods, including those used at laser wavelengths, to scientific measurements.
— Automated and computerised measurements.
— Measurement of electromagnetic pollution (joint with Commission VIII).
— International comparison of standards.
— Josephson junction as an element in electronic measurement systems (joint with Commission VII).

Commission II on Radio and Non-ionized Media

— Remote sensing of surface and underground characteristics of the Earth.

— Theory and results of studies of the lower atmosphere by acoustic methods.
— Wideband communication systems (joint with Commission VI).
— Results of measurements of absorption due to rain.
— Development of models of the atmosphere applicable to absorption due to rain.
— Theory and experimental results relating to depolarisation due to rain.
— New topics.

Commission V on Radio Astronomy.

— Solar system, radio and radar astronomy.
— Spectral line observations and techniques.
— High-resolution mapping.
— Microwave acoustics (joint with Commission VII).
— Accurate position measurements.
— Unresolved continuum sources.
— New developments at observatories and laboratories.

Commission VI on Radio Waves and Circuits.

— Non-planar arrays.
— Antennas for satellite communications.
— Digital filters.
— Holography and its influence on electromagnetics.
— Special problems in scattering and diffraction.
— Optical communications (joint with Commission VII).
— Wideband communication systems (joint with Commission II).
— Millimetre and optical waveguides.
— Acoustic surface wave filters and transmission lines.
— Computer simulation of communication systems.

Commission VII on Radio Electronics.

— Quantum frequency standards including optical standards (joint with Commission I).
— Microwave acoustics (joint with Commission V).
— Laser measurements (joint with Commission I).
— Memories and large-scale integration.
— Optical communications (joint with Commission VI).
— 5 mm and sub-mm techniques.
— Microwave solid-state devices.

— Josephson junction as an element in electronic measurement systems (joint with Commission I).

Annex 2

Call for papers for open symposia

Details are given below of three Open Symposia which will be held during the 1975 URSI General Assembly. Authors wishing to present papers in any of these symposia are invited to submit titles and brief preliminary abstracts to reach the appropriate people (See details below) before 20 September 1974.

(A) Open symposium on radio waves and the ionosphere.

This Symposium, organised by Commission III, with co-sponsorship of certain parts by Commission VIII, will comprise 16 half-day sessions dealing with the following topics :

Artificial heating of the ionosphere and its effects.
Advances in incoherent scatter.
Ionospheric propagation problems in radio communication.
Ionospheric scintillation effects at VHF and UHF
VLF and ELF propagation in the earth-ionosphere waveguide; theories and results.
Global models of the ionosphere.
Drifts, waves and other irregularities; results and interpretation.
Remote sensing of the mesosphere using radio techniques.
Ionospheric radio measurements during the IMS, including the rôle of ionosondes in future studies.
Equatorial ionosphere structure and dynamics (Co-sponsored by IAGA).
Data processing in ionosphere research.

Other topics relevant to the subject of the Symposium will be dealt with in a special session.

The members of the Symposium Programme Committee are W. J. G. Beynon (Chairman), H. G. Booker, S. A. Bowhill and J. W. King. Titles and abstracts for this Symposium should be submitted to Professor S. A. Bowhill, Aeronomy Laboratory Department of Electrical Engineering, University of Illinois, Urbana, Illinois 61801, U.S.A.

(B) OPEN SYMPOSIUM ON NON-STATIONARY ANALYSIS.

This Symposium, organised by Commission IV, with co-sponsorship of certain parts by Commissions V and VI, will comprise 6 half-day sessions dealing with the following topics :

(1) *Mathematical aspects :* Estimation theory of non-stationary processes; concept of instantaneous frequency; modelling of continuous and discontinuous noise processes.

(2) *Technical aspects :* Real-time analysis; fast correlators; adaptive filters; use of optical techniques.

(3,4) *Magnetospheric aspects :* Analysis of non-stationary electromagnetic and electrostatic ULF and VLF waves; electromagnetic wave propagation in an inhomogeneous and time-dependent dispersive and absorbing medium; analysis of random wave fields in space.

(5) *Acoustical aspects :* Reflection on random surfaces; noise generators in movement; propagation through a turbulent medium; animal sonar systems.

(6) *Astronomical aspects :* Propagation of optical or radio wave signals through non-stationary media.

The members of the Symposium Programme Committee are R. Gendrin, J. L. Locke and F. L. Stumpers, together with T. Kaylath, B. Picinbono, R. L. McPherron, D. Jones, B. Escudie, M. Cohen and J. C. Ribes. Titles and abstracts should be sent to the scientists responsible for the individual topics; these are : Prof. T. Kaylath, Stanford Electronics Laboratories, Stanford, Calif. 94305, U.S.A. and Prof. B. Picinbono, Laboratoire d'Etude des Phénomènes Aléatoires, Université Paris-Sud, 91405 Orsay, France (Mathematical aspects and Technical aspects); Prof. R. L. McPherron, Institute of Geophysics and Planetary Physics, U.C.L.A., Los Angeles, Calif. 90024, U.S.A. and Dr. D. Jones, Space Science Department, ESTEC, Domeinweg, Noordwijk, Netherlands (Magnetospheric aspects); Prof. B. Escudie, Institut de Chimie et Physique Industrielles, 25 rue du Plat, 69288 Lyon Cedex 1, France (Acoustical aspects); Prof. M. Cohen, California Institute of Technology, Pasadena, Calif. 91109, U.S.A. and Dr. J. C. Ribes, Observatoire de Paris, Place Jules Janssen, 92190 Meudon, France (Astronomical aspects). Authors wishing to participate in this Symposium should note that abstracts are not required before 1 March 1975 but it would nevertheless be useful if preliminary abstracts could be sent before 20 September 1974.

(C) OPEN SYMPOSIUM ON THE TELECOMMUNICATIONS NOISE AND INTERFERENCE ENVIRONMENT.

This Symposium, organised by Commission VIII with co-sponsorship of certain parts by Commissions IV and VI, will comprise 9 half-day sessions dealing with the following topics :

Radio system performance models.
Radio noise models.
Man-made radio noise : sources and characteristics.
The undesired signals (interference) environment.
Atmospheric noise characteristics.
Acquisition and interpretation of sample records of non-stationary signals and noise.
Electromagnetic pollution measurements : techniques and instrumentation.
Storms : their description and location.
The composite noise and interference environment.

The members of the Symposium Programme Committee are N. D. Clarence (Chairman), G. H. Hagn, Ya. I. Likhter and F. L. Stumpers. Titles and abstracts for this Symposium should be submitted to Mr. G. H. Hagn, Stanford Research Institute, 1611 North Kent Street, Arlington, Virginia 22209, U.S.A. Authors wishing to participate in this Symposium should note that abstracts are not required before 1 March 1975 but it would nevertheless be useful if preliminary abstracts could be sent before 20 September 1974.

ANNEX 3

Sessions outside the scope of the Symposia.

— Coupling of whistler mode energy in and out of magnetospheric ducts.
— Report of Working Group IV. 1 on Whistlers in the magnetosphere.
— Active magnetospheric experiments involving radio and plasma waves.
— New topics.

ANNEX 4

Group travel from Europe to Lima

European participants at the URSI Assembly in Lima will be able to make great economies if they travel in groups of at least 10 persons rather

than individually. Following recent consultations with a European airline, two possible Travel Plans have been worked out (see below). The details could, however, be modified if there is a general demand for changes in the provisional Plans.

Plan 1 is designed for 1) participants who must attend administrative meetings during the week preceding the opening of the Assembly on 11 August; 2) participants who will be free to visit Cuzco and Machu Picchu before the Assembly begins.

Plan 2 is designed for participants who are not concerned with the pre-Assembly meetings and who wish to see something of South America after the end of the Assembly.

Plan No 1

1975

6 Aug (11 h)	— 6 Aug (21 h)	Paris to Lima
6 Aug	— 19 Aug	Stay in Lima
20 Aug	— 20 Aug	Lima to Rio de Janeiro
23 Aug (22 h 20)	— 24 Aug (13 h 20)	Rio de Janeiro to Paris.

This Plan includes room and breakfast in Lima from 6 August to 19 August.

Participants who have no other engagements during the week preceding the Assembly will have the possibility of making a 3-day excursion from Lima to Cuzco, including one day at Machu Picchu.

Price per person (as at 1 August 1974).

	Hotel Riviera (Ist class)	Hotel Crillon or Bolivar (De luxe)
	Belgian Frs	
Double room	44,500	47,700
Single room	48,340	54,120

Supplement for 3-day excursion to Cuzco and Machu Picchu :

Double room	4,750 B. fr.
Single room	5,780 B. fr.

Plan No 2

1975

9 Aug (10 h 40) — 9 Aug (20 h 35)	Paris to Lima
9 Aug — 20 Aug	Stay in Lima
20 Aug (morning)	Lima to Cuzco
20 Aug (afternoon)	Visit to Cuzco
21 Aug	One-day excursion from Cuzco to Machu-Picchu
22 Aug	By train across the Andes from Cuzco to Puno on Lake Titicaca
23 Aug	By hovercraft across the Lake, and then by bus to La Paz (Bolivia)
24 Aug	Visit La Paz and the Valley of the Moon
25 Aug	La Paz to Rio de Janeiro
25 Aug — 29 Aug	Stay in Rio de Janeiro
29 Aug (21 h) — 30 Aug	Rio de Janeiro to Paris.

This Plan includes :

— Economy class air fare
— Room and breakfast in Lima and Rio de Janeiro
— Room and fullboard (pension) during visits to Cuzco and La Paz
— Transfers and excursions by bus
— Local guides speaking English and French.

Price per person (as at 1 August 1974)

	Hotel in Lima	
	Riviera (Ist class)	Crillon or Bolivar (De luxe)
	Belgian Frs.	
Double room	56,520	61,300
Single room	59,380	64,120

The costs of Plans 1 and 2 have been calculated as at 1 August 1974 and are subject to any increases in air fares and hotel charges during the next year.

The amounts quoted in Belgian francs can be converted into other European currencies (and US dollars) by assuming that 1,000 BF is equal to (approximately) :

Austria	480 sch.	Portugal	645 esc.
Germany FR	67 DM	Spain	1,500 pta
France	126 FF	Sweden	116 Kr.
Italy	17,100 lire	Switzerland	78 SF
Denmark	158 Kr.	UK	£ 11
Netherlands	70 fl.	USA	$ 26
Norway	142 Kr.	USSR	R 20

These rates are subject to changes over the next year.

We would like to find out how many European participants are interested in Plans 1 and 2 or in modifications of them.

Interested persons are invited to provide the information specified below as soon as possible to :

URSI Secretariat,
Place Emile Danco 7,
B-1180 Brussels, Belgium.

Persons who provide information will not be committed in any way. They will be notified later of the final Plans.

1. Are you inested in
   (*a*) Plan 1, with 3-day visit to Cuzco and Machu Picchu ?
   (*b*) Plan 1, without visit to Cuzco and Machu Picchu ?
   (*c*) Plan 2 ?
2. How many persons will accompany you ?
3. Do you wish to suggest any modifications to the Plan in which you are interested ?

Please add your name, initials and postal address.

I. U. C. A. F.

The Inter-Union Commission on Frequency Allocations for Radio Astronomy and Space Science met in Bonn, F. R. Germany, on 29 July on the invitation of Prof. R. Wielebinski and the Max-Planck-Institut für

Radioastronomie, and with Prof. F. G. Smith in the Chair. The meeting was attended by the representatives of the constituent bodies (IAU, URSI and COSPAR) and by a consultant from the International Frequency Registration Board of ITU.

Much of the discussion was concerned with the preparations for the World Administrative Radio Conference to be held in 1979 at which major changes may be made to the present ITU frequency allocations, including those used by the Radio Astronomy and the Space Research Services with which IUCAF is concerned. A preliminary discussion may take place in 1977 and IUCAF will consult its Correspondents, and others interested, about questions concerned with, for example, the usefulness of existing frequency allocations, the need for changes in the bandwidths available at present, and requirements for allocations to meet new scientific needs.

The increasing use of artificial earth satellites which emit radio frequency energy for various purposes represents a growing interference problem, especially when wide-band emissions spread into adjacent bands and cause interference. IUCAF is actively engaged in studying current problems of this kind and the potential sources of interference in satellites to be launched in the future.

A list of the present IUCAF Correspondents is given below. Radioastronomers or space research scientists who are concerned with the problems of frequency allocations are invited to make contact with the Correspondents in their respective countries, or with the Secretary of the Commission :

Dr. C. M. Minnis,
Secretary, IUCAF,
c/o URSI Secretariat,
Place Emile Danco 7,
B-1180 Brussels, Belgium.

IUCAF Correspondents

Australia : Dr. B. J. Robinson, CSIRO Division of Radiophysics, P. O. Box 76, Epping N. S. W. 2121.

Austria : Dr. R. Leitinger, Institut für Meteorologie und Geophysik, Universität Graz, Halbärthgasse 1, A-8010 Graz.

Belgium : Prof. R. Coutrez, Institut d'Astronomie et d'Astrophysique, Université Libre de Bruxelles, 50 avenue F. D. Roosevelt, B-1050 Bruxelles.

M. R. Gonze, Service de Radioastronomie, Observatoire Royal de Belgique, 3 avenue Circulaire, B-1180 Bruxelles.

Brazil : Dr. F. de Mendonça, Scientific Director CNAE, C. P. 515, Sao José dos Campos, Sao Paulo.

Canada : Dr. L. H. Doherty, Radio Astronomy Section, National Research Council of Canada, Ottawa, Ontario K1A OR8.

Czechoslovakia : Prof. A. Tlamicha, Astronomical Institute, Czechoslovak Academy of Sciences, Ondrejov, Okres Praha-vychod.

Denmark : Dr. A. Lundback, Meteorological Institute, Geophysical Section I, Lyngbyvej 100, DK-2100 Copenhagen ø.

Finland : Prof. M. Tiuri, Helsinki University of Technology, SF-02150 Otaniemi.

France : M. M. Thué, CNET, 38 rue Général Leclerc, F-92131 Issy-les-Moulineaux.
Dr. E. J. Blum, Observatoire de Paris, F-92190 Meudon.

German D. R. : Dr. A. Krüger, Heinrich-Hertz-Institut, Rudower Chaussee 5, DDR-1199 Berlin-Adlershof.

Germany, F. R. : Dr. R. Wielebinski, Max-Planck-Institut für Radioastronomie, Auf dem Hügel 69, D-53 Bonn.

Greece : Prof. M. Anastassiades, Ionospheric Institute, National Observatory of Athens, Athens.

Hungary : Dr. Cs. Ferencz, VIII Pushkin u. 24, Budapest.

India : Dr. G. Swarup, Radio Astronomy Station, TIFR, Post Box No. 8, Oottakamund, South India.

Israel : Dr. J. Mass, Radio Observatory, P. O. B. 4655, Haifa.

Italy : Prof. P. F. Checcacci, Istituto di Ricerca sulle Onde Elettromagnetiche, Via Panciatichi 56, I-50127 Firenze.

Japan : Prof. H. Tanaka, Research Institute of Atmospherics, Nagoya-University, Ichida-cho, Toyokawa.

Netherlands : Mr. J. W. M. Baars, Radiosterrewacht Westerbork, Post Hooghalen.

Peru : Dr. R. Woodman, Instituto Geofísico del Peru, Jicamarca Radio Observatorio, Apartado 3747, Lima.

Poland : Dr. S. Gorgolewski, Astronomical Observatory N. Copernicus, Sienkiewicza 30, Torun.

South Africa : Dr. F. J. Hewitt, Deputy President, CSIR, P. O. Box 395, Pretoria.

Sweden : Dr. H. Sterky, Sibyllegatan 43-45, S-114 42 Stockholm.
Dr. J. A. Högbom, Stockholm Observatorium, S-13300 Saltsjöbaden.

United Kingdom : Dr. F. Horner, Appleton Laboratory, Ditton Park, Slough SL3 9JX.
Prof. F. G. Smith, Nuffield Radio Astronomy Laboratories, Jodrell Bank, Macclesfield, Cheshire SK11 9DL.

USA : Dr. J. W. Findlay, National Radio Astronomy Observatory, Edgemont Dairy Road, Charlottesville, Virginia 22901.
Dr. J. P. Hagen, Department of Astronomy, 103 Whitmore Lab., University Park, Penn. 16802.

USSR : Dr. B. A. Dubinskij, Scientific Council of Radioastronomy, Institute of Radioelectronics, Prospekt Marksa 18, g. Moscow, Centre, GSP-3.

Yugoslavia : Prof. M. Vukićević-Karabin, Department of Astronomy, University of Belgrade, Studentski Trg 16, Beograd.

TIME DETERMINATION

Cagliari, June 1974

From 3 to 6 June 1974, an international meeting on the problems of time determination, dissemination and synchronisation was held at the University of Cagliari (Sardinia). The meeting was initiated by the Astronomical Institute of the University of Cagliari and the International Latitude Station at Cagliari-Carloforte and was co-sponsored by Commission 31 (Time) of the International Astronomical Union.

The main topics discussed were : Atomic Time (AT), Coordinated Universal Time (UTC), relativistic effects on time scales, problems relating to a redefinition of Ephemeris Time (ET), and new techniques for time determination and dissemination.

There were 21 contributions, including 8 invited papers, which covered such subjects as the improvement of International Atomic Time (TAI) by means of steering on the basis of primary standards measurements; time comparisons using TV pulses; time transmission using LORAN-C; the development of a future Ephemeris Time; principles of time scales and relativistic effects on time scales; synchronisation of public clocks by means of transmitted time signals.

G. Becker.

STRATOSPHERIC WARMINGS

COSPAR has recommended the intensive collection of data on stratospheric warmings during the period 1 December 1974-14 February 1975. Rocket sondes should be launched in accordance with regular programmes until the beginning of a warming. Once a warming has begun, the primary launch day will be Wednesday, but additional launches on Mondays and Fridays will be desirable.

Countries which have no regular programme should regard the interval mentioned above as a prime experimental period and should endeavour to make soundings at least on Wednesday each week and, if possible, on Mondays and Fridays also during a warming.

V COLLOQUIUM ON MICROWAVE COMMUNICATION

Budapest, 24-30 June 1974

On registration, the participants received the Microcall Proceedings in five volumes, more than 2,000 pages. The subjects treated were Microwave Communication Systems (7 papers), Communication System Theory (26 papers), Circuit Theory and Computer Aided Design (36 pages), Electromagnetic Theory, Antennas and Propagation (19 papers), Microwave Circuits and Magnetic Materials for Microwave Applications, and Plasma Phenomena (29 papers). These well-produced volumes are still available from Akadémiai Kiadó, Budapest.

Professor Bognar, President of the Colloquium and Member of the Hungarian Academy of Sciences, welcomed the participants at a cocktail party on 25 June, and officially opened the Congress on the morning of 26 June. His Co-chairmen were Dr. Varadi (Research Institute for Telecommunications) and Dr. Komporday representing the Hungarian Scientific Societies. Of the many Hungarian scientists who cooperated in the organisation, I may mention Almassy, Berceli, Csurgay, Csibi, Géher, with the risk of having forgotten others whose contributions were as important. Mrs Merey, Mrs Metzger and the ladies of the conference secretariat were very helpful on all occasions. A ladies programme was also organised.

From Tuesday to Friday, three parallel sessions were held from about 08 h 20 to 18 h 30, with coffee and luncheon intervals. The quality of the papers was, in general, quite good, with some outstanding lectures by well-known authorities. The day usually ended with a panel discussion on problems about which lectures had been given; for example, Circuit Theory Problems, or Antennas. However, it is not easy to stimulate lively discussion in a meeting, and audience participation is usually rather low, so that panel members fill most of the available time.

The number of participants was 449. Hungary led with 195, followed by Poland 50, Fed. Rep. of Germany 31, Czechoslovakia 24, German Dem. Rep. 22, USSR 18, Italy 17, USA 17, France 15, Netherlands 9, United Kingdom 7, Belgium 6 and smaller numbers from Austria, Bulgaria, Canada, Denmark, Finland, Iran, Japan, North Korea, Romania, Sweden, Switzerland, Turkey and Yugoslavia.

Professor Stumpers represented the International Union of Radio Science (URSI) and brought with him the greetings and best wishes of its President and Board of Officers. Professor Siforov, who received many congratulations on his recent 70th birthay, represented the Popov Society, of which he is President. Other members of the International Organising Committee for the Colloquium were A. Oliner, H. Carlin, A. Smolinski, J. Scanlan, F. Carassa, J. Efimov, L. Wainstein, P. Wacker, P. Jeppesen, F. Voigt, M. Kummer, N. Hamid, M. Novak and P. Weissglass. This Committee met on 26 June and agreed to a proposal to hold another Budapest Microwave Colloquium in 1978. It was hoped that, by that time, coordination between the different organisations in the field would have made sufficient progress to ensure that no competing symposia would be held in Europe in the same year.

Social events included a concert, several excursions and the conference banquet. On Saturday, 30 June, Professor Bognar closed the Colloquium with a speech in which he thanked participants and authors as well as representatives of international organisations. The Hungarian capital, with its many beautiful buildings and avenues, left us with an impression not only of scientific and cultural quality, but also of sometimes overwhelming personal hospitality. Although 1978 is still far away, I feel sure that many of those who participated in 1974 will look forward to a return to Budapest in four years time.

F.L.H.M. Stumpers.

COSTED TRAVEL FELLOWSHIPS

The following announcement was issued in June 1974 by the ICSU Committee on Science and Technology in Developing Countries.

Objectives.

(i) The travel fellowships are intended to enable scientists from developing countries to attend scientific conferences. Only those conferences where specific symposia are held will be considered for these awards. Attendance at General Assemblies will not be encouraged.

(ii) The fellowships will also be available for scientists from developing countries to visit laboratories/institutions/industries for specialised training or project work or workshops.

Availability.

(i) The funds under this scheme will be available to support round-trip international travel by economy class. The fare will be paid to the authorised travel agent.

(ii) The fellowship does not include allowances for maintenance in the host country or break of journey en route.

(iii) There will be no restriction as to the country to be visited by the fellows.

(iv) The fellowships will be available only for candidates from developing countries.

(v) Fellowships will not be available for participation in programmes within the same country (e.g. : Indians will not be eligible for a workshop in India).

(vi) The fellowships will not be available for any programme which is of more than 3 months duration.

Applications.

(i) Only candidates below the age of 35 years will be eligible for these fellowships.

(ii) Candidates should have a good academic background or industrial experience. These details should be included in the biodata attached to the applications.

(iii) Candidates should normally be employed, and should return to the position in the home country after the training.

(iv) Candidates should establish availability of other sources of support for covering expenses during the stay abroad.

(v) Candidates should have been accepted in the Conference/Project/ Workshop (this partly transfers the responsibility of judging the quality of the candidates to the sponsors).

(vi) Two letters of assessment of the candidates should be directly sent to the COSTED Secretariat — one from a senior person in the field within the home country and the other, if possible, from the Director or Convener of the Conference/Project/Workshop.

(vii) Applications should contain a statement (one page) of the likely benefits to the candidate in developing potential for future work in the home country.

(viii) Applications should reach the COSTED Secretariat with supporting documents at least 3 months before the starting date of the programme.

(ix) Applications should be addressed to the Scientific Secretary, COSTED Secretariat, Indian Institute of Science, Bangalore 560012, India.

Selection.

Candidates selected for the awards will be informed by the COSTED Secretariat.