

and India

Following the British practice the Bureau was to be designated the National Physical Laboratory.

The immediate result was that I did not join Dr Bhatnagar in 1940.

and I also accepted the membership of the Board of Scientific Advisors. But the did accept ~~its~~ membership of this Committee. ^{the} ~~the~~ organizational of CSIR immediate ~~background~~ ^{was effort-} which prompted these major steps. Moreover did not enthuse me ~~with~~ my pronounced academic leanings there was a strong resistance in me on academic grounds, to putting the cart before the horse! I felt that ~~that it was~~ the development of the Universities ^{is} that ~~should have~~ ^{been assigned} ~~received the~~ highest priority, and not the new laboratories proposed, and that we would be eating ~~out the~~ ^{and} seed crops / if the new laboratories were to be organized before the University laboratories had been ~~we would be forced to eat out of the seed crops~~ ^{greatly strengthened} It took me ^{many} ~~some~~ years to be convinced that Dr Bhatnagar too realised as strongly as

p 5

La

conveniently ①

p 8

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absorption ②

limiting

DR. K. S. KRISHNAN'S
60th Birthday Celebrations

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December 14, 1958

Vigyan Bhavan, New Delhi

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PRIME MINISTER'S TRIBUTE

The Prime Minister of India (Shri Jawaharlal Nehru): Dr. Subbarayan, Dr. Krishnan, and friends: I do not know how to inaugurate a birthday anniversary, but I suppose—as Dr. Subbarayan ^{suggested} ~~said~~—one is supposed to say something about the person whose birthday anniversary it is. Yet, surely, you have not gathered here today, I take it, to hear a long list of the scientific publications of Dr. Krishnan, but rather to do honour and pay homage to him for what he is.

KRISHNAN : MORE THAN A SCIENTIST

He is, as is known, a great scientist. But he is something more than that, and it is that something more that has attracted people to him.

SCIENCE VS. OTHER ASPECTS

Today, there are many problems in the world, but perhaps one of the basic problems is how to co-ordinate, how to bring together science and certain other vital aspects of life. Everyone knows of the tremendous achievements of science and technology. Almost every day brings some new revolution, some new discovery, some new invention, some new advance. Still our minds get a little benumbed in trying to understand the consequences of all that we read or hear about. But one fact is clear : the modern world

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has been powerfully affected, and is daily being changed, by science and technology.

SCIENCE AND HUMAN ADVANCE

That leads to another problem : as to how far this tremendous knowledge of science and technology is correlated to human advance, apart from the purely physical plane. Science dabbles in the physical world and has advanced very greatly in the last, let us say, two or three generations, changing the whole concept of the physical world and opening out new avenues and new vistas. Suddenly one feels that while one knows—or at any rate, the wise scientist knows—so much about the physical world, yet one is on the threshold really of other kinds of knowledge which might take one to some unknown regions of thought. All this is well known.

MAN UNABLE TO MATCH SCIENTIFIC POWER

The difficulty arises, as I said, of catching up with all this knowledge which has been placed before mankind by the men of science. All the problems—whether it is the problem of the atomic bomb or the hydrogen bomb—ultimately derive from scientific discoveries. All the time, the nuclear bomb is, sort of, hanging over us, without our knowing when it might fall. All these powers have descended upon man before probably man is fit to exercise them. He has not grown up to match these powers—not grown up in other ways. What are these other ways? One may describe them as one likes, but they are ways of the human being developing, not only intellectually but in other aspects.

THE "PERFECT CITIZEN"

Now what is ^{very} remarkable and likeable about Dr. Krishnan is that he is not a mere scientist. A great scientist as he is, he is something more and it is always that something more

that makes all the difference to a human being. Whatever ^{his} profession or job he might be in—he may be an eminent scientist, or engineer, or doctor, or politician, or whatever else he might be—if a person lives in that groove, he may succeed—he is likely to succeed—in his life's journey, but he will still be—perhaps a little—lopsided, one-sided, working in a groove, however deep that groove might be, and so, he ceases to be—or he may cease to be—the "perfect citizen". None of us are perfect citizens.

THE "INTEGRATED BEING"

In the old days, when knowledge—scientific and other—was, in a sense, limited, educationists—whether in India or in other countries—aimed at producing the "whole man", the "integrated personality": not a very clever engineer, or a very good doctor, or a very fine scientist, who knows nothing about the rest of life. But that has become, today, very difficult. For, because of the range of knowledge, we have specialists everywhere. We cannot do without them. Specialists are very eminent men. But they know a great deal about their own subject and perhaps very little about humanity.

KRISHNAN : A "LOVABLE" MAN

Again, the chief virtue, as I see it, and the chief charm of Dr. Krishnan is that he sees life as a whole. He is ^{a scholar} not only ^{in science} a scholar, but apart from being a classical scholar, he is taking interest in many things like music. He is, above all, a likeable and lovable human being, full of humour. (Cheers.) I have no doubt that all of you who have gathered here and many others—large numbers of others—in India today and elsewhere who know about him, who admire him and like him, do so more because of his various other attainments. If he was simply a scientist, he would not be liked so much. It is obvious that Dr. Krishnan is liked by all of us. So, there is that special thing in him.

HUMANITY AND SPIRITUALITY

And that leads me to the same problem which I mentioned to you : how to combine this great advance in science with the advance in the qualities that go to make a great human being—humanity if you like, something spiritual if you like, call it what you like. All this is, presumably, necessary for a "whole man", an "integrated personality". We see some such person in Dr. Krishnan who, inspite of his great learning, has yet retained in him the common touch of humour, of humanity, and so we admire him, we respect him, ^{but} and above all, we love him!
(Cheers.)

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THE SCIENTIST'S REPLY

Dr. K. S. Krishnan: Mr. President, Mr. Prime Minister and friends: I do not intend to make a long speech : in fact, I do not intend to make a speech at all. The occasion needs merely my coming before you with folded hands to say how grateful I am to you for the many kind sentiments which were expressed. I wish I deserved a small part of it, but in any case my ideals are fairly high and some of the things which you were pleased to say fit in with my ideals, not with the man.

EXAMPLE OF BHARADWAJA

One of them is associated, Mr. Prime Minister, with a very distinguished neighbour of yours--the Bharadwaja Ashram, as many of you know, is just on the other side of the road of Anand Bhavan. There is a very touching incident which is related to it, in the Krishna Yajurveda. They wished me another 60 years. I had a little time before I came to the mike to plan what I should attempt to do during these sixty years. (Laughter.)

I am not a Sanskrit scholar. I know a little Tamil : I can read classics in Tamil freely. I follow in a general way Sanskrit, but my knowledge of Sanskrit is not quite enough for me to attempt a speech in Sanskrit, or to be able to write in that language. But this particular incident in the Krishna Yajurveda is easy to follow and I shall therefore quote it.

Bharadvaja was given three full lives by Indira, each of 100 years' duration. Bharadvaja spent all the three centuries in learning. He was getting old.

The old man realised that even the extended period of his term was coming to a close.

Indira, without being invoked, knew what was passing in the mind of the old man. So, he asked Bharadvaja, of his own accord, a very significant question:

He just asked him, "What would you be supposed to do with the next 100 years, if I give you a fourth century to live?" The Veda does not even introduce his reply with any remark like saying "Bharadvaja replied", but it just says:

I liked the language and so I am sharing it with you. I liked the reply, which is spontaneous : "I want to spend

the next century also just in learning things." See the beauty of the words:

"If you are good enough to grant me a fourth century, I propose to do just what I have been doing during the last three centuries. I shall continue to learn and use the period in exactly the same way as I had been doing previously." Indira was naturally pleased, but he wanted to be sure.

THE THREE MOUNTAINS AND THE THREE HANDFULS

He showed Bharadwaja three mountains, which represent the sum-total of knowledge that one has to acquire, and then turning to Bharadwaja

he took three handfuls, one from each of the three mountains, and addressed Bharadwaja thus:

"Oh, Bharadwaja, what you have to learn are these three mountains. What you have to learn are infinite, limitless." He adds,

"What you have learnt in your three centuries of learning are these three handfuls."

"The rest," pointing to the mountains, Indira said, "are the ones which you have to touch!" As I said, this is a very touching incident. Bharadwaja was naturally content with one

more handful.

INFINITY OF KNOWLEDGE

That is how every scholar feels; every scientist feels. In fact, he is the more keenly, the more realistically, aware that every door not only he opens, but every door that any of his colleagues opens, leads on to numerous new pathways, and at the end of each one of them there is another door. One of the distinguished research chemists in California used this analogy, which I find most appropriate, to describe the infinitely unfolding, the infinitely expanding, new knowledge. It is several degrees of infinity. And that is science. By its very nature, it is not only impossible for any one of them to think in terms of being able to learn as much as he wishes to, but it is not even conceivable that the sum-total of knowledge which all the scientists in the world, all the scholars in the world, all the original thinkers in the world, can manage to acquire will in any way set even a remote limit to what is to be known, viz. the expanding new avenues—which leave the unlearnt portion enormously wider: the vista is much more deep than any of them found it. That, in any case, is the picture of science which every scientific worker is realistically aware of.

THE STORY OF THE SQUIRREL

But even so, to the individual scientist his little handful even though it be a little particle appears at the moment to be just as important as the rest of what cannot be learnt. That keeps up not only his enthusiasm, but it makes him feel in a way his oneness, his being part of the universe which he is trying to understand. He at least feels that he also has done his share. There is a fine incident which many of the South Indian readers of the Ramayana are aware of: it is not Valmiki's. I found a panel in one of the walls in

the temples in Indonesia where this incident is carved in stone. It is about a squirrel. They were damming the sea in order to make a causeway for crossing the Strait of Mannar. Many brought large boulders, huge trees and many things with which they filled up and constructed the causeway. There was a little squirrel which used to plunge into the water, get out wet, and just roll on the sand, and then go back and shake off the sand over the causeway. That was how the squirrel contributed to the building up of the bridge, and it gave him just the same satisfaction as building with big boulders did to his other colleagues. That is how I feel. It may be a squirrel's contribution, but still, to the squirrel it is important. (Laughter.) It is not so much the amount of science, the amount of material that you contribute to the building up of the causeway; it is the feeling of your share, of your own contribution to what you feel is a great cause worth participating in. That is how one feels when one takes to science: the feeling that by the sweat of your brow you have contributed your share.

THE KARAIKUDI MEMORIES

I feel particularly touched by the shawls. Irrespective of how many honorary doctorates one receives, the doctorate which one earns by the sweat of his brow reminds him of the background. In a nostalgic mood, one thinks of the time when he too did submit a thesis. When I received these shawls today, naturally I felt very proud, felt deeply honoured by the act, in the same sense in which one receives honorary degrees. It is a great thing and one appreciates the kind sentiment behind it. But it reminded me, also, of an occasion when I earned a shawl, and in the old days, it was the ambition of every scholar, however humble might be his contribution, to earn it

at a public gathering from one who can appreciate from personal knowledge some connoisseur of scholarship. It happened to me in Karaikudi. It was Kamban Festival, and I had been invited to preside. In my presidential address I said a few things which I thought might not be quite relished by some of the scholars who were my colleagues on the platform, because I was expounding a point of view which I was a little diffident of getting across. One of them appreciated that, obviously, for he stopped me in the middle of my speech and asked one of his colleagues to bring a shawl—evidently, he had a few in store always!—(Laughter.) He wanted to "robe" me with the shawl. I felt doubly touched, because all the time I was looking to him for disapprobation!

You see, the welcome address started with some such sentiment as this: "There has been a feeling that the Vaishnavaites do not patronise Kamban as well they should do. I understand that Krishnan is a Vaishnavaité, and the readiness with which he agreed to preside over this function indicates that that longstanding disability of the Vaishnavaites has been greatly rectified." That was how he started. My reply was: "Being a great scholar, being the incumbent of a great Adenam, he cannot be wrong. I had my own doubts as to whether I was a good Vaishnavaité, but I have no doubts now on that issue. But the major issue is not whether Vaishnavaites patronise Kamban properly. There have been differences of opinion on that issue, and I do not agree with the grouse that he is not properly encouraged, because the critics refer to an incident which happened two centuries before he was born!" Then I said, "What is essential for the reading of Kamban's Ramayana is to know what were Kamban's own ideals, and I have no doubt in my own mind that Kamban cherished the same ideals which the Vaishnavaites cherish." My thesis in that address was, "If you want to appreciate Kamban properly, you ought to be

familiar with the background of Vaishnavite literature which Kamban was nurtured on. Unless you do that, it will not be possible to understand him correctly, to appreciate him in the proper manner in which he ought to be appreciated. That is the thesis I want to present to you." I could see I had touched a delicate point, and so when I replied, I illustrated my thesis by numerous examples. As I said, he stopped me in the middle of my lecture, and I felt honoured that I had earned that day my doctorate by the sweat of my brow. Today, when I received these honorary ones, I said to myself : if one stays long enough, I am sure he will reach 60; and I am sure if he stays a little longer, he will reach almost any age which is supposed to be respectable. I have attained that, and so the degrees are honorary, there is no doubt. But still, one of them at any rate comes from the same scholar who appreciated me and who gave me the degree on the basis of my thesis. That is a remembrance which I will always cherish.

"THANK YOU" : FROM THE HEART

Shawls are supposed to be the robes just like the doctorate gowns, and a scholar normally appears in them on academic or ceremonial occasions. So, I flatter myself that I have the right today--of course, I had earned that right also earlier--to appear on the platform of pandits and talk to them in a language which they appreciate. For some reason, today that language has not the same public esteem which it used to have--which in my opinion it ought to have--because there are many extremely fine sentiments, very touching ones, in them. It is good literature, which can move the deepest human sentiments : they are all there in the language which they speak. Even if I have not the competence to claim to be a connoisseur to understand all that, at least in a vague way I can feel and say to myself, "It is good literature; I

I consider it a great honour to have been associated with the sixtieth birthday celebration of Dr Krishnan. Dr Krishnan is amongst those half a dozen Indian scientists who has made a position not only in his own country, but in the international world. His name is known throughout the length and breadth of this country. I remember those days when about fifteen or twenty years before he went to Allahabad and took over as the Head of the Deptt of Physics. In fact he had succeeded another eminent scientist, Dr Megh Nad Saha, who had also attained international repute. I remember how Dr Krishnan's name was respectfully mentioned in the literary circles of Allahabad. In subsequent years, Dr Krishnan has ranked amongst one of the top leaders in the field of science. I cannot delve into his theories and his new interpretations of Nature or the powerful forces of Nature as I do not know even the 'a b c' of science. But there is no doubt that the scientists in this age have changed the very face of the world. Their contributions have been something on a gigantic scale

the other day, in which he had appealed to the people that they should develop full faith in the basic and fundamental philosophies of our ideologies of Gandhiji. In fact, I have always been interested to read the speeches of our great Indian scientists in regard to the preachings of Gandhiji. Dr Raman's speeches and his views about Gandhiji are well known. There are other scientists also who have expressed similar opinions. Dr Krishnan is not an exception to it and then Dr Krishnan is not merely a scientist, he is a deep student of philosophy and an acharya and hence it is only but proper that he should take such a balanced view in regard to such matters and keep before him the higher objectives for which *the man lives*. In fact the scientists Set a *Great* example for *us* this. They do their work - most important work - in such a quiet manner and they do not seek any publicity and they do their work in a manner which undoubtedly creates a tremendous impression on the minds of the people who come in touch with them.

If I may be pardoned to refer to a personal matter, when I was in jail in the year 1942-43, it was very difficult

to get books there during the first few years of jail
life in those days but I got the biography of Madame
Curie written by her daughter Dr *Eve Curie in jail*
and I went through it. I was so profoundly impressed
by her life that I took special ^a permission from the
jail authorities to get some ink and paper and ^I translated
the biography in Hindi which was ^{later} published. It
is indeed, well I cannot imagine *a fair*
Mr Curie, Madame Curie and her husband, ~~the~~ two great
scientists whose contributions are indeed remarkable *and*
I read in the biography that Madame Curie was offered
a large sum if she would merely part with her researches
and discoveries, the techniques which she had made on
experiments on radium and she could, if she wanted, earn
lakhs and lakhs of rupees on that. But she consulted
her husband and in a moment's time both agreed that
they could not think in terms of making any profit
on their researches as they were dedicated to the
humanity at large, to serve them and to serve the ~~pre~~
people. So at *least* while I ^{for} have myself who
to work in the political field, have to take lessons
from the scientists who work in the scientific field,

they are in a true sense ~~the~~ real sanyasis and I hope that we will be able, and especially our younger friends also, to take lessons from Dr Krishnan and others to work in this field. I might also again mention a small matter before I conclude *that*

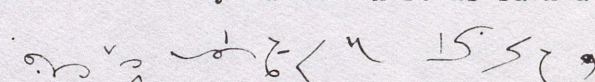
I had not met Dr Krishnan before he met me only five or six months back; and when he came to meet me, well I had to prepare myself mentally, how to meet him, and what to talk to him. In fact I felt a bit nervous ! But when I met him well, he completely disarmed me by his politeness and humility and I could see how noble and good he is.

I shall not say more, but may I wish that Dr Krishnan should live for many years to come so that he is able to serve science and more so his country in the years to come.

Friends,

I feel deeply touched by the very kind, warm and generous sentiments expressed by my distinguished colleagues and friends. When I read the address I was reminded of an episode in the Ramayana. Since I have been given ~~the~~ credit to a weakness for the Classics, I shall start with a little indulgence in that weakness. When Dasaratha announces that he has decided to instal his son in the Yuvarajya, there was a thunderous applause. In fact the audience, the Rishi says that, made such a noise that the towers were just shaking and the father was naturally very happy that they responded so generously to his proposal. But there was also a feeling that all that probably shows he is going to retire and he is going to, at least the people would probably wish him to retire from the way they enthusiastically responded to his proposal. When I read all that reference to my *close* association with the laboratory, I had almost a feeling that though I had not decided it has been decided ~~that~~ I should retire sometime from the laboratory. That has

also been my wish for quite sometime and I have
expressed it repeatedly, ^{to e} ~~not retiring~~ from the laboratory
side of it, but to be able to do science whole of the
time. I hope it will be possible for me to indulge
in that weakness too.

I do not remember, Sir, of having spoken about
Mahatmaji. ^C ~~Because~~ I fight shy of a great subject.
But occasionally when I expound ~~the~~ Ramayana to some
of the audiences, I emphasize that the great and
noble ideals for which the Father of the Nation ~~and~~
stood were also ~~the~~ ideals expressed in some of the
chapters of the Ramayana and there is such a resemblance
to the 

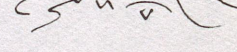
and naturally I would like to find deep roots for
~~these~~ ^o noble ~~ideals~~ in some of the classics in which
many of us have been brought up so as to feel quite at
home with those ideals. You, Sir, referred to the lives
of the Curies. I cannot think of any parallel in
physics to a generation, to a family, of physicists like
that of the Curies. I will have to ^{step out} ~~stoop down~~ to

mat

mathematics, to the great tradition established by
the many Bernaulis. Once in the course of a mathematics
lecture, I referred to the seven great ^{Bernaulis} Brainles. One
of the members in the audience, who later turned out to
be a very good mathematician, was a little sceptical.
He told me later and he looked up the literature and
then he ^{wrote to} ~~told~~ me ["] ~~that~~ there have been as many as
fourteen Bs who had held at least distinguished
Chairs in Mathematics, if all of them had not contributed
to Mathematics in an original way. In fact it is
definitely a case of heredity. ^{Because} One of them
forbade his son from doing mathematics and threatened to
disinherit him if he discovered him doing mathematics,
because he was doing ^{it} stealthily and the father had a
little suspicion and finally the tragedy was this. The
son had competed for a prize offered by the French
Academy of Science, ^{at} Paris, in which the Father also was a
competitor. ^{of} The son won the prize and ^{Sent out of the home} He was actually
disinherited. In physics, the Curies remind me of the
Bernaulis, though it was only two generations, but there are
four of them who ^{have} ~~had~~ made history and it is no wonder
that the life of Madame Curie had such a fascination for

our distinguished President that he undertook ~~to~~
translate^{ing} the life. In fact she was interested, apart
from science, in doing work for her country and she came
to Paris ~~purely~~^{partly} with the view of doing some political
work and she came with a letter of introduction from
Mandeleef, one of the greatest ~~of~~ scientists the world
has ever produced, the greatest in Russia, and she
came to join Beck~~man~~^{er} in the early days. Finally
she shifted to Professor Curie and Prof. Curie was one
of those who seriously believed that no woman can
turn out to be a good scientist and that was the irony
and he ~~married~~ her and she was regarded, if not a greater
physicist, at least a physicist certainly comparable
with ~~her~~^{the} husband.

In the address there was a reference to Leonardo

DaVinci I do not know from where they got 
It is true of course. Once at a brains trust in America,
I mentioned that the great Lord Rayleigh ~~probably~~^{probably} was the
last of the "complete physicists" and someone asked me "Who
do you think was the last complete mathematician." I said
probably Poincare. Someone ~~asked who~~^{asked "who is"} is the complete

scientist. I hesitated and said probably Helm ⁱⁿ Holtz

and then a distinguished member in that group almost

~~dissent~~ ~~to~~ ~~so~~ I had to justify the choice
nodded ~~assent~~ and so I had justified the choice. He

started as an army surgeon, ^{he was one of the most} distinguished
anatomist,

held the chair of anatomy in Berlin and later held the

chair of physiology

Probably

2) E.P.

[Handwritten scribbles and notes, including "Holtz" and "H's"]

He also wrote papers on the foundations of geometry, I am

just trying to find out ^{whether} if I have omitted any major

branch which he did. Even after ^{I had} ~~editing~~ all that,

Oppenheimer who was in that group

" ^{shd} I would go a little further back to Leo Nardo Da Vinci "

and he ^{then} said, Helm ["] Holtz did not do engineering. I said

" certainly I agree. " *[Handwritten scribbles]*

I did not want to go that far back to a period when one

could be a complete scientist ~~and~~ would reserve Leonardo

for a complete man

The range of subject that he covered was amazing
and in each one of them he was so eminent, and
so original and such a great leader and I am glad
his name was mentioned.

If I may be permitted to shift to a lighter
subject, when I drank the vodka, I knew of course
it was vodka, though it looks like water there is
no mistaking it. One of the audience I remember
mentioned 'Ah, we ^{used to} ~~of course~~ know about a man in the Balkans
~~who~~ could do that. He could drink straight
from the bottle. But that lead to a reputation at the
table, which landed me in having to propose a toast
to the Ballerina Galena Molenova. That was at an
academy dinner where ^{my friend Nabha} ~~the Ballerina~~ was present

If it was a toast at the Academy Dinner for Mullenova, naturally I have to find some relation between the Academy and Mullenova and so I remembered Boltzmann. In Vienna, he got into disfavour with the Emperor and he was externed from Vienna. Naturally his friends and colleagues at the Academy were very unhappy. One evening they found the Emperor in the Royal Box at the Ballet ^{and the} of Mullenova was a favourite Ballerina of his. He obviously looked very pleased and the few Academicians who happend to be there and who noticed it, thought that that was a suitable occasion to put in a word to the Emperor on behalf of Boltzmann. They went on deputation to the Emperor and said "Your Imperial Majesty, what is your favourite Ballerina is to you Boltzmann is to the Academy." The Emperor was very pleased and he asked them "Is Boltzmann that good?" When they said it was, the Emperor replied "Surely, you ought to have him" and that led to Boltzmann coming back to Vienna and his

activities at the Academy.

That afternoon we had been talking about the establishing relations between the scientists of USSR and India and I said the easiest thing to achieve this objective is to send the Ballerina to India and I have already assured her if she comes to India four hundred million admirers, which Russia certainly cannot provide

When Dr Bhabha referred to the high table naturally by association of ideas with the Vodka, I feel that I have enjoyed life certainly. There is fun in it, and a good deal of fun in it and when I had an heart attack, that was a year ago, I had admitted, only a fortnight back, a friend of mine to the hospital for a similar attack and so I had read some literature and I knew all about it and I diagnosed it as the heart though there was hardly any pain. The books described it as one of the most dreadful feeling^s you are always aware of death

experience. That was what I found. If the end is to come, probably this is the happiest way I would like it to happen and I was most happy it was the heart. I am merely mentioning when one enjoys life, one also enjoys equally well having had his innings to retire. I would like to retire in the most gently, most useful manner. That is my wish, but till I retire, I would like naturally to be associated with the NPL, not necessarily as the Director, and if the future Director would permit me, I would like to spend whatever time I can spend actively in the NPL.

Thank you

A "SQUIRREL'S" CONTRIBUTION
TO YOUR
G R A N D
60TH BIRTHDAY CELEBRATIONS !

G H G Raman

oo

PRIME MINISTER FELICITATES
SCIENTIST

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Dr. K. S. Krishnan, F. R. S.,
President, Delhi Tamil Sangam,
New Delhi.

DR. K. S. KRISHNAN'S
60th Birthday Celebrations

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December 14, 1958

Vigyan Bhavan, New Delhi

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has been powerfully affected, and is daily being changed, by science and technology.

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That leads to another problem : as to how far this tremendous knowledge of science and technology is correlated to human advance, apart from the purely physical plane. Science dabbles in the physical world and has advanced very greatly in the last, let us say, two or three generations, changing the whole concept of the physical world and opening out new avenues and new vistas. Suddenly one feels that while one knows--or at any rate, the wise scientist knows--so much about the physical world, yet one is on the threshold really of other kinds of knowledge which might take one to some unknown regions of thought. All this is well known.

MAN UNABLE TO MATCH SCIENTIFIC POWER

The difficulty arises, as I said, of catching up with all this knowledge which has been placed before mankind by the men of science. All the problems--whether it is the problem of the atomic bomb or the hydrogen bomb--ultimately derive from scientific discoveries. All the time, the nuclear bomb is, sort of, hanging over us, without our knowing when it might fall. All these powers have descended upon man before probably man is fit to exercise them. He has not grown up to match these powers--not grown up in other ways. What are those other ways? One may describe them as one likes, but they are ways of the human being developing, not only intellectually but in other aspects.

THE "PERFECT CITIZEN"

Now what is remarkable and likeable about Dr. Krishnan is that he is not a mere scientist. A great scientist as he is, he is something more and it is always that something more

that makes all the difference to a human being. Whatever profession or job he might be in--he may be an eminent scientist, or engineer, or doctor, or politician, or whatever else he might be--if a person lives in that groove, he may succeed--he is likely to succeed--in his life's journey, but he will still be--perhaps a little--lopsided, one-sided, working in a groove, however deep that groove might be, and so, he ceases to be--or he may cease to be--the "perfect citizen". None of us are perfect citizens.

THE "INTEGRATED BEING"

In the old days, when knowledge--scientific and other--was, in a sense, limited, educationists--whether in India or in other countries--aimed at producing the "whole man", the "integrated personality" : not a very clever engineer, or a very good doctor, or a very fine scientist, who knows nothing about the rest of life. But that has become, today, very difficult. For, because of the range of knowledge, we have specialists everywhere. We cannot do without them. Specialists are very eminent men. But they know a great deal about their own subject and perhaps very little about humanity.

KRISHNAN : A "LOVABLE" MAN

Again, the chief virtue, as I see it, and the chief charm of Dr. Krishnan is that he sees life as a whole. He is not only a scholar, but apart from being a classical scholar, he is taking interest in many things like music. He is, above all, a likeable and lovable human being, full of humour. (Cheers.)

I have no doubt that all of you who have gathered here and many others--large numbers of others--in India today and elsewhere who know about him, who admire him and like him, do so more because of his various other attainments. If he was simply a scientist, he would not be liked so much. It is obvious that Dr. Krishnan is liked by all of us. So, there is that special thing in him.

HUMANITY AND SPIRITUALITY

And that leads me to the same problem which I mentioned to you : how to combine this great advance in science with the advance in the qualities that go to make a great human being--humanity if you like, something spiritual if you like, call it what you like. All this is, presumably, necessary for a "whole man", an "integrated personality". We see some such person in Dr. Krishnan who, inspite of his great learning, has yet retained in him the common touch of humour, of humanity, and so we admire him, we respect him, and above all, we love him!

(Cheers.)

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THE SCIENTIST'S REPLY

Dr. K. S. Krishnan: Mr. President, Mr. Prime Minister and friends: I do not intend to make a long speech : in fact, I do not intend to make a speech at all. The occasion needs merely my coming before you with folded hands to say how grateful I am to you for the many kind sentiments which were expressed. I wish I deserved a small part of it, but in any case my ideals are fairly high and some of the things which you were pleased to say fit in with my ideals, not with the man.

EXAMPLE OF BHARADWAJA

One of them is associated, Mr. Prime Minister, with a very distinguished neighbour of yours--the Bharadwaja Ashram, as many of you know, is just on the other side of the road of Anand Bhavan. There is a very touching incident which is related to it, in the Krishna Yajurveda. They wished me another 60 years. I had a little time before I came to the mike to plan what I should attempt to do during those sixty years. (Laughter.)

I am not a Sanskrit scholar. I know a little Tamil : I can read classics in Tamil freely. I follow in a general way Sanskrit, but my knowledge of Sanskrit is not quite enough for me to attempt a speech in Sanskrit, or to be able to write in that language. But this particular incident in the Krishna Yajurveda is easy to follow and I shall therefore quote it.

Bharadwaja was given three full lives by Indira, each of 100 years' duration. Bharadwaja spent all the three centuries in learning. He was getting old.

The old man realised that even the extended period of his term was coming to a close.

Indira, without being invoked, knew what was passing in the mind of the old man. So, he asked Bharadwaja, of his own accord, a very significant question:

He just asked him, "What would you be supposed to do with the next 100 years, if I give you a fourth century to live?" The Veda does not even introduce his reply with any remark like saying "Bharadwaja replied", but it just says:

I liked the language and so I am sharing it with you. I liked the reply, which is spontaneous : "I want to spend

the next century also just in learning things." See the beauty of the words:

"If you are good enough to grant me a fourth century, I propose to do just what I have been doing during the last three centuries. I shall continue to learn and use the period in exactly the same way as I had been doing previously." Indira was naturally pleased, but he wanted to be sure.

THE THREE MOUNTAINS AND THE THREE HANDFULS

He showed Bharadwaja three mountains, which represent the sum-total of knowledge that one has to acquire, and then turning to Bharadwaja

he took three handfuls, one from each of the three mountains, and addressed Bharadwaja thus:

"Oh, Bharadwaja, what you have to learn are these three mountains. What you have to learn are infinite, limitless." He adds,

"What you have learnt in your three centuries of learning are these three handfuls."

"The rest," pointing to the mountains, Indira said, "are the ones which you have to touch!" As I said, this is a very touching incident. Bharadwaja was naturally content with one

more handful.

INFINITY OF KNOWLEDGE

That is how every scholar feels; every scientist feels. In fact, he is the more keenly, the more realistically, aware that every door not only he opens, but every door that any of his colleagues opens, leads on to numerous new pathways, and at the end of each one of them there is another door. One of the distinguished research chemists in California used this analogy, which I find most appropriate, to describe the infinitely unfolding, the infinitely expanding, new knowledge. It is several degrees of infinity. And that is science. By its very nature, it is not only impossible for any one of them to think in terms of being able to learn as much as he wishes to, but it is not even conceivable that the sum-total of knowledge which all the scientists in the world, all the scholars in the world, all the original thinkers in the world, can manage to acquire will in any way set even a remote limit to what is to be known, viz. the expanding new avenues--which leave the unlearnt portion enormously wider : the vista is much more deep than any of them found it. That, in any case, is the picture of science which every scientific worker is realistically aware of.

THE STORY OF THE SQUIRREL

But even so, to the individual scientist his little handful even though it be a little particle appears at the moment to be just as important as the rest of what cannot be learnt. That keeps up not only his enthusiasm, but it makes him feel in a way his oneness, his being part of the universe which he is trying to understand. He at least feels that he also has done his share. There is a fine incident which many of the South Indian readers of the Ramayana are aware of : it is not Valmiki's. I found a panel in one of the walls in

the temples in Indonesia where this incident is carved in stone. It is about a squirrel. They were damming the sea in order to make a causeway for crossing the Strait of Mannar. Many brought large boulders, huge trees and many things with which they filled up and constructed the causeway. There was a little squirrel which used to plunge into the water, get out wet, and just roll on the sand, and then go back and shake off the sand over the causeway. That was how the squirrel contributed to the building up of the bridge, and it gave him just the same satisfaction as building with big boulders did to his other colleagues. That is how I feel. It may be a squirrel's contribution, but still, to the squirrel it is important. (Laughter.) It is not so much the amount of science, the amount of material that you contribute to the building up of the causeway; it is the feeling of your share, of your own contribution to what you feel is a great cause worth participating in. That is how one feels when one takes to science: the feeling that by the sweat of your brow you have contributed your share.

THE KARAIKUDI MEMORIES

I feel particularly touched by the shawls. Irrespective of how many honorary doctorates one receives, the doctorate which one earns by the sweat of his brow reminds him of the background. In a nostalgic mood, one thinks of the time when he too did submit a thesis. When I received these shawls today, naturally I felt very proud, felt deeply honoured by the act, in the same sense in which one receives honorary degrees. It is a great thing and one appreciates the kind sentiment behind it. But it reminded me, also, of an occasion when I earned a shawl, and in the old days, it was the ambition of every scholar, however humble might be his contribution, to earn it

at a public gathering from one who can appreciate from personal knowledge some connoisseur of scholarship. It happened to me in Karaikudi. It was Kamban Festival, and I had been invited to preside. In my presidential address I said a few things which I thought might not be quite relished by some of the scholars who were my colleagues on the platform, because I was expounding a point of view which I was a little diffident of getting across. One of them appreciated that, obviously, for he stopped me in the middle of my speech and asked one of his colleagues to bring a shawl--evidently, he had a few in store always!--(Laughter.) He wanted to "robe" me with the shawl. I felt doubly touched, because all the time I was looking to him for disapprobation!

You see, the welcome address started with some such sentiment as this: "There has been a feeling that the Vaishnavaites do not patronise Kamban as well they should do. I understand that Krishnan is a Vaishnavaites, and the readiness with which he agreed to preside over this function indicates that that longstanding disability of the Vaishnavaites has been greatly rectified." That was how he started. My reply was: "Being a great scholar, being the incumbent of a great Adeenam, he cannot be wrong. I had my own doubts as to whether I was a good Vaishnavaites, but I have no doubts now on that issue. But the major issue is not whether Vaishnavaites patronise Kamban properly. There have been differences of opinion on that issue, and I do not agree with the grouse that he is not properly encouraged, because the critics refer to an incident which happened two centuries before he was born!" Then I said, "What is essential for the reading of Kamban's Ramayana is to know what were Kamban's own ideals, and I have no doubt in my own mind that Kamban cherished the same ideals which the Vaishnavaites cherish." My thesis in that address was, "If you want to appreciate Kamban properly, you ought to be

familiar with the background of Vaishnavaitic literature which Kamban was nurtured on. Unless you do that, it will not be possible to understand him correctly, to appreciate him in the proper manner in which he ought to be appreciated. That is the thesis I want to present to you." I could see I had touched a delicate point, and so when I replied, I illustrated my thesis by numerous examples. As I said, he stopped me in the middle of my lecture, and I felt honoured that I had earned that day my doctorate by the sweat of my brow. Today, when I received these honorary ones, I said to myself : if one stays long enough, I am sure he will reach 60; and I am sure if he stays a little longer, he will reach almost any age which is supposed to be respectable. I have attained that, and so the degrees are honorary, there is no doubt. But still, one of them at any rate comes from the same scholar who appreciated me and who gave me the degree on the basis of my thesis. That is a remembrance which I will always cherish.

"THANK YOU" : FROM THE HEART

Shawls are supposed to be the robes just like the doctorate gowns, and a scholar normally appears in them on academic or ceremonial occasions. So, I flatter myself that I have the right today--of course, I had earned that right also earlier--to appear on the platform of pandits and talk to them in a language which they appreciate. For some reason, today that language has not the same public esteem which it used to have--which in my opinion it ought to have--because there are many extremely fine sentiments, very touching ones, in them. It is good literature, which can move the deepest human sentiments : they are all there in the language which they speak. Even if I have not the competence to claim to be a connoisseur to understand all that, at least in a vague way I can feel and say to myself, "It is good literature; I

have tasted it in a small way, but I know how great it is." That is the satisfaction which I occasionally derive whenever I read it.

I thank the very distinguished people who have presented me these gifts for giving me their good wishes for many more occasions to feel that way.

Thank you very much! (Cheers.)

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I just want to associate myself with all of you ^{on} to congratulate his scientific achievement and the other works that he has done for this country during the past sixty years of his life and to wish him many more years of fruitful activity.

Prime Minister

I have come here gladly today of course. It is always a pleasure for me it is a pleasure to associate oneself with functions connected with one's colleagues and Dr Krishnan being a very particular friend and colleague it gives me particular pleasure. But I have been put in ~~a~~ somewhat slight difficulty. I

was thinking

Handwritten scribbles and notes including '567', '604', and 'VB = x'.

Now to have to speak on identically the same subject twice over within a few days is apt to produce a sense of ^{of} confusion in one's mind: what should one say on this occasion and what should be reserved for the other

Then again as I ^{said} send it is a pleasure and a privilege
to be here to congratulate him but what is there
after all ^{about} ~~in~~ the sixtieth birthday? To a person
who has attained the age of sixtynine, sixty seems ~~to~~
a ridiculously small age ! We celebrate birthdays
and though there is no particular significance ^{u c n |}.

Chanda's love

Every morning when the sun rises, it is almost a new
world if you like it, whether it is new or old it is a
changing world and I think the sensation of facing a
new day, which all of us have to some extent every
morning. If you can enlarge that sensation in yourself
and ^{outside} ~~decide~~ it would have a tremendously vitalizing
effect. It would keep us fresh and cheerful. ^{It} would
prevent us from getting into ruts and it would keep us
in good humour

Now whether Dr Krishnan has all this various
sensation every morning or not, I do not know.

But anyhow, ^{so} he has that sense of certain freshness
certain adventurousness ^{7 2 3 3 3}

and ^{with} ~~that~~ that particular feeling which a scientist
sometimes ~~is~~ ^{- 1200}

for discovering new worlds; and so Dr Krishnan is
particularly blessed not because he has got FRS
or he ^{high} ^{have} has honours often thrust upon him, or

He has something in him in which he is very fortunate

We see glimpses of that and therefore we praise him

we ^{delighten} applaud him, we congratulate him ^{v-o-f} and sometimes ^{v-o-f}

we envy him ^x

Life appears to him - I may use ^{rather} a colloquial phrase

something out of which he can get ^a lot of fun, not fun

in ^a ~~the~~ trivial sense of the word, but in ^a ~~the~~ deeper

sense of the word ^{- no on 7/12/57}

^{2-10/12/57} ^x So Dr Krishnan ^x has as Bhabha said, has the quality of

being human ^x and I do not remember meeting Dr Krishnan

on any occasion when he has not told me some new story.

It is amazing - the fund of knowledge of ^{the} these historians

I wonder if he realizes that other people may be
telling stories about him just as Bhabha told ^{us} ~~one~~
story - well - it is good to hear stories and to be
the stuff of stories. People about whom you ^{can't} ~~cannot~~
tell stories must obviously be terribly dull ?.

And so, apparently, some good ^{fairy} ~~theory~~ ♪.

Dr Krishnan on the day of his emergence in this world
and gave him these many qualities, if you like, many
advantages, which he developed and here he is a great
scientist, ^a great in many ways a great scholar and a
man who least of anyone I know is lopsided in science,
that is who has specialized in science ⁷ that he ^{forgets} ~~has~~ for
~~get~~ ^{on} the other aspects. But Dr Krishnan does not.

He is equally good ⁱⁿ humanities, ⁱⁿ his love for music
and so many other things.

[Handwritten notes in Hindi/English script, including "And" and various symbols]

so I gladly associate myself ~~with~~ on this occasion
with all the good wishes in the world, ^{the many}

[Handwritten notes and symbols]

Sri Lal Bahadur Shastri

I consider it a great honour to have been associated with the sixtieth birthday celebration of Dr Krishnan. Dr Krishnan is amongst those half a dozen Indian scientists who has made a position not only in his own country, but in the international world. His name is known throughout the length and breadth of this country. I remember those days when about fifteen or twenty years before he went to Allahabad and took over as the Head of the Deptt of Physics. In fact he had succeeded another eminent scientist, Dr Megh Nad Saha, who had also attained international repute. I remember how Dr Krishnan's name was respectfully mentioned in the literary circles of Allahabad. In subsequent years, Dr Krishnan has ranked amongst one of the top leaders in the field of science. I cannot delve into his theories and his new interpretations of Nature or the powerful forces of Nature as I do not know even the 'a b c' of science. But there is no doubt that the scientists in this age have changed the very face of the world. Their contributions have been something on a gigantic scale

But I was somewhat surprised to read the speech of Dr Krishnan the other day, in which he had appealed to the people that they should develop full faith in the basic and fundamental philosophies of our ideologies of Gandhiji. In fact, I have always been interested to read the speeches of our great Indian scientists in regard to the preachings of Gandhiji. Dr Raman's speeches and his views about Gandhiji are well known. There are other scientists also who have expressed similar opinions. Dr Krishnan is not an exception to it and then Dr Krishnan is not merely a scientist, he is a deep student of philosophy and an acharya and hence it is only but proper that he should take such a balanced view in regard to such matters and keep before him the higher objectives for which *the man lives*. In fact the scientists *Set a Great* example for *us* ~~this~~. They do their work - most important work - in such a quiet manner and they do not seek any publicity and they do their work in a manner which undoubtedly creates a tremendous impression on the minds of the people who come in touch with them.

If I may be pardoned to refer to a personal matter, when I was in jail in the year 1942-43, it was very difficult

to get books there during the first few years of jail life in those days but I got the biography of Madame Curie written by her daughter Dr *Eve Curie in jail* and I went through it. I was so profoundly impressed by her life that I took special ^a permission from the jail authorities to get some ink and paper and ^I translated the biography in Hindi which was ^{later} published. It is indeed, well I cannot imagine *a fair* Mr Curie, Madame Curie and her husband, ~~the~~ two great scientists whose contributions are indeed remarkable *and* I read in the biography that Madame Curie was offered a large sum if she would merely part with her researches and discoveries, the techniques which she had made on experiments on radium and she could, if she wanted, earn lakhs and lakhs of rupees on that. But she consulted her husband and in a moment's time both agreed that they could not think in terms of making any profit on their researches as they were dedicated to the humanity at large, to serve them and to serve the ~~pre~~ people. So at *least* while I ^{for} have myself who to work in the political field, have to take lessons from the scientists who work in the scientific field,

they are in a true sense ~~the~~ real "sanyasis" and I hope that we will be able, and especially our younger friends also, to take lessons from Dr Krishnan and others to work in this field. I might also again mention a small matter before I conclude *that*

I had not met Dr Krishnan before he met me only five or six months back, and when he came to meet me, well I had to prepare myself mentally, how to meet him, and what to talk to him. In fact I felt a bit nervous ! But when I met him well, he completely disarmed me by his politeness and humility and I could see how noble and good he is.

I shall not say more, but may I wish that Dr Krishnan should live for many years to come so that he is able to serve science and more so his country in the years to come.

Friends,

Looking into the last 40 years of life and work of Prof. K.S. Krishnan on his 60th birthday, our mind is naturally engrossed in finding, what is it that has given such capacity, intellect, ingenuity and mental power to this great Scientist who has reached such great and mighty heights and who has brought so much name and fame not only for himself but for the whole of ^{The} Motherland. A simple answer to such a query would be that it is all God-given. That may be so, but, at the same time, it can not be gainsaid that these have been acquired by him by self-discipline, by proper training and by the sweat of his hard and diligent work.

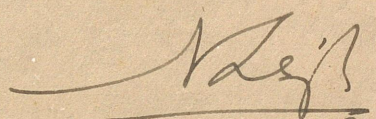
Another reason for his greatness may be sought into the associations he had during his University career and there after, because an educated man is what his teacher makes him or what great minds instil in him through their writings and teachings. If we assess properly we find that the lectures of Prof. Karl Barrow on natural colours ~~which~~ inspired Newton to discover visible spectrum. Likewise the inspiring discourses of that great genius, Professor Raman, led Krishnan to discover Raman Effect, but can any student be so tolerant and devoted to his teacher as young Krishnan during 1928-32 who was to be Prof. Sir K.S. Krishnan, F.R.S. to be least tempted to have his name associated with that universal effect which should rightly have been known as Krishnan and Raman Effect. Prof. Krishnan may not appreciate these remarks, but here lies the secret of his greatness. Here was the man, who had unique integrated qualities of submissiveness, tolerance and reverence combined with intense sincerity of purpose to be what you see him to-day. A complete and perfect educationist who has fitted justly, skilfully and magnanimously in all the offices of a Professor, of a Researcher, of a Director, of an Ambassador to carry the scientific mission of India abroad.

It has been well said : Any one who has once come in contact with one or more men of the first rank must have his whole mental standard altered for the rest of his life. With all the above inherent qualities Professor Krishnan went to Dacca and came in close association with Professor S.N. Bose. On so many occasions Professor Krishnan has paid glowing tributes to Professor Bose and has expressed ~~clearly~~ clearly what he owes to this great scientist. We have, however, to remember that so many others were with these two great teachers but few could attain such distinctions as Sir K.S. Krishnan.

Our Prime Minister has to listen to a new story everytime Prof. Krishnan meets him. Pandit Ji has rightly said : "Prof. Krishnan is an eminent scientist, a great scholar and a man with the least lopsided personality. He is endowed with rich human qualities and it is these qualities which make him more valuable to society".

Thus we find in Professor Krishnan a man unostentatiously and naturally living upto the ideals of Hindu Culture. The ideals, which have charmed him and filled him with the joy of living are goodness, truth, honesty and sincerity. His moral qualities are no less significant than his scientific achievements. He has grown up not only in mind ^{but} also in heart with the reciprocative effect that he is loved, admired and honoured by all. It is difficult to find any occassion when any person of any shade has not been accommodated by him and has not derived inspiration from him.

I endorse whole heartedly what has been said about Prof. Krishnan in the address presented by Dr. Dayal and by other speakers. [Sir, I have nothing ^{to} present to you on this happy occasion except to offer my sincere prayer to the Almighty to bestow upon you another quantum of Sixty years of sound health and active life to serve as a beacon for the young workers in the field of science in India and abroad.]


22/11/58

(seemed imperative.)

build-up/ The Council of Scientific & Industrial Research
 took shape during that period of great stress, and I
 had close contacts with Dr Bhatnagar during these for-
 mative ~~ix~~ years of the Council. Indeed I was invited
 early in 1940/ (and on generous terms) to join him in organizing the scientific
 part of the programme, The scientific objectives were
 unexceptionable, and I had myself frequently expressed
 in my discussions ^{with him} the need for (various laboratories and in particular) ~~the~~ organizing a Bureau
 of Standards for India. When ^{the latter} ~~this~~ was decided on, and
 a Planning Committee was appointed for this purpose I

p. 1

after years

after personality

a solution

The award was made by the Prime Minister
on March 24
Mr Jawaharlal Nehru at a large
gathering in the auditorium of the
National Physical Laboratory in New Delhi

p. 3

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probably

Felicitations to Dr. K. S. Krishnan on the occasion of the 60 birthday celebrations .

On the occasion of the 60th birthday celebrations of Sri Kariya Manikka Srinivasan, Delhi Sri Ananthachariar composed and dedicated the following poems.

1. We, the people of Delhi are pleased to render the following poems to Sri Krishnan, who is a great humanist, renowned scientist and a wonderful orator.
2. I present this invocation to Sir K. S. Krishnan who is endowed with good qualities, a great spiritual giant well versed in vedantic sastras, a great thinker and a great orator who impresses one and all with his charm.
3. We feel that it is rather difficult to find a greater thinker than Sri Krishnan who enthral people with his speeches.
4. Raghava, the hero of Ramayana is known for his great character. We find such a similarity in Sri Krishnan with his humble nature.
5. Indeed Raghava who considered others sorrow as his own is well known in the epics. We find such a quality in Sri Krishnan also.
6. We are not surprised with Sri Krishnan's presence in 'Satsangs', keeping in mind that one does not need an invitation to attend 'Yagas'.
7. The secrets in Valmiki Ramayana have been answered by Sri Krishnan and we are indeed very grateful to him.
8. The great Dr. Krishnan is endowed with scholarship, humility, friendship, and good conduct in this world.
9. We pray to the Almighty to bestow on Sri Rangaraja Krishnan his choicest blessings, who has been a great human being by his lifestyle.
10. Sri Krishnan who constantly contemplates on ''Alwar Sookthi'', which is one of the important ''Divya Prabanthas'', may he live happily with good health and fame.

!! May Lord Vasudeva be Happy !!

~~~~~

Felicitations by Sri Subramanya Desika Jnanasambandha  
Paramacharya Swamigal :

Sri Krishnan is well known for his scholarship in Kamba Ramayana. Moreover, his interest and dedication to Tamil literature is praiseworthy. It is due to his untiring efforts that the Delhi Tamil Sangam is functioning and doing good service. Even though he is known to be a great scientist, it is also true that he is equally competent in spiritual matters. His deep religious and charitable activities are well known.

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Other felicitations are by

1. Chief Minister of Madras, Sri K. Kamaraj
2. Sri T. S. Avinasilingam, Industrialist
3. Sri S. Velayudha Pillai from Sri Lanka
4. Sri. K. V. Jagannathan, Great Tamil Scholar and Editor of Tamil magazine 'Kalaimagal'

This article appeared in Ananda Vikatan on 14.12.1958

Dr. K. S. Krishnan

The names Rama and Krishna are epitomes of the greatness of our country, Bharatha.

Today, in the field of Science, these two names play an important role.

The great scientist Sir C. V. Raman discovered the famous 'Raman Effect'. The world praised him for this contribution. It is a wonder how a black man can make such a discovery, was the reaction of the scientific community throughout the world. He was also awarded the famous Nobel Prize. Dr. Krishnan played a major role in this discovery.

Dr. Krishnan is a famous scientist. He is the Director of the prestigious National Physical Laboratory, Delhi. He has taken the trouble of inspiring several young people to take up science.

The number of awards and distinctions conferred upon Dr. Krishnan is a testimony of his greatness. He has been recognised by most of the international bodies.

The British Empire conferred on him 'Sir' as early as 1946. Many universities in Britain as well as India have honoured him with several awards. There are very few scientific agencies of which he is not a honorary member.

In spite of his involvement in science and other activities, Dr. Krishnan continues to be a child in spirit. His interests in literature, poetry, music, alvar pasuras are well known. His interests in his mother tongue, Tamil is praiseworthy. He is a devout believer in God. The culture and art of Tamil is deep rooted in him.

Considering the achievements of Dr. Krishnan, it is difficult to believe that he is only 60 years old. His involvements in literature and art is commendable.

His 60th birthday was celebrated in his house on the 3rd of this month in the traditional way. The Tamil people living in Delhi have decided to honour this great son of the soil who has brought laurels to our country, in particular to Tamilnadu. In this regard, a grand function has been organised to celebrate his 60th birthday on 14th of this month.

We pray to the Almighty to shower his blessings on Dr. Krishnan so that he will lead a healthy, long life and continue to contribute for the betterment of Science in our Country.

This article appeared in a Tamil Weekly, Rasika Ranjani  
on 12 - 07 - 1960

Dr. K. S. Krishnan - A World Famous Scientist

Sixty years back, during the end of the nineteenth century, the golden era of India, Tamilnadu in particular, gave us the most famous son of the soil, Dr. Kariyamanikkam Srinivasa Krishnan.

Dr. K. S. Krishnan was born in the village, Vanthirayiruppu, Srivilliputtur Taluk, Ramanathapuram District, Tamilnadu. Although this place is known for its dryness, it has given us a brilliant personality.

Dr. Krishnan is a famous scientist, recognized worldwide for his contributions to science.

Sir C. V. Raman was awarded the 'Nobel Prize' for his contributions to the famous 'Raman Effect'. It is not an exaggeration to say that Dr. Krishnan played an important role which enabled Sir C. V. Raman get the coveted prize.

He is a very famous Tamil scholar, great orator and his speeches are compared to the literary Tamil prevailing a few centuries ago. He is a great believer in God, master of classical philosophy. He was also interested in the Tamil works of Kambar. With the efforts of some devout Tamilians, the Delhi Tamil Sangam is able to function successfully. He is the Head of the Delhi Tamil Sangam and plays an important role in its activities.

Educated persons would find it difficult to understand many specialized topics of Science, even though the lectures are delivered in English. However, Dr. Krishnan has the distinction of delivering lectures in Tamil on specialised areas of Science so that even a common man will be able to get some idea on the difficult concepts.

Dr. Krishnan was invited to give a talk at the National Academy of Sciences, Washington, U. S. A. The experts present congratulated him for his excellent exposition and the clarity with which he spoke.

He became a Fellow of the National Academy of Sciences in the year 1956. This academy has only 60 members, of which 9 are from the area of physics. Dr. Krishnan had the distinction of being one of them.

Presently, Dr. Krishnan is the Director of the National Physical Laboratory, Delhi. He is the head of the National Committee which is part of the International Geophysical Union. The Govt. of India has appointed him as the National Professor. This position was held previously by Sir C. V. Raman and Prof. S. N. Bose. He is the Vice President of the International Council of Sciences for the past six years. His contributions to the International Geophysical Union is well known. He has won many laurels and awards.

His speeches in the radio, 'New Trends in Science' is indeed priceless. The Royal Society of London has conferred on him the coveted fellowship, F. R. S. Most of the international bodies have honoured Dr. Krishnan.

Born in an ordinary family, Dr. Krishnan rose to great heights by his dedication, hard work and sincerity. The Govt. of India has honoured him with 'Padma Vibhushan'. May his contributions to India and our people continue unabated. We pray and wish that he lives a healthy and long life in the years to come.