

Ahmedabad 9

3 / 11 / 51

My dear Krishnan,

I received a letter today from K. S. Ramanathan saying that he had not yet received any order of appointment for India, but that Mr. Carter of the UNESCO had asked him to produce a statement regarding the post that would be given ^{to} him on his return to India.

I am sure that you will do whatever is needed. The matter is urgent, because Ramanathan has not much money with him. If there will be any delay in getting things ^{ready} let me know through, I do that I can arrange to send him sufficient funds for his stay. He has also not yet been to Leiden as he had planned.

Yours affectionately,

K. Ramanathan

INLAND LETTER

NO ENCLOSURES ALLOWED



Sir K.S. Krishna Rao
3, Kishak Road
New Delhi

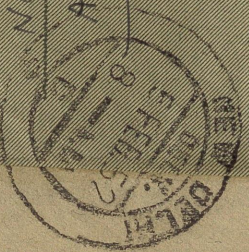
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Third fold here

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Sender's name and address :-

K.R. Ramani - with an
Phys. Research Lab
Newrangpur
Ahmedabad 9



To open cut here

Ahmedabad 9

3/2/52

My dear Krishnan,

I was at Baroda yesterday and Dr. Gogate told me that you will be there on the 12th, 13th & 14th to give a few lectures on Low Temperature Physics - I expect you here on the evening of the 14th by either the Veraingam Express (which arrives at 19.40 hrs) or the Kalthiawan Express (which arrives at 21.50 hrs). The ~~earliest~~ earlier train is fast enough & is quite convenient.

I shall again be in Baroda on the 6th, 7th & 8th -

The Foundation Stone Ceremony will be between 08.30 & 10.00 hrs. - on the 15th

(3)

Dr. Bhatnagar has also agreed to come.

The ATIRA meeting will be over before lunch time. If it would not be inconvenient, could you kindly give a short talk on Low Temperature Physics in our Laboratory at 14.30 or 15.00 hrs? & We are requesting Dr. Bhatnagar also to give a short talk.

Yours affectionately
K. Ramanathan

अन्तर्देशीय पत्र

इस पत्र के अन्दर कुछ न रखिये



Sir K. S. Krishnan F.R.S.

3, Kurshak Road

NEW DELHI

पहला मोड़ ↑

नीसरा मोड़ →

दूसरा मोड़ ↓

भेजने वाले का नाम और पता :-

K. R. Ramanathan

Phys. Res. Lab.

Ahmedabad 9.



पत्रों का न रखिये ↑

इंदिया सिन्धुदिल्ली देण, नासिक देण

Ahmedabad 9

2/2/53

My dear Kishan,

I shall be in Delhi
on the morning of 9/2/53 —
arriving there by the Metri gauge
train. As you no doubt know,
the C.S.I.R. is holding a symposium
on Artificial Rain on the 9th
and 10th, and there is to be a
meeting of the Atmospheric Research
Committee on the 11th.

Yours effectually

K. R. Ramanathan

PHYSICAL RESEARCH LABORATORY
NAVRANGPURA
AHMEDABAD 9
(INDIA)

TELEGRAMS:
"RESEARCH"

TELEPHONE:
7076

28/1/55

My dear Krishnan,

I propose to come to Delhi on the morning of 1/2/55 by the metre gauge mail to attend the meetings of the Ground Water Symposium, CBQ meeting, and the meetings of the World Met Organisation's Regional Conference. We can then write to Mr. Casey & Dr. Bowen about sending two scholars to Australia and also arrange for the deputation of the IAF man.

We are fixing up a meeting of the Council of Management of the Physical Research Lab on the 6th - before ~~or~~ after the ATIRA meeting at 8.54 a.m. at Shree Kastubhai's house.

Yours affectinately,

K.R. Ramanathan

Dr. K. S. Krishnan F.R.S.,
3, Kishak Road
NEW DELHI

TO OPEN CUT AT TOP

LINGEN
FRADLØS
KET 100 ÅR



SE UTSTILLINGEN
TRÅD OG FRADLØS
TELEGRAFVERKET 100 ÅR



AÉROGRAMME

AEROGAM



Sir K. S. Krishnan

Indian Delegation ^{76.S.}

"Atoms for Peace" Conference

~~to UNESCO,~~

Geneva, Switzerland

SENDER

K. R. Ramanathan

Hotell-Viking, Oslo, Norway.

MERK! DET MÅ IKKE LEGGES NOE INN I ELLER HEFTES NOE VED
AEROGRAMMET. I SÅ FALL VIL DET NEMLIG BLI BEHANDLET SOM
EN UTILSTRÆKkelig FRANKERT LUFTPOSTSENDING.

TO OPEN CUT HERE

I trust that your
conference in Geneva
is going on well

My regards to
Prof. M. Szymulski.

Dr. Laclaux has
as usual, been very
active.

Most of the people in
Stockholm & Göteborg
are on holiday and I therefore
hope to leave for
London on 14/8/55

My address will be:

C/o Dr. D. C. Martin,
Ant. Beulay,
Royal Society

With kindest regards,

Yours affectionately
K. R. Ramaswami

UK

My dear Krishnan,

Our meetings are nearly
over and they have on the whole
been very successful. The Russians
have agreed to come into the ICSU &
an observer from the Russian Embassy
attended the meeting yesterday

Any verbal plan for ICSU structure
as proposed by Australia and the Academy
of Sciences, France, will not be under-
taken now — but the question of ^{the}
~~an organization of~~ ^{organised} Int. Science will

be pursued by UNESCO (Prof. Auger was
present throughout) & ICSU will keep its ^{eyes} open.

The new Bureau of the ICSU will
be: Dr. L. V. Berkner (President, ICSU)
Sir K. S. Krishnan & Fe. Lejay (vice-presidents, ICSU)
Prof. A. V. Hill (Secretary-General), Dr. Herbage
(Treasurer), and Prof. Lindblad (Retiring President),

Oslo

12/8/55

Prof. Stoll (ICPAC) and
Prof. Engelhardt (Russia)
members.

The Union of Physiology
& Biochemistry have
been admitted into the
ICSU group, but not
the Union of Experimental
Physiology.

Six categories of
membership have been
accepted for ICSU
ranging from \$200 a year
to \$6000. Countries ~~for~~
adhering to even one
Union will be invited
to join ICSU on payment
of a minimum salary of \$100.

~~Dr. R. Ramaswami~~



Sir K. S. Krishnan F.R.S.
Delegate for Conference on "Peaceful
Uses of Atomic Energy"
c/o UNESCO
Geneva, Switzerland

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Sender's name and address: K R Ramanathan
c/o The Asst. Secretary
Royal Society, Burlington House
Piccadilly, London W1

AN AIR LETTER SHOULD NOT CONTAIN ANY
ENCLOSURE; IF IT DOES IT WILL BE SURCHARGED
OR SENT BY ORDINARY MAIL.

To open cut here

UK

Bedford Hotel,
Southampton Row
16 / 8 / 55

My dear Krishnan,

I understood from Dr. S. Krishna
that you will be coming to London sometime
next week - I am leaving for Oxford on the
20th & shall be back in London on the 21st.
My address in London on the 21st, 22nd, 23rd & 24th
will be

c/o Alpha House

2, Minster Road

Kilburn Park

London N.W. 2

Telephone Gladstone 0228.

I shall be attending the meetings of
the symposium on 'The Ionosphere & the Solar
Eclipse' from the 22nd to 24th.

I propose to leave for Manchester on
the 24th night for the symposium on Radio-
Astronomy. My address in Manchester will be
c/o Grand Hotel. Hope to meet you if
you come to UK.

Yours affly
K R Ramanathan

Alpha House
2, Minster Lane
Kilburn, London NW2.

6/9/55

My dear Krishnan,

I have received your letters
of Aug 28 and 29 written from Geneva.
I attended the meetings on Radio Astronomy
at Jodrell Bank, spent a day with Mr
Rose-Innes and others at Slough Radio
Research Station and had a week at Bristol
at the British Association. The British
Association treated me as their guest and
I spent a very pleasant week. Dr C. S. Patel
of Baroda & Dr U. Basu were the official
delegates ^{from} of the Sc. Congress. Dr Seshadri was there
and also Dr Eliezer from Ceylon.

I understand that Prof. Powell will be in
India in January or February. He has left today
for Italy to make some more ascents.

His balloon technique is simple.

Both Prof. Powell & Prof. Mott are charming
people.

I am leaving for Bruxelles tomorrow (7/9/55)
and propose to leave for India either on the
14th or 18th for Dusseldorf. I have not yet
fixed the date & shall write again c/o Dr S.

Kushna for Bruxelles.

I trust that you are having an
enjoyable (though necessarily hectic) time
in U.S.S.R.

with kindest regards & best
wishes,

Yours affectionately
X B Ramasethan

K. R. Ramanathan, D. Sc.,
Meteorologist,

Observatory,
Colaba, Bombay.

16/1/57

My Dear Krishnan,

Ramas writes that Ananthakrishnan saw Professor on his way down south during Xmas. Among various schemes, it appears that Professor is considering the starting of a new Institute if the Madras Govt would give him the building of the Forest College at ~~Bangalore~~ ^{Coimbatore} (which they are closing down) for the purpose.* It is a good idea. Please let me know if you happen to meet M. C. R. at Calcutta. Have you heard anything from M. K. V. R. at Benares? I haven't had any letter yet.

* It appears that he has asked the Madras Govt about this. I don't know his ~~scheme~~ ^{plans for} ~~expenditure~~ ^{maintaining} X Ramanathan Yours affectionately

I have just now got a
letter from Prof Ramaswami
Ayyangar which I am
enclosing. Please let me know
of any further developments.

RAM

Ahmedabad 9

13/3/57

My dear Krishnan,

15 MAR 1957

I have received your letter No 232
dated March 11.

1. The SCOR itself, like the CSA&I, will be composed of representatives ~~of~~ from ICSU and the Unions. This is all right.

2. However, even in the initial framing of the scientific programme of the SCOR (and not merely in its carrying out), the co-operation of National Oceanographic Committees shd be invited - Some of the national representatives (who may not represent any Union) may be included in the Working Groups. This is what CSA&I did.

3. There is little doubt that Regional Committees will be required, and India will surely be an active participant in the Regional Committee for the Indian Ocean. This is ^{even} more important than being a member of the SCOR.

(2)

4 - It is important that even at this stage, India should take steps to form a National Committee for Oceanography so that there will be a competent body which can not only advise in the first formulation of the programme, but also take part in its implementation.

The present Oceanographic Committee of the Central Board of Fisheries ~~may~~^{can} then be abolished.

With kind regards,

Yours sincerely,

K R Ramanathan

Sir K. S. Kustuman F.R.S

National Physical Laboratory

Hillside Road

NEW DELHI

I got your note about Krishna.
Many thanks.

TELEGRAMS:
"RESEARCH"

PHYSICAL RESEARCH LABORATORY
NAVRANGPURA
AHMEDABAD-9
(INDIA)

TELEPHONE:
7076

CONFIDENTIAL

IUGG/Gen/31/57.

22nd March, 1957.

My dear Krishnan,

I send herewith copies of some correspondence which I am having with Colonel Laclavere. The Academia Sinica of the Chinese People's Republic desires to join the IUGG and so too does East Germany. The scientists of these countries are as you know, cooperating in the work of the I.G.Y. According to the statutes of the IUGG all countries in which there is independent activity in Geodesy or Geophysics, can be members of the Union. Some countries interpret "independent" in a political sense. Personally I am of the view that political considerations should not come into this matter at all and wherever work is being done in the fields relating to scientific Unions countries should join them on equal terms irrespective of their political affinities. I would like to have your opinion as to whether I should communicate on this matter formally with the Ministry of Foreign Affairs or could you consult Dr. Thacker and the appropriate people in the Ministry of Foreign Affairs and let me know?

Mr. Ramachandra Rao has notified a C.B.G. meeting at Delhi on 10.4.57. Will you be in Delhi at that time?

With kind regards,

Yours sincerely,

K.R. Ramanathan

(K.R. Ramanathan)

Encls: As above

Prof. K.S. Krishnan, F.R.S.,
Director, National Physical Laboratory,
Hillside Road,
NEW DELHI.

UNION GÉODÉSIQUE ET GÉOPHYSIQUE INTERNATIONALE
(INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS)

PRÉSIDENT : PROF. K.R. RAMANATHAN (Inde)

VICE-PRÉSIDENTS : PROF. J.T. WILSON (Canada) et GÉNÉRAL C.A. LEVENE (République Argentine)

SECÉTAIRE GÉNÉRAL : GEORGES LACLAVÈRE, 30, AVENUE RAPP, PARIS (VII^e)

COPY

CONFIDENTIAL

Paris, 6 March 1957

Prof. K.R. Ramanathan,
Physical Research Laboratory,
Navrangpura
Ahmedabad 9

My dear President,

I am now facing an impossible situation and I would very much like to have your guidance.

There are two Chinas which are not getting along very well and both of these Chinas are making plans to join the Union. At the meeting of the CSAGI in Barcelona, in September last year, the Chinese People's Republic sent a delegation; the head of the delegation approached me and inquired about the adherence of the Chinese People's Republic to the IUGG as a member country. I gave him the information he required and sent to Peking shortly after the meeting a documentation about the Union. I have received from the Academia Sinica in Peking two or three letters mentioning their interest in their affiliation to the IUGG but I have not yet received a formal request for adherence.

A few days ago, I have received from the Academia Sinica of Taipei the attached letter. You will find herewith my answer to them.

I consider that according to the Statutes of the Union nothing prevents both Chinas to become member of the Union. However, I know that the political relations between the two Chinas are such that if one China adheres to a certain organization, then the other will not adhere.

At a geophysical point of view, it is more important to have the People's Republic of China adhere to the Union than to have the Republic of China. I do not know whether at a later date both Chinas will again become one country but so far I can foresee that:

a. Some countries will object to the adherence of one or the other of the Chinas. I am certain that the Soviet block will vote against the adherence of the Republic of China.

b. Some other countries will certainly vote against the adherence of the Chinese People's Republic. This will involve political problems in our Union which must be avoided.

I do not know enough of the political situation between the two Chinas to know whether they would accept to be both members of the Union. We have in the Union countries who are not too friendly together, for instance Israel and Egypt, and so far no difficulties of a political nature have occurred during our meetings.

I would therefore like to know whether you would approve the following policy:

a. That we just ignore that there are difficulties between the two Chinas.

b. that we correspond with both Academiae Sinicae as independent organizations.

c. that, when I have received a formal application for membership from one or the other, I circulate to the National Committees the information saying that the question will be submitted to a vote at the next General Assembly of Toronto.

d. that at the General Assembly of Toronto, the question of adherence of one of the other of the Chinas will be submitted to a secret vote.

?
An early answer would be appreciated. I would like to add to this that I have consulted Dr. Doodson about the advisability of discussing this problem in the Policy Committee of the Union and Dr. Doodson feels that such problems are not under the terms of reference of the Policy Committee.

With kind regards.

Yours sincerely,

Sd/ G.LACLAVERE
Secretary General

COPY

Confidential

Dr. J. Bartels

9 Mars 1957

Mon cher Collègue,

J'ai reçu hier votre lettre du 5 Mars 1957 adressée au Prof. Ramanathan et à moi-même relative à l'adhésion de la République Démocratique Allemande à l'UGGI. Il est indispensable pour que vous soyez bien au courant de la situation que je vous décrive l'action que j'ai menée jusqu'à ce jour. Vous m'excuserez donc du développement un peu long de cette lettre. Je serai très heureux d'avoir vos conseils dans cette affaire délicate.

1. Avant l'Assemblée Générale de Rome vous m'avez écrit pour me faire part du désir du Prof. Krumbach de participer à l'Assemblée Générale de Rome. Je lui ai aussitôt envoyé une invitation et estimant que la présence de savants de la République Démocratique Allemande ne pourrait que contribuer au succès de notre Assemblée Générale, j'ai envoyé une invitation officielle à la Deutsche Akademie der Wissenschaften de Berlin.

2. Comme suite à cette invitation l'Académie de Berlin a envoyé à Rome une délégation de 4 personnes. Dès les premiers jours de la réunion le chef de la délégation, le Dr. Pavel, Directeur de l'Institut Géodésique de Potsdam m'a demandé si l'on pourrait envisager l'adhésion de la République Démocratique Allemande comme pays membre de l'UGGI. Si j'ai bonne mémoire, je crois que je vous en ai alors entretenu et que vous m'avez dit qu'il n'y avait que des avantages à ce que la DDR devienne pays adhérent.

3. Le Dr. Pavel est décédé pendant l'Assemblée Générale de Rome et a été remplacé comme chef de la délégation par le Dr. Krumbach avec qui je me suis également entretenu de la question. Après son retour en Allemagne nous avons continué à correspondre à ce sujet et, d'après une correspondance recue de Dr. Krumbach, l'Académie des Sciences de Berlin a alors été saisie du projet.

4. Le Dr. Krumbach est mort à son tour et les négociations que j'avais entreprise avec lui ont été poursuivies avec le Dr. Reicheneder, Directeur de l'Institut Géodésique de Potsdam avec qui j'ai échangé une importante correspondance. L'Académie de Berlin m'ayant demandé les Statuts et une description de l'Union je les ai fait parvenir.

5. J'ouvre ici une parenthèse et je me réfère à l'article 4 des Statuts de l'Union. Cet article 4 est le suivant: "Tout pays (en comprenant sous ce vocable tout territoire dans lequel une activité géodésique ou géophysique indépendante s'est développée) peut adhérer à l'Union à condition de prendre une part convnable à son entretien. L'organisme adhérent peut-être le Gouvernement ou l'Académie des Sciences de ce pays, ou tout autre organisme ou service représentant les sciences considérées".

Me référant à cet article je considérais en effet que la République Démocratique Allemande remplissait les conditions pour devenir pays membre de l'Union. Rien dans cet article ne prévoit en effet que le dit pays doit être considéré comme un pays indépendant au sens politique du terme par les autres pays membres, mais une interprétation trop large de cet article nous avait déjà amené certaines difficultés au Président Chapman et à moi-même. C'est ainsi en particulier que le Gouvernement Général du Congo Belge s'était adressé à nous pour adhérer à l'UGGI indépendamment de la Belgique. Le Prof. Chapman avait pris l'initiative de répondre au Gouvernement du Congo Belge en donnant son accord et en souhaitant l'adhésion prochaine du Congo Belge à l'UGGI. Nous avons eu une réaction très vive de la Belgique qui s'est fort opposée à l'adhésion séparée du Congo Belge. Le même cas s'est produit à propos de l'adhésion du Mozambique, etc... Mais il y avait, dans ces cas particuliers, un problème différent, les gouvernements des pays responsables des territoires en cause considérant que c'était un abandon de souveraineté que de laisser à ces territoires la possibilité d'adhérer séparément à l'UGGI. C'est à mon sens une façon un peu étroite d'envisager le problème: il en résulte naturellement que les territoires en cause ne sont que rarement ou insuffisamment représentés à nos Assemblées Générales.

6. Je ne pensais qu'il puisse y avoir de bien grandes difficultés lorsque viendrait le moment de mettre aux voix l'adhésion de la DDR et j'attendais impatientement sa demande officielle d'adhésion à l'UGGI pour procéder à une consultation des états membres sous une forme analogue à celle suivant laquelle j'ai procédé tout récemment pour l'adhésion de la Fédération de Rhodésie et de Nyassaland.

7. J'ai eu Vent, il y a quelques semaines, et tout-à-fait par hasard, des difficultés qui avaient surgi à l'Assemblée Générale de l'Union Géographique Internationale à Rio-de-Janeiro lorsque fut discutée la question de l'adhésion de la DDR à cette Union. Je n'ai pas pu avoir de détails bien précis sur ce qui s'est passé, mais j'ai cru comprendre que les Etats-Unis, en particulier, s'étaient opposés à l'adhésion de la DDR arguant de fait que le Gouvernement de la DDR n'est pas reconnu par le Gouvernement des Etats-Unis. Ayant donc eu vent de ces difficultés, j'ai consulté confidentiellement trois pays pour savoir quelle serait leur attitude si la question de l'adhésion de la DDR était soumise au Conseil à la prochaine Assemblée Générale de Toronto. Les trois pays consultés sont les Etats-Unis, la Grande Bretagne et la France. Le Conseil du Comité National français de Géodésie et de Géophysique a estimé que seul l'aspect scientifique devait être envisagé et bien que je n'ai pas encore reçu de réponse officielle, il me paraît que le délégué principal français à Toronto ne fera pas d'objection à l'adhésion de la DDR. (bien que le Gouvernement de la DDR ne soit pas officiellement reconnu par le Gouvernement Français). En Grande-Bretagne les avis sont plus nuancés, néanmoins je crois savoir que, se basant sur l'article 4 des Statuts, le Comité National Britannique ne fera pas d'objection à l'adhésion de la DDR. Je n'ai pas encore reçu de réponse des Etats-Unis, je sais seulement que la question est actuellement à l'étude. Je vous tiendrai naturellement informé de la décision qui sera prise.

8. Mon intention était de soumettre cette question à la discussion au cours de la prochaine réunion de Policy Committee qui doit se réunir à Paris du 8 au 13 Avril. Le Dr. Doodson, Président de ce Policy Committee, estime qu'il n'est pas dans les attributions de ce Comité de traiter cette question. Je dois dire que je ne suis pas de son avis, le Président Ramanathan non plus.

9. Le Prof. Ramanathan est naturellement au courant de toute la correspondance que j'ai échangée à ce sujet et je vais le consulter pour savoir s'il estime qu'il serait opportun de sonder l'opinion par une lettre circulaire qui serait adressée au Conseil des Comités Nationaux. Une telle lettre pourrait être libellé comme suit:

"Il résulte de correspondances engagées entre le Secrétaire Général de l'UGGI et plusieurs organisations scientifiques de la République Démocratique Allemande que l'Académie des Sciences de Berlin envisage de présenter une demande officielle d'adhésion à l'UGGI. Je vous serais reconnaissant de me faire connaître si le Comité National de votre pays envisage favorablement l'admission de la République Démocratique Allemande comme pays membre de l'Union et, le cas échéant, quelle catégorie d'adhésion il recommande pour ce pays. Je me permets de vous rappeler l'article 4 des Statuts qui définit les conditions que doit remplir un pays ou un territoire pour pouvoir devenir membre de l'UGGI. Je vous serais reconnaissant de vouloir bien me retourner aussitôt que possible le questionnaire ci-joint.

Il est bien spécifié, que si une demande officielle d'adhésion de la République Démocratique Allemande me parvenait avant l'Assemblée Générale de Toronto, un vote interviendrait au Conseil et que la présente consultation ne préjuge en rien du résultat de ce vote et ne saurait me donner pouvoir pour ratifier l'adhésion".

10. Je vous serais reconnaissant de vouloir bien me faire connaître aussitôt que possible si vous estimez opportun de procéder à cette consultation. Il est bien évident qu'elle ne saurait donner qu'une indication assez vague sur le résultat du vote qui interviendra à Toronto. Il est certain que si le délégué officiel de la République Fédérale Allemande, au moment de la discussion, s'élève contre l'adhésion de la République Démocratique Allemande, beaucoup des délégués présents suivront son mouvement et que dans ces conditions l'adhésion de la République Allemande risque fort d'être rejetée. Je pense donc que si nous procédons à cette consultation comme je vous le propose, et dont le résultat, j'en suis à peu près certain se montrera en faveur de l'adhésion de la République Démocratique Allemande, il conviendrait que parallèlement une action soit menée par vous-même ou par le Prof. Kneissl auprès de Gouvernement de Bonn pour lui faire comprendre que l'UGGI n'a aucun caractère politique et pour lui mentionner le fait, souligné dans votre lettre, que la République Démocratique Allemande participe à l'Année Géophysique Internationale et qu'il y aurait une situation extravagante lorsque l'Année sera terminée et que les Unions reprendront la conduite de l'exploitation des résultats que la DDR soit ~~exclue~~ exclue de ce programme scientifique. J'estime que c'est essentiellement de l'attitude que prendra le délégué officiel de la République Fédérale Allemande que dépendra l'issue du vote.

11. Je tiens aussi à vous reppeler qu'outre l'Anné Géophysique Internationale le DDR participe à de nombreuses réunions et activités de l'UGGI en envoyant des délégués ou des communications. Je citerai par exemple, en autres, la Commission Seismologique Européenne, la Commission Gravimétrique Internationale etc...

Je vous prie de recevoir, Cher Dr. Bartels, l'expression de mes sentiments les meilleurs et cordialement dévoués.

Sd/ G.Laclavere.

Copies: Prof. S.Chapman
Prof. K.R.Ramanatnan
Dr. A.T.Doodson
D.D.R.

Copy

Oxford,
28/3/57.

My dear Ramanathan,

the/ Thank you very much for your letter and manuscript. I think ~~it is~~ final copy is fine and makes matters easy for any new-comer to the subject, who can now proceed readily to the practical task of evaluating the O₃ distribution. Not that many of the observing stations will have men keen enough to tackle the task. They will want to escape the labour! So, it may well be that we shall get more data coming in if it is known that you are prepared to set up a centre for α computation by the B.Method. Both Prof. Dobson and I think it will be of great use and value if you do organise such a centre. I could put the suggestion in-to the Commission's report for the Toronto meeting and also if you so wish, circulate the matter beforehand to all stations (with spectro-photometers) to find out their response. If it's to be a circular, are there any particular conditions to be included in it?

Walton's paper came some days ago and I was about to send it off, along with yours, to Spencer Jones for reproduction, when today he arrived himself here and requested a few more days to revise it, as he had had much to do on his College term and felt he had hurried it through. However I am sending you a copy of his paper as it is now -by separate post- for you to see.

The method A has so few parameters that it is evident a quick approximate graphical solution can be obtained. Ten or so graphs could cover the range of solution for C (or A) wavelength. I am hoping he will get these completed, drawn and then issued as a supplement.

I am provisionally adding your note about $6(1+p)/6-7p$ as a footnote to your table 3.

Yours sincerely,

Sd/ Charles Normand

TELEGRAMS:
"RESEARCH"

PHYSICAL RESEARCH LABORATORY
NAVANGPURA
AHMEDABAD 9
(INDIA)

TELEPHONE:
7076

4/17/57

Ahmedabad

30-3-57

My Dear Krishnan,

The 9th meeting of the Executive Board of the ICSU will be held in Brussels from June 27 to June 29. Are you going to attend?

Our Russian trip will be over by the 10th June. If you cannot attend the Brussels meeting and think that it is desirable that one of us should attend, I shall consider whether I should stay over for a few days in Europe after the Russian tour. I would prefer to return to India.

The Policy Committee of the ICSU is meeting in Paris from April 8 to April 13. I am not thinking of attending it, unless there is an urgent requisition from Laclavere in a day or two.

The next General Assembly of the ICSU is to meet in Washington from Sep 25 to Oct 5. I expect that you will be there for it.

Dr. Gabor had sent Krishna's appln to Dr. Ponte

+ I understand that Dr. Ponte has replied to say that the appln is receiving his personal attention.

Yours affectionately

K. R. Ramanathan

TELEGRAMS:
"RESEARCH"

PHYSICAL RESEARCH LABORATORY
NAVRANGPURA
AHMEDABAD-9
(INDIA)

TELEPHONE:
7076

IGY/35A/57.

2nd April, 1957.

My dear Krishnan,

After preparing a small IGY manual for the calculation of the vertical distribution of ozone, I had suggested to Sir Charles Normand that it might be convenient if the observational data of all the IGY stations during the International Geophysical Year could be worked out on a uniform basis at one center. Both he and Professor Dobson strongly support the idea and I have been thinking whether we can undertake the task here. I shall be prepared to do it provided I have three people to work on the job, two of the rank of Junior Research Assistant and one a Senior man to keep an overall eye on the computations and look after the correspondence. It is possible that the CSAGI may be able to provide some money for it, but I am not sure. I would also like to consider whether we can do it on our own as a part of India's contribution. I do not expect that it will cost more than Rs. 20,000/- in a period of one and half years, but we shall have put the whole of the ozone vertical distribution data collected during the IGY in a scientific form. That would be a worthwhile job. I would like to have your views on this before I write to Sir Charles Normand.

With kind regards,

Yours sincerely,

K.R. Ramanathan

(K.R. Ramanathan)

Prof. K.S. Krishnan, F.R.S.,
Chairman, Indian National Committee
for IGY,
National Physical Laboratory,
Hillside Road,
NEW DELHI

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PHYSICAL RESEARCH LABORATORY
NAVRANGPURA
AHMEDABAD-9
(INDIA)

TELEGRAMS:
"RESEARCH"

TELEPHONE:
7076

24 MAY 1957

P/1/57.

22nd May, 1957.

My dear Krishnan,

You may remember I wrote to you in March regarding the admission of the Chinese People's Republic to the IUGG. Professor Chapman has written to me saying that there are still difficulties about this and I send herewith extracts from a recent letter of his. I want to be clear as to the policy we should pursue in this matter and I shall be glad if you will kindly consult Dr. Thacker and the Secretary of the Ministry of Foreign Affairs so that when it comes to a question of voting, we can use our influence in the right side.

With kind regards,

Yours sincerely,

K.R. Ramanathan
(K.R. Ramanathan)

Dr. K.S. Krishnan, F.R.S.
Director, National Physical Laboratory,
Hillside Road,
NEW DELHI-12.

*I expect to be in Delhi on the 28th,
probably by plane from Bombay - Shall inform you
after fixing programme.*

*K.R.R.
22/5/57.*

" At Barcelona the Chinese Academy at Peking sent a delegation for the first time to a CSAGI meeting; they joined in the IGY at Brussels the year before. My old pupil Tschu, who studied with me for two years at Oxford before the communist victory in China, was there as assistant secretary of the Chinese NC-IGY. When he asked me to advise on the methods to promote geophysics in China, one thing I urged was that China should join the IUGG; his chairman said that they would welcome an invitation to do so; I told Colonel Laclavere, who seemed pleased and, I thought, said he would be glad to do so. In IUGG Newsletter 14, pp 188/9, it states that negotiations were going on for the entry of several nations to IUGG, among them was China. Earlier this year I wrote to my friend Tschu asking whether China had joined IUGG; to my surprise, and his expressed regret, he said that no invitation had been received. So I wrote to GL reporting on the Tschu-SC letters, saying I could not understand why Tschu did not know of the negotiations, and suggesting a renewed invitation. To my surprise he replied on April 13 very briefly as follows:

"This matter is a difficult one for the reasons you know and the Policy Committee of IUGG, which will meet in Paris this week, will discuss the matter. I will let you know the outcome of the discussions".

So far I have not heard further, but on April 29 I wrote again to GL expressing my surprise, as I did not know the reasons; to my mind, I said, it is very desirable for China to belong to IUGG, and in time to be present at Toronto. CSAGI has had some difficulties because before the Tokyo IGY regional conference, Taiwan asked to join, saying that they considered that the Peking Chinese could be excluded. It has been difficult for CSAGI, but this does not seem to me to require not inviting China to join IUGG. I feel sure that your influence will be exerted in this direction also. "

From a letter from Prof. S. Chapman 27 May 11,

1957 5 Dr. K. R. Ramanathan.

KRB
22/5/57

PHYSICAL RESEARCH LABORATORY
NAVRANGPURA
AHMEDABAD 9
(INDIA)

TELEGRAMS:
"RESEARCH"

TELEPHONE:
7076

IUGG/Gen/31/57.

15th July, 1957.

79 JUL 1957
157

The Secretary,
Ministry of Education and Scientific Research,
Government of India,
NEW DELHI

Sir,

A Committee of the International Union of Geodesy and Geophysics was appointed by the Council of the Union in April 1956 to prepare a draft of revised Statutes and By-laws. The Committee has submitted its recommendations and these will be considered at the Toronto Assembly. A copy of the draft is sent herewith. I should like to invite the attention of the Government of India to the following paragraphs. Paragraph 4 defines the nature of the bodies which may adhere to the Union. In paragraph 4 occurs the statement

"There are two categories of adhering countries: Member countries and Associated countries; the former of which are entirely responsible for the control of their international relations.

The adhering body may be either the Government, such as an Academy of Sciences or a National Research Council or any national body or group of national institutions provided it is truly and indisputably representative of the country's interests in the sciences of the Union."

In paragraph 5 it is stated that no delegate from an Associated Country may be a member of the Council, the Bureau, the Executive Committee or Finance Committee of the Union. The functions of the Council, the Executive Committee, the Bureau and the Finance Committee are catalogued in the By-laws. As the Chief delegate from India may have to give his opinion on this and vote on it, it is desirable that he should be briefed regarding the attitude of the Government of India on this point. So far, there has been only one class of member countries. The present draft will divide them into two classes, Member countries and Associated countries, the latter being of an inferior variety. It is not clear as to who will decide whether a country should be a Member country or an Associated country and a decision on this is likely to create controversy. In my view, the adherence of a country to a Union is a purely scientific matter depending on the interest of the country in the scientific work of the Union, and if there is scientific activity in any field in a country, the scientists of that country should have freedom to join the International Unions on equal terms.

The question is no doubt difficult, as both Taiwan (Formosa) and People's China (Peking) wish to join the IUGG as separate countries, and also E. Germany. Anyhow, there should not in my view, be two categories of countries joining scientific Unions. The views of the Government of India may kindly be communicated to me at an early date.

Yours faithfully,

K.R. Ramanathan
(K.R. Ramanathan)
DIRECTOR

Wm for info to Sir K S. Krishnan
K.R. Ramanathan

Encl: As above

If a seat is available on 23-6-57,
I shall be in Bombay on
22-6-57, so ~~so~~ that I
can get some travellers'
cheques on Saturday.

If Mr. Zwigoni has not yet
posted the passport, please
ask him to post it Express
Delivery to

Dr. K. R. Ramanathan
c/o P. Narayanan
Examiner, Trade Marks Registry
Bombay 1

अन्तर्देशीय पत्र

इस पत्र के अन्दर कुछ न रखिये



Sir K. S. Krishnan F.R.S
3, Kuruk Road
NEW DELHI

लौकिक मोह

भेजने वाले का नाम और पता :-

K. R. Ramanathan

Phys. Kes. Labz

Annexed 9



पत्र को भेजने के लिये

Ahmedabad 9

19-6-57

My dear Krishnan,

After thinking over the matter, I decided to give up the idea of going the delegate to USSR. - I know I miss much — in particular, I shall miss the opportunity of seeing many new things with you -

But with the work that I have undertaken for this year, and the inevitable, increasing slowness of my reaction, I feel that I should not try to crowd too many things into

(3)

my life. I am sure you will understand me.

I telegraphed to Zinjani for my passport. I have not received it. It is necessary for obtaining some money for the journey to Europe (in the shape of Travellers' cheques) -

If I don't get it in time, I shall have to depend on you.

Yours affectionately
K R Ramanathan

I have asked my son-in-law to book a plane seat for me on 23/6/57. If one is not available that day, on 25/6/57.

for Los Angeles - I shall spend a few days at each of the places - Chicago (Yerkes), Denver & Washington (New York) ^{on my way back} and return to India by about the middle of November.

There are a number of good Indian students in these countries - we should take steps to get as many of them back to India as possible. Some of them feel frustrated in their attempts to find ~~a~~ suitable jobs in India.

I trust that you are having a restful time and are feeling fit.

Yours affectionately

K R Ramanathan

I have met the Indian Committee of this State here at Ottawa.

K R R

TO OPEN CUT HERE - POUR OUVRIRE, COUPEZ ICI



Sri K.S. Krishnan FRS
3, Kushak Road
NEW DELHI
INDIA

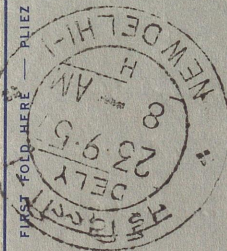
AEROGRAMME
AIR MAIL - PAR AVION

SECOND FOLD HERE - PLIEZ ENSUITE ICI
SENDER'S NAME AND ADDRESS - NOM ET ADRESSE DE L'ENVOYEUR

K R Ramanathan
^{now at}
Dominion Observatory, Ottawa
c/o Department of Meteorology,
University of California, Los Angeles
USA

NO ENCLOSURE PERMITTED - NE RIEN INSÉRER

FIRST FOLD HERE - PLIEZ D'ABORD ICI



TO OPEN CUT HERE - POUR OUVRIRE, COUPEZ ICI

Ottawa

17-9-57

My dear Krishnan,

Our meetings at Toronto came to an end on 14-9-57 and I came to Ottawa on the 16th morning. We had excellent meetings - I am glad to say that

the Academies of E & W Germany (with the ^{best} consent of their respective Governments) are taking steps to join the USSR as "Germany" -

Both the USA & Russian delegations were helpful in bringing about this result.

Prof Chapman, Dr Becker & Fr. Lejay and many others whom you know, attended the Assembly and enquired about you.

Prof J. T. Wilson of Canada (Prof of Geophysics at the Univ. of Toronto) ~~will be~~ ^{is} the next President and Dr. Caclaven continues to be the Secretary - Prof Belussov of USSR & Prof Heiskanen of Finland are the two vice Presidents. The next meeting of the Assembly will be held in Helsinki in Finland in 1960.

I attended the NRSI meetings for three days from Aug 26 to 28 - Dr. Mitra had not arrived in Denver when I left - I understand he came later.

A number of post-graduate & post-doctorate research workers (from India) working in USA & Canada attended the Assembly - I feel however that it was a definite loss that more senior workers from India could not attend.

I propose to spend four or five days more in Canada and then leave

Dr. S. Venkateswaran still there or has
he left for Bombay?

I am looking forward to meeting
you, back in India, at Delhi or Ahmedabad
with kindest regards,
Yours affectionately
K.Ramanathan

SECOND FOLD



VIA AIR MAIL
PAR AVION



K.Ramanathan
Department of Meteorology
University of California
Los Angeles 24, USA

AIR LETTER
AÉROGRAMME

Sir K.B. Krishnan F.R.S.
3, Kushak Road
NEW DELHI
INDIA

NO TAPE OR STICKER MAY BE ATTACHED
IF ANYTHING IS ENCLOSED, THIS LETTER
WILL BE SENT BY ORDINARY MAIL



FIRST FOLD

Los Angeles 24

30/9/57

My dear Krishnan,

I was glad to hear from Ramdas that you will soon be back home.

I came to Los Angeles on 21/9/57 after spending a few days in Ottawa seeing the laboratories of the National Research Council and of the Defense Research Board Telecommunications. I am giving here a course of lectures on the Physics of the Upper Atmosphere & expect to leave for India via Chicago, Boston & New York in the last week of this month. I shall be back in India in the 3rd week of November.

S.V.S.'s brother,

I am staying with Dr. Venkateswara (Venky as he is called) who has a flat and a car. Yesterday, I had a two-dollar hair cut and a 200-mile drive to Santa Barbara and back - In America, & particularly in Los Angeles area, people don't walk - They always roll on wheels. I am having a very enjoyable time here with weather similar to that of Delhi in November =

I didn't meet Dr. AP Mitra. He reached Boulder, I understand, after I left the place - He has many friends in USA who were asking ~~me~~ about him

अन्तर्देशीय पत्र

इस पत्र के अन्दर कुछ न रखिये



Dr. L. S. A. Ramdas, F.N.I.,
Section of Heat and Power,
National Physical Laboratory
Hillside Road, NEW DELHI

पहला मोड़

तीसरा मोड़

दूसरा मोड़

भेजने वाले का नाम और पता :-

K. R. Ramaswami
(Phys. Res. Lab., A-1)
Jamp Salem Town



पत्रां को न रखिये

Salem

2/1/58

My dear Kamdas,

Many thanks for your
letter sent to Tirupattur.

Bhagavantam told me that

the father of the young
man ^{at Coimbatore} (~~the~~ ^{the father} is now in Bangalore)
who was being considered
as a possible bridegroom
by Prof. Krishnan is expecting
to receive a formal letter
from Krishnan proposing the
alliance - If K.S.K. feels
that the alliance will be

satisfactory, he should send a
letter as soon as possible to
that gentleman and keep
Bhagavantam informed about
it. I shall be glad
if you ^{will} please see that
whatever is necessary is
done as early as possible.

I am leaving for
Kodai this afternoon and
after a stay of 2 days in
Madras on the 6th & 7th,
shall be in Bombay on the
8th and in Ahmedabad on
the 9th

With kindest regards,

Yours affly

K. R. Ramanathan

अन्तर्देशीय पत्र

इस पत्र के अन्दर कुछ न रखिये



Sir K. S. Krishnan FRS

3 Kushak Road

NEW DELHI

पहला मोड़ ↑

दूसरा मोड़ ↓

तीसरा मोड़

अन्तर्देशीय पत्र का नाम और पता :-

Dr. K. S. Krishnan
Laboratory
Medicines



पत्रों को न खोलिये ↓

Ahmedabad 9

10 - 1 - 58

My dear Kustman,

I shall be in Delhi on
the morning of 15-1-58,
(Wednesday) by the metric gauge
train =

I met Dr Venkateswaran in
Madras. He is keeping fit and
attending to work with late
Rajagopala Ayyangar - He expects
to be back in Bombay in ~~a~~
a couple of days.

Kustman has written from Paris
to say
that the French Defence Authorities
cannot permit him ^{continue to} to work in
the CSF unless he is sponsored by
the Government of India - This

(2)

means that he will have to
leave CSF by the end of this
month. The ~~two~~ personnel officer
of the CSF asked the French
Defence Ministry for a clearance
Certificate for his employment in the
CSF, and they have not agreed.

Yours affectionately
K Ramanathan

अन्तर्देशीय पत्र

इस पत्र के अन्दर कुछ न रक्खिये



Sir K.S. Krishnan F.R.S.

3 Kurhak Road

NEW DELHI

पहला मोड़

तीसरा मोड़

दूसरा मोड़

का नाम और पता
K.S. Krishnan F.R.S.
P.O. Box. Labhy
Ahmedabad - 9

पत्रों को न खोलिये

Ull
Ahmedabad 9
28/1/59.

My dear Krishnan,

Dr. Mathur has written to say that the meeting of the Ex. Council of the NPL will be held on 7/3/59 at 12 noon.

We have arranged a Cosmic Ray Symposium at Bombay for 9 to 11/3/59.

I propose to come to Delhi by air & expect to be there by the night plane from Bombay on the morning of 7/3/59

~~Please~~ Please do not trouble to send me car to the airport

I have written to Mustafy saying that I would like to meet him on questions relating to CBQ

If Bhogavantam comes, we can also finalize arrangements for the publication of the "Selecta"

When & where do you propose to have the meeting of the Board of Nuclear Science?

I was very happy to hear from Ramoo & Ramdas

that the arrangements for Papa's wedding were all very fine & that she is now with her husband.

It will be a great pleasure if Papa & Srinivasan can spend some days with me at Ahmedabad.

Yours affectionately
K R Ramanathan

PHYSICAL RESEARCH LABORATORY
NAVRANGPURA
AHMEDABAD-9
(INDIA)

TELEPHONE
7076

TELEGRAMS:
"RESEARCH"

1/59

13th March, 1959.

My dear Krishnan,

I have a letter from Dr. Mayer-Kaupp, Professor Flugge's deputy, asking me what the position is regarding the article on Scattering from the "Handbuch der Physik". It appears that he has also written to you.

In view of the many commitments which both of us have, should we not wash our hands of this and tell them that they may find somebody else to do the job? What do you think?

I have received from Dr. A.P. Mitra notice of a meeting of the National Committee for the IGY at 11 hours on 28.3.1959. Can we not arrange the meeting of the Board of Nuclear Science also on the same day at Delhi? Dr. Vikram said that 3 p.m. on 28.3.1959 would suit him better than 11 a.m.. He will probably write to you about this.

With best regards,

Yours sincerely,

K.R. Ramanathan
(K.R. Ramanathan)

Prof. K.S. Krishnan, F.R.S.,
Director,
N.P.L.,
Hillside Road,
NEW DELHI

To be taken to Delhi.

Dr Sarabhai may have already
spoken about this.

Dr. Bibha Chowdhuri's Scheme -

"Study of high energy air showers at Kodaikanal"

A scheme for an experimental study of high energy air showers at the Kodaikanal Station of the Physical Research Laboratory was submitted to the Cosmic ray Research Advisory Committee of atomic energy commission and was recommended at their meeting in January 1960.

In that scheme it was proposed to perform the experiment with the help of scintillator and neon flash tube techniques.

The experimental layout will consist of three parts:-

- (1) Zenith angle determination of air showers :-

For which we shall need at least 4 scintillators along with necessary electronic circuits. The cosmic ray laboratory of M.I.T. has agreed to place their apparatus at our disposal for this purpose.

- (2) Location of cores of air showers and also determination of their sizes:-

To find out the position of the ^ocore of a shower and also its size, it is necessary to determine the density of electrons of the showers at various different distances. For this purpose also, we are going to use the M.I.T. scintillators. But necessary electronic circuits have to be made in India.

- (3) Determination of density of penetrating particles in air showers :-

In order to get information about the penetrating component we have proposed to set up a neon flash tube hodoscope unit under lead absorber.

Recently Dr.A.W.Wolfendale of Durham University has offered the collaboration of his group with us in flash tube part of the experiment. They would like to send their flash tube hodoscope unit along with one of their Research Workers, who is at the moment working with that unit at Durham University.

In view of this recent development in our proposed investigation, I am presenting a modified estimate of the expenditure for building the equipment and starting this investigation for the year 1960-61 at Kodaikanal.

Estimate of Expenditure (upto 31st March 1961)

Equipment

Cost of Material for electronic circuits :-

(1) Linear amplifiers (4)	.....	....	Rs. 2400/-
(2) Time-lease circuit control circuits for 4 cathode ray tubes		....	2400/-
(3) Phototubes (4)	.....	....	6000/-
(4) Standard Pulse generator (1)..		....	1000/-
(5) Cables (150 m)	.....	....	700/-
(6) Cathode ray Tubes (4) Type - Blue - 5 CpM or 5 LpM	.....	....	2500/-

			Rs. 15,000/-

Contingencies

Photographic film chemicals	.....	3000/-
Transport and T&A other contingencies	....	3000/-

		6000/-

Staff

Two technical Assistants :-

Salary in the grade of Rs. 150-10-300 plus Rs. 50 D.A.
Overhead - 15% of basic salary

One assistant has been already appointed on April 25, 1960.

Total cost for salary plus overhead etc for

two assistant	...	Rs. 5000/-
All Total Expenditure	<u>26,000/-</u>

B. Chowdhury

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