

Trinity College  
Cambridge  
1934 August 11

My dear Krishna Iyengar,

please do  
excuse me for not having replied earlier,  
but I have been away from Cambridge  
visiting the observatories in Russia (where  
I have been inaccessible to my correspondence)  
and ~~have~~ returned to Cambridge only  
last evening. Let me say at once  
how intensely grieved I am at what  
I fully realise must be a personal  
calamity to you more than to any body  
else. I never expected that M.N.'s could  
be so vulgar but - well! there is hardly  
anything I could add to the facts  
which like murder speaks for itself  
Oh! How I wish that you  
had come to Cambridge. The  
atmosphere here is so pure, so  
encouraging and so wholesome -  
and so free of personal animosities

and jealousies. The sincere collaboration  
of the best minds, sacrificing personalities  
for the progress of science — it  
seems <sup>so</sup> impossible now that in  
India we <sup>could</sup> build a similar school — where  
the same spirit would prevail, even if  
a Rutherford, Eddington, Fowler or Dirac do not  
exist — You can never know, how  
much I owe to the inspiration of  
your friendship, and even in Cambridge  
I miss you so much and to me  
it is ever so ~~keen~~ <sup>intense</sup> a sorrow that one  
whom I respect and admire so much  
should how be in the whirl of  
such bitter winds. But I am hopeful  
nevertheless that you with your  
infinite goodness ~~and~~ and motive  
power would brave the darkest  
gloom that ever reigned in Indian  
scientific life and let me assure you  
that it is my profoundest desire and  
~~wish~~ I look forward to, with all the  
strength of Sincerity, when you would be

the sole Conqueror. I do not know  
what else I could write in this letter.  
I will write again soon, but believe me  
my dear Krishna Iyengar that I am as ever

Yours  
S. Chandrasekhar

Trinity College  
Cambridge  
1934 August 11

My dear Venkateswara Iyer,

It is extremely considerate of you to have written to me in such detail about the "coup". I am sorry not to have replied earlier, but I have been away from Cambridge and inaccessible to my correspondence, and returned only last evening and I need hardly stress the pain the contents of your letter gave me. The whole affair seethes with a spirit so antagonistic to the real spirit of science and so calculated to divert the youthful minds to channels of discussion foreign to scientific domain - it is a pity which cannot be too deeply lamented and Saha could have been more worthy - I do not see why any comments should be made regarding his evident satisfaction in "the return match" the facts speak for themselves

It is all the more discrediting to Indian Science in the large that it should happen just now when particularly physics should be making <sup>those strides</sup> more fundamental than ever ~~the~~ epoch making years of the close and the early years of 19<sup>th</sup> & the 20<sup>th</sup> Centuries respectively.

But, above all, this is a tragedy too personal to Krishna Iyengar that he his friends and admirers know this especially, but as I <sup>have</sup> written to Krishna Iyengar, I have too much faith in his originality as a scientific investigator and his infinite goodness as a person ~~that I do~~ to doubt even for a moment, that he personally will not come out the greater out of this "whirl" — Of course the treatment which Bengal has given Professor Raman's successful attempts to to organize a school has been despicable but I think the moves in the "coup" value science too little in expecting that posterity will at all smile at them — to say the least.

There is hardly any point in expressing oneself strongly, but I cannot help feeling that the hovers in the "Corp" must a priori be too third rate ~~to~~ to have taken part in such tactics. Whatever it maybe, it is my sincerest wish that the new Management Committee will allow Krishnaiyengar complete liberty with regard at least to scientific work and personally I feel confident that Krishnaiyengar will carry on the tradition in spite of those who are suffering from what Krishnaiyengar calls the "Raman phobia".

I have again to thank you for your letter - as I am almost so completely isolated here that I do not at all know what is happening over there (By the way Ramaswamy did not write to me). I should indeed be very grateful if you write to me at least how and again as to what is happening. I <sup>am</sup> myself returning to

India only after another two years (at least)

Hope you are getting on well and with  
my kindest regards

yours ever

J Chandrakhan

As from

Trinity College

Cambridge

1935. III. 20.

My dear Krishna Iyengar,

I have been wanting to write to you for a long time to ask you how things have finally settled down at 210. Bow Bazar. I hope you will not regard me as particularly intruding to ask you about this. You know very well how much I am interested in your work and you that you would - I think - understand me. I was glad to see the other day the announcement of your third part of your investigations on Magneto-<sup>electric</sup> effects. I should like very much to know about your students, the general atmosphere in Calcutta. Is there any possibility of your coming to Europe sometime before

the Summer of 1936. I hope myself to return to India by about time and imagine our travelling together back to India! Somehow I think that you will enjoy a small tour in Europe even if you cannot afford the time to spend a longer time.

As for me I am continuing in the same way more or less. I sent you last week my recent work on Stellar Structure. I should be glad to know what you think about it. I am now writing a small book on "Stellar Atmospheres" which will appear as a member of the Cambridge Series of Mathematical Tracts.

I have heard that some "responsible" persons in India have stated that I am "wasting my time in Astrophysics". It seems to me strange that such remarks

Should be made - not that I have any  
very exaggerated - or even Satisfying -  
opinion of my Studies but I am rather  
disappointed that it should not be  
recognized that advanced Studies are  
made by a person entirely as a matter  
of personal Choice and in so far as  
he has general interests and spends his  
time in learning - but not in vain  
attempts to produce Sensations - he has  
every justification for his Choice.  
Any way in Cambridge I get the utmost  
sympathy and encouragement for my  
work. Fowler, Eddington and Dirac are  
all extremely kind & encouraging  
and even spend quite considerable time  
to clear up some difficulties that I  
may come across. When I first came

to Cambridge, I used to look forward to returning home, but now after nearly five years in Cambridge, I feel so very unhappy that I should soon return. Indeed there would be nothing for me to look forward to when I return to India, were it not that I still hope — or am I deluding myself? —

that I may still expect that I have some friends like you, & Chowla who may not regard my attempts as altogether in vain.

Last term in Cambridge I gave a course of about 20 lectures on "Special problems in Astrophysics" and these and some of my later work all kept me so busy that I am glad to have now come to Copenhagen again. I came here on Sunday and expect to stay on till the middle of

April when I will return to Cambridge.  
During my stay here I hope to combine  
a certain amount of leisure with work.

Well! I have talked ~~of~~ quite a lot  
and I expect you are getting bored.  
But you can hardly imagine how  
much pleasure you would give me if  
you would try to find some time to  
write to me.

Hoping that this letter would  
find you enjoying good health and in  
the midst of your vigorous activities

Yours ever  
S. Chandrasekhar

Trinity College  
Cambridge  
1935 May 21

My dear Krishna Iyengar,

Your kind letter.

I am ever so sorry to learn that the situation is made quite unpleasant at 210. Bow Bazar, — I guessed as much from the new "format" of the Indian Journal. I hope very much — I hope too that this does not sound to you too vain a hope — that things will get better — I am sure that your care consideration and tact will prove to you the essential rightness of your own optimism — the efforts of no one <sup>more richly</sup> know deserved success and I can fully sympathise the more with you the difficulty of your situation. However personally I have no doubts whatever that you will be successful in the end.

As for me, I am getting on  
in much the way - which is only  
rarely better than slow plodding -  
but I have to get out of my way  
many stray calculations before I  
can start again with a clean page, but  
I am looking forward to doing so  
before the end of the summer. I  
am also due to attend in July,  
the International Astronomical Union,  
which is to meet in Paris.

There is nothing else particula.  
Do write to me about your work etc,

Yours ever

J. Chandrasekhar

UNIVERSITY OBSERVATORY,  
OXFORD.

1935 July 26.

My dear Krishna Iyengar,

You wrote to me a letter sometime ago in which you had said that the general atmosphere at Calcutta was being made very difficult for work - unpleasant jealousies, intrigues etc. I wonder if things have improved to any extent. I am especially anxious to know as I have recently heard rumours that you are even contemplating leaving Calcutta. Could you go back to Dacca or has a permanent man been installed in your place there? I also saw recently advertised in Nature an 'experimental-position' at Bangalore. Have you applied for it? I am quite far away, but even at this distance I can realise how uncomfortable things are being made over there, and I am always only too anxious to hear how you are getting on. I was very glad to see that your third memoir in Phil. Trans. has been published.

I see that Ganesht Prasad is dead and that  
he is made out as the greatest Indian mathematician.  
Ramanujan was head and shoulders and in fact  
by his whole stature the best mathematician  
of his kind and ranking only with Jacobi, Gauss and  
Galois. The Hardinge Professorship is vacant and  
has anybody been appointed as yet. Vijayaraghavan  
would otherwise - why it is "otherwise" needs no  
explanation! - have a very good chance. Perhaps  
they are going to shift the (local) great man!

As for me, as you will see, I  
have now come down to Oxford - only however  
for a short stay. I expect I shall stay on here  
for the whole of August. I am trying to do  
some practical work with Plaskett. But tho' I  
have been now here for a week I have not done  
a stroke of work. The inertia of laziness! I worked  
pretty hard during the months Sept '34 - June '35  
but then I gave way and indeed for the  
past month I have been laziness (!). Mean time

I was in Paris to attend the International  
Astronomical Union. Paris was too warm - much too  
warm to appreciate anything! However I did  
go about a great deal to escape endless  
discussions! Oh! I must tell you, I flew to Paris  
and back. I was tremendously excited. That was  
my first experience of flying and "it was grand" - to use an  
Americanism - I met quite a lot of Americans there  
among others Shapely and Russell. Russell is tremendously  
enthusiastic. I do not know if you see the Scientific  
American. Russell had recently written quite nice things  
about my work! Please do not think me vain. When  
I write to you I again feel so childish and free  
as I used to years ago. Here one is shrouded with  
formalities and one learns to hide oneself completely. On  
the whole quite nice but sometimes apt to get  
on one's nerves! I can't say anything about  
my work because I have not done any. I have  
however been reading some kinetic theory and also

Some hydrodynamics. I am planning to develop a  
molecular theory of turbulence - perhaps it is too  
foolish and one might get crazy in the end. By the  
way, I met Rosseland at Paris - He made the  
assertion that all theorists end by getting mad or  
shooting ~~oneself~~ <sup>themselves</sup>. Boltzmann shot himself. Soddid Drude  
and Ehrenfest. Eddington is crazy. Tears a detective  
story writer ("Have you read Edgar Wallace's recent  
thriller "Mysterious Universe"!!") Einstein a  
bundle of contradictions and Dirac already human!  
Bohr is the only exception. Even Sommerfeld is  
getting to be a "pathologist" - I do not know if you  
know this kind of accusation! - and Born, too  
middle headed and Hilber has already discovered  
a God in the universe (He is of course entitled to his  
"private view" that the Universe actually was  
Created in a point!) and so the chain can be  
extended. Oh! yes Maxwell fortunately died  
young. Tait had his Quaternions - Wars and  
Kelvin had his magnetometer to keep him  
straight - Anyway! OF COURSE practical people

always keep sane — The example  
of Faraday. . . . It is pretty bad outlook for me in  
any case!

Well! I have written quite a long  
letter and may I expect soon also a long  
letter from you? Ofcourse I need not say  
how much pleasure it gives me to hear from  
you, and how much I regret to know that  
the conditions are being made so difficult for  
you at Calcutta. Couldn't you manage to  
visit Europe before Spring next year? I  
am sure you would enjoy your visit —  
especially I expect to the Royal Institution where  
they are all so much interested in your work.

How is your family?

Please DO write to me. With kindest regards

Yours ever

S. Chandra Sekhar.

as from

Trinity College  
Cambridge.

1935 August 13.

My dear Krishna Iyengar,

I was ever so glad to have received this morning, a collection of your recent publications including your latest Phil. Trans. memoir. I do not want to appear presumptuous but I cannot help allowing myself the liberty of expressing my sincerest admiration of the zest and care with which you have been continuing your excellent studies in magree - Xlic action. You would also I hope forgive me, if I said that you are the only person (among my personal friends) for whom my admiration, respect and regard has continued to grow all these years. There have been many things at home - personal and otherwise - which have caused me such bitter disappointment that I wish at times

to stay in Europe for ever, but then nothing has more glaringly shown off my absurd despondency than my invariable remembrance of you on those occasions . . . . .

I think I wrote to you - in my half-'joking' letter - that I am now in Oxford. I am returning to Cambridge soon - in about ten days - and meantime I have been mainly doing some quiet study. I have been mainly interested in kinetic theory - plodding through the papers of Chapman. (I am going to give a course of 20 lectures or so on the Chapman-Enskog group of ideas) By the way, I find Loeb's book quite stimulating. He is rather sketchy in his treatment of viscosity, conduction, and diffusion, but the decided emphasis he lays on the experimental side is a necessary 'corrective' to an otherwise formal standpoint one

might be tempted to adopt. In connection with my studies in kinetic theory I went back to Maxwell's papers. It is really remarkable how large a proportion of the ideas and methods of modern kinetic theory are due to Maxwell. There can be no doubt that Maxwell is — to use an Americanism — a super-genius. I must confess that my admiration of Jeans's "Dynamical Theory" was rather subdued, after I realised that <sup>from</sup> he had to a large extent transcribed Maxwell's work! — in order not to be unfair, I must say, that Jeans has introduced at least one idea (eg. the question of the persistence of velocities) which is fundamental. I do not know what you think of Jeans's book, but it seems to me that the earlier portions on Statistical mechanics and equation of state are rather poor — his derivation

of van der Waal's equation is definitely wrong — The only correct derivation I know of is R.H. Fowler's given in his Statistical Mechanics.

I have also been reading some pure mathematics. Perhaps you are not interested in 'pure' theory of functions. But if you are there is a much better book now to go to than Whittaker and Watson.

Titchmarsh "Theory of Functions" (Oxford press) is a perfect work of art. I have read parts of this book before, but I have now reread the book systematically and I enjoyed it very much indeed.

Oh! I must write to you about another very important book I have read — Alice in Wonderland!!! Have you read this book? I expect you have, but if you have free time, you must read it again. There are so many nice things there.

5

For instance what the Cheshire Puss told Alice could be told with profit to all beginners of research:-

She went on "Would you tell me please which way I ought to go from here?"

"That depends a good deal on where you want to get to" said the Cat.

"I don't much care where —" said Alice

"Then it doesn't matter which way you go" said the Cat

"— so long as I get Some where" Alice added as an explanation.

"Oh! you're sure to do that" said the Cat "if you only walk long enough".

Again do you know how you define Logic

"If it was, it might be; If it is, it would be; If it's not, it ain't — that is logic".

How often Scientific Controversies are  
Carried in the following way?

"When she got back to the Cheshire Cat  
she was surprised to find quite a  
large crowd collected round it: there  
was a dispute going on between the  
executioner, the King, and the Queen,  
who were all talking at once, while  
all the rest were quite silent, and  
looked very uncomfortable.

The executioner's argument was,  
that you couldn't cut off a head ~~was~~  
unless there was a body to cut it  
off from... The King's argument was  
that anything that had a head could  
be beheaded, and that you weren't to  
talk nonsense. The Queen's argument  
was if something wasn't done about it  
in less than no time, she'd have  
everybody executed, all round"

!!

7  
Well! I have bored you  
long enough with my silly talk!  
When you are not busy, please <sup>do</sup> try  
to write to me - about how  
everything is getting on at 210 and  
elsewhere!

With kindest regards  
yours ever

Anandra Sekhar

TRINITY COLLEGE,  
CAMBRIDGE.

1935 October 7

My dear Krishna Byengar,

I was very distressed  
at your last letter. I will write  
in detail later, but just now  
I ~~just~~ want to say about the  
Smithson Fellowship of R.S.  
From such enquiries as I have  
made, it looks as tho' the  
R.S. has decided on the person  
but certainly no harm will  
be done by you putting  
in the application.

Things are decided here on  
entirely Common sense  
basis and so your age  
being 37 will not matter,  
provided they want you.

Here ~~so~~ <sup>every thing</sup> ~~xxxxxx~~ depends on  
how much support one can  
get from the celebrities here  
and your chances would  
depend on how <sup>much</sup> for instance  
Sir W. Bragg would support you.

Do you know Sir W. Bragg  
personally? You could write  
to him, if you know him  
by correspondence already.

TRINITY COLLEGE,  
CAMBRIDGE.

I will write in detail  
some time later. Just now  
I will finish here.

Yours ever  
S. Chandrasekhar



ON BOARD  
CUNARD WHITE STAR  
"BERENGARIA"

1936 March 19

Dear Krishna Iyengar,

The last time I wrote to you, I was crossing the Atlantic on the other direction. I am now returning to England after some three months of quite profitable time at Harvard and elsewhere. I was at Harvard the greater part of the time, making a series of seminars on Stellar Structure. There was plenty of discussion and I learnt a quite bit of the observational side of these questions. I did not see a great deal

I answered with an American emphasis "I should say yes"! I was very delighted at H's enthusiasm for the work you and your collaborators are doing and he indeed told me that he have (at least) wished he could ~~once~~

~~have~~ the opportunity to discuss with you. — Incidentally

I have heard that you have been proposed for the F.R.S. If Bragg is one

of your proposers you would have a good chance as Bragg is the president.

Do you still plan to  
come to Europe sometime? If  
you would allow me, I could  
talk to Rutherford asking him  
to send you an invitation  
to come to England for  
sometime. But from your  
publications and otherwise I see  
that you are too busy.

Recently I have been  
invited by the Chicago  
University to take up the  
position of a Research  
Associate at Yerkes  
Observatory (with it goes  
a stipend of 3000 dollars a year)

of the physicists, though I succeeded  
to interest van Vleck in certain  
astrophysical matters and also  
went to a course of lectures  
on nuclear physics by  
Lawrence. I spent also a few  
days at Yerkes Observatory  
(Chicago University) and also  
at Princeton with H.N. Russell.

I passed Washington during  
a week end and at  
Washington I had occasion  
to spend an evening with  
one Hendrik (or is it Heinrich?)  
who asked me if I "knew  
one Krishnan who was doing  
~~some~~ excellent work".



ON BOARD  
CUNARD WHITE STAR  
"BERENGARIA"

The matter is still Confidential,  
and so please do not mention  
this to others. But I should  
very much like you to write  
to me, whether you would  
advise me to accept the  
Chicago offer. From what I  
hear, there is a great deal  
of Scientific misunderstandings  
in India, and somehow I do  
not have the courage, which  
you must have in order  
to have accomplished what

you might know that  
Sir C. V. Raman offered me in  
the summer of last year  
the position of Reader in  
Mathematical physics at  
Bangalore. I did not accept  
the offer - for various reasons  
not least being that I would  
be entirely out of place  
there. Meantime, I have been  
officially disowned by Madras  
and there are some who  
sometimes would rather  
not have me "hundreds of  
miles away". Oh the whole, I do  
not see why I should

not accept the Chicago  
position. (An air mail letter  
from you to Trinity College  
will be most gratefully  
received). There is one thing  
which is not very important.  
So long as I continue to  
remain in Europe or America  
it would be impossible for  
me to marry - and this is  
of significance not to me  
but may be to my father.  
On the whole, I think I  
would continue being single  
for some years yet.

you have. Still there are,  
for me ~~quite~~ quite Considerable  
advantages to be attached to  
a great Observatory like  
Yerkes. Personally I strongly  
feel that I am only now  
emerging slowly from the  
first initial groping phase  
of a Scientific person and  
a break before fully getting  
initiated into the second  
phase of clearness and light  
might prove disastrous  
— I wish really I could have  
more Confidence in myself



ON BOARD  
CUNARD WHITE STAR  
"BERENGARIA"

As I said before the matter is still extremely confidential and I would appreciate if you do not mention this to anybody else.

I am sorry that I have spoken so much about myself, but I hope you will forgive me for it. You know very well how much your friendship means to me and so, I hope, formalities are not necessary

between us.

With best wishes and  
kindest regards

Yours ever  
S Chandra Sekhar.

Chandra Kilar  
41 Elliot Road  
Mylapore  
Madras.

27/36 (?)

My dear Krishna Iyengar,

Many thanks for your  
kind letter. I am sorry I have not written  
to you meantime, but I have <sup>such</sup> a great  
deal to write that I never started! and  
now I am looking forward to meeting  
you soon. I was at Bangalore last week  
and returned only on Thursday this week.  
It was all much too distressing and  
that humanises it. Still the situation  
is not without hope and it is a bitter enough  
comment that both you & Sir C.V. both  
wish to be away in Europe.

As I am expecting to meet you  
quite soon, I shall not write anything  
about all the things I want to write  
about. My plan is to leave Madras  
— for good? — on Tuesday morning  
(29<sup>th</sup>) for Nagpur. I shall spend  
three nights (ie) I shall leave  
Nagpur by the Bombay mail passing  
Nagpur on 3<sup>rd</sup> & reach Bombay  
on the 4<sup>th</sup> — I am glad you have  
written Lord Rutherford and wish that  
your trip will be successful.

With kindest regards

Yours affectionately

J Chandrasekhar

Suez Canal  
Conte Rosso  
1936 October 24

My dear Krishna Djangar,  
I must apologize  
for not having written to you after  
seeing Prof. on his way back - as I  
promised I would. But my last  
days at Bombay were too much of a  
rush - indeed I was even ill toward  
the end though I am all right after  
a weeks rest on the boat. It was  
kind of you to send the telegram - but  
I am thanking for the letter for it  
was really such pleasure for me that  
you did come and spend the days  
at Bombay before I left....

About Prof. Perhaps  
you have already heard from D.K.R.R.  
He certainly seems to have placed his  
case very well before the Viceroy, but  
one feels that the worst may not be  
over yet.

As I said, the whole thing is too distressing  
and I hope that the 'Institute' we  
are dreaming of, for ourselves will  
be realized in a not too distant  
future...

I shall write to you again as ~~of~~  
soon as I get to Cambridge again  
and after meeting Lord Rutherford. In  
any case, please write to me about  
your plans quite definitely <sup>to reach me</sup> before I  
leave England - (i.e.) before the 1<sup>st</sup> week  
in December. I have no doubt  
whatever that your trip to Europe will  
be a success... I shall write to  
Swirps - at Lie'ge (where Henri is, whom you  
could meet at Lie'ge) - Rosenfeld at Göttingen  
also so that they would be of help to you.  
- I shall write to you about these more  
definitely later on. ~~When~~ you. If you go  
to Bombay, please spend some time with my  
father, who would appreciate it. He is rather  
lonely at Bombay. ...  
with kindest regards  
yours ever  
Chandrasekhar

CUNARD WHITE STAR  
"LACONIA"

1936 December 5

My dear Krishna Deyar,

I am sorry that I did not write to you from Cambridge as I promised I would. Tho' I do not want to plead any excuse for my slackness, the month at Cambridge was packed with work and the pressure of work was very severe. First the difficulty over the visa business, then the problem of packing, the number of friends on whom I had to

Hope I have spoken about  
your visit to Cambridge — they  
of course knew your work before-  
hand — are quite enthusiastic  
about meeting you. You may  
find Bernal a bit — well! Cold  
perhaps — but you will surely  
have an excellent time in England.  
But always write well in  
advance before going to a  
place. Thus before going to  
Cambridge, please write to  
Sherrington and he has promised

me to do all he can to help  
you in the matter of arranging  
for your stay etc...

I shall write to  
Rosenfeld - Copenhagen and  
Swings - Tie'ge. I shall  
write the letters en-route and  
you could also write to them before  
going to these places. At Oxford  
I do not know the physics  
crowd but Milne and Pleskett  
are very good friends of mine  
and you might care to  
go round the University Observatory

Call, and lastly I had to clear  
if some work as well — I just  
managed to send in a paper a few  
hours before sailing from Liverpool  
and on the top of it proofs, refereeing  
papers, giving research problems to  
students... Now I feel a little  
free...

Well! I had occasion  
to meet Lord Rutherford and  
he appeared quite pleased with the  
prospect of your visiting Cambridge.  
At Cambridge both Shoenberg  
and Peierls to whom I have

CUNARD WHITE STAR  
"LACONIA"

You are going to stay for really  
a very short time in Europe, but  
I am sure you will have a most  
profitable and enjoyable time. Perhaps  
when you go over to England, you  
will arrange to have your plans a  
little elastic, so that you could leave  
by a later boat than <sup>Getray</sup> if the  
occasion should arise - as I am  
strongly suspicious it would.

I am sorry ~~too~~ that you  
did not come to England while I was

there — it is already was! — but  
I do not think it will make any  
difference to the success of your  
tour.

By the way, please write to me  
about what finally happened at I I of  
Science, B. I arranged that Lord R.  
wrote to the Viceroy, but I do not  
know if that had any effect.

With best wishes, also from Lolita

yours ever

Chandra Sekhary

The University of Chicago

Verkes Observatory  
WILLIAMS BAY, WIS.

1937 January 21

My dear Krishna Lyengar,

your letter of the Second  
January This morning. I wrote to you only  
last week about 'yerkes' and also sent to  
you the replies I had received from Swings  
and Rosenfeld who respectively will take 'charge'  
of you at Liege and Copenhagen respectively.  
Further my friend Shoenberg promised to be of  
assistance to you - in practical matters  
(as well) e.g. the place for staying etc. He may  
probably allow you to stay in his house at a  
nominal weekly charge. Shoenberg, Swings and  
Rosenfeld are among my best friends and you  
will find them both charming and helpful.  
But as I wrote to you, before, it is essential  
that you should write to them well in  
advance (i.e. at least a week earlier) the  
precise date and time of your arrival as  
well as the length of duration of your stay  
at the particular place. I have no doubts  
whatever that you will both enjoy and  
profit by your visit to Cambridge and  
Europe generally.

I want however to request  
you one thing. When conversing with any  
Scientist (Shoenberg or Rosenfeld for instance) or anybody

Who happens to know me, I would especially request you not to talk to them (or even mention) anything about me which could even be remotely described as "private". Many of my friends in Cambridge (you are likely to come upon many of them) do not even know my relation with Sir C.V. R. and they are better be ignorant of that — this is only for an example — Perhaps this sounds pedantic, but you can take it as one of my idiosyncracies!

I am very anxious to learn about your impressions after your visit to the 'South' — Meantime I may say that I find the whole thing far too respectable for words and as I have often emphasized to my English friends, I should have no faith in Indian Scientists but for you — I mean it. It is my earnest wish that your life and work be ever and ever more successful.....

L. sends her best regards  
as well.

With my very best wishes

Yours ever

Chandra Sekhar

The University of Chicago

Verkes Observatory  
WILLIAMS BAY, WIS.

1937 August 28

My dear Krishna Iyengar, I was very glad to receive your letter of August 28. It was very kind of you to have written to me in the way you have done. I need hardly say - and I think I have mentioned it in some of my earlier letters - that I personally owe a great deal to you ----.

I am glad you liked your European tour. Schönberg wrote to me a long letter about your visit to Cambridge and that he learnt a great deal from you and he wrote to me <sup>also</sup> that he felt that you made an exceedingly good impression both at Cambridge and at the Royal Institution.

I hope you had opportunities - I say this because you must have been very busy preparing your lectures etc., - to go into the technique of some of the low temperature work. Have you any definite plans for an expansion in your laboratory? - or is the <sup>in</sup>obscuration

of the local clique too much? - you  
must feel it much more now.

As for me, I am now writing  
a monograph on Stellar Structure  
I have written about two thirds and I  
hope it will go in to press before the  
end of September. It has been very  
hard work, and it is my good fortune  
that I have in one of my colleagues here  
- Dr Bengt Strömgen - an extremely valuable  
help. --- I miss Cambridge very  
much, but I am liking Jukes too  
and I think I have more immediate  
scope here - just now - than I would have  
at Cambridge. But in the long run I should  
plan to migrate again!!

Please do write to me about  
your work, etc. How is your son?  
I hope he has not caricatured me in his  
drawing note book!!

With best wishes also from L.

Yours ever

Chandra Sekhar

The University of Chicago

Verkes Observatory  
WILLIAMS BAY, WIS.

1938 June 30

My dear Krishna Iyengar,

It was a pleasure to hear from you even apart from the depressing news it carried about the "vindictiveness of little men who unfortunately . . . control our Scientific institutions".

First regarding your paper. I am of course delighted to have this opportunity (however little) of being of some assistance to you. I have sent off the paper to Prof Tate. I am enclosing the covering letter I sent with it.

It happens that if you had sent the paper a week earlier, I could have handed it to Prof Tate personally. He was here at Yales for a symposium on "molecular spectra" which had been arranged jointly by the physics and the astronomy departments of the University of Chicago. Tate gave a very interesting paper. Dennison gave a very clear account of the infra red spectrum of water vapor [Incidentally, it

appears that 'Raman Spectra' haven't  
"displaced" infrared work by any means  
and as such it seems to me that  
Such laboratories as do Raman Spectra  
must have equipment for infrared  
work — this is also what Sutherland used  
to tell me at Cambridge] Herzberg gave  
an extremely interesting paper on  
"Dissociation, Predissociation and Recombination  
of diatomic molecules". He seems to be  
convinced that the so called 'pressure bands'  
(after A. Fowler) of Carbon are really the  
extension of the Swan bands. There were  
other interesting papers on the identification  
of  $\text{C}_2\text{H}_2$  and  $\text{N}_2\text{H}_2$  in the atmosphere of  
Jupiter and Venus. We had a very  
stimulating conference though I am sure  
I did not profit as much by it as a pure  
physicist, like you, would have. There was  
Teller (whom I have known since 1931) who  
incidentally spoke very highly of your last  
Phil. Trans paper. I suppose you know that

Mulliken is in the University of Chicago.  
He was here too. I wished you had been  
here. When do you plan to come to  
America?

As for my own work. I  
suppose you have seen some of my  
last papers in the Ap. J. But my  
main work during the past year  
has been on my book on "Stellar  
Structure" which is now well in the  
middle of the proof stage. I think, I wrote  
to you that it is going to be a  
"handsome" volume of over 500 pages.

There are some chapters on pure physics  
— Thermodynamics and Statistical  
mechanics which would be of some  
interest you. With regard to Thermo-  
dynamics have you ever tried to  
follow Carathéodory's axiomatic  
exposition? I am convinced that  
Carathéodory's approach is the only correct  
approach to the Second law. The  
usual treatments are all logically  
unsound and at points definitely wrong.  
My chapter on Thermodynamics follows  
Carathéodory — There is (not a very  
good!) exposition of it by Landé in one  
of the volumes of the Handbuch de Physik  
(Greiger Scheel).

Apart from this, I am going to lecture  
on quantum mechanics next year  
and am quite looking forward to it.

I am afraid I talk just as much  
as you <sup>are</sup> silent. In your letter, you do not  
talk about your work at all. Why?

I am so interested to know how your  
Institute is developing. Have you  
great opposition to develop new lines  
of research? I shall end by insisting that  
you really must write to me a long  
and detailed letter about your own work,  
the Indian Association etc., with  
kindest regards also from Lalit

yours ever

Chandra Sekhara.

P.S. With regard to the proof of your paper, I  
shall see that your manuscript is  
faithfully printed i.e., compare the proof  
very carefully with your m.s.

P.P.S. Confidentially, I have a letter from the Director  
of Public Instruction (Madras) offering me the Addl. Prof. at Presidency  
College. I am afraid that I shall have to reject it.

P.P.P.S(!)

I shall order 100 Reprints  
of your paper in the course.

The University of Chicago

Verkes Observatory  
WILLIAMS BAY, WIS.

1938 September 20

My dear Krishna Lyengar,

Your letters of the 11<sup>th</sup> and 17<sup>th</sup> August and the enclosed manuscripts of your  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  paper duly to hand. I have just sent it off to Tate. The delay in my sending it is due to the fact that I had to find time to make your graphs suitably India-inked so that it would be ready for reproduction - incidentally I may mention, that the Physical Review undertakes only very reluctantly to have the diagrams made for the authors of papers, and they prefer the papers and diagrams sent in forms ready for the press. I am not myself particularly good at inked diagrams, but I have done my best under the limitations of time.

There is not very much news to write about, except that I am still involved in the prep of my book and

finding very little time to do research.  
However, I have finished a paper on  
"Stellar dynamics" and am in the midst  
of another... From January on, I  
am to lecture on Nuclear Physics - I  
am glad at this opportunity to systematize  
my knowledge. . . . Well! how are  
things getting along in India. I heard  
vague rumours that Sir C. V. R. had  
accepted a position in Amsterdam.  
But from his notes in Nature, I  
infer that he is still at Bangalore.  
What is the 'truth' about the matter now

with kindest regards

yours

Chandrasekhar



French Line

1939 July 27

à bord, le Normandie

My dear Krishnan,

I was very glad to receive your letter of July 4. I do not however see how I am in any way responsible for "introducing" you to Europe". Of your had welcome receptions in the various laboratories and Institutes it was solely for your own intrinsic Scientific achievements. I am very delighted however to read that you "are returning to India full of enthusiasm for work".

As you will see I am myself returning to work though I don't know with any increased enthusiasm

My "vacation" in England was spoilt  
partly on account of my hay fever  
which became increasingly bad after  
you left and the conference in Paris  
also spoilt on account of my "bête  
noire". I had one pleasant week in  
Cambridge. Some of my earlier  
mathematical friends - Davenport and  
Heilbronn - were both in Cambridge  
and we spent most of the time on the  
river which was thoroughly enjoyable.  
On the whole I am rather tired  
and stale and hope to continue  
a fortnight of holidaying after  
returning to Yukes. I am stopping off  
at Harvard a day or so before I go to  
Yukes so that I can meet Oort  
~~whose~~ who is at Harvard Summer School.