

OPENED BY



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Sir

K.S.Krishnan, M.A.D.Sc., F.R.S. Director
National Physical Laboratory
University Buildings

Delhi INDIA

~~Handwritten signature~~

Dr. Gerhard Pfestorf

Lehrer an der Fakultät und Mitglied der
Physikalisch-Technischen
Reichsanstalt

(20b) Braunschweig

Postfach 447

P.C. 90.

EXAMINER
8950

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8950

From

Dr. Gerhard Pfestorf
Regierungsrat u. Mitglied der
Physikalisch-Technischen Reichsanstalt
(20b) Braunschweig
Postschliessfach 447
GERMANY, BRITISH ZONE

19-4-47.

To

Sir K.S. Krishnan, M.A.D.Sc., F.R.S., Director
National Physical Laboratory
University Buildings
D e l h i ,
INDIA

Dear Sir:

I understand that as part of your big scheme of national laboratories for India, you will soon start a National Physical Laboratory at Delhi. This will no doubt have a Department of Electricity with a section devoted to High Voltage Phenomena, Testing standards and insulating and synthetic materials. It is in this connection that I shall be most grateful if you will be so good as to consider me for taking charge of the High Voltage Laboratory of the N.P.L. of India. If the opportunity I seek is, through your kindness, offered to me, it shall be my earnest endeavour to do my utmost to develop high voltage research and allied activities so that at no distant date, the Laboratory may compare favourably with the best of similar national laboratories elsewhere in the world.

For this type of work I believe I am particularly qualified. For during the whole of my working life for the last 20 years, I have been on the staff of the High Voltage Section of the Physikalisch-Technischen Reichsanstalt (the German N.P.L.) and head of the Section of High Voltage and Insulating and Synthetic Materials since 1935. I have therefore been engaged throughout these 2 decades in researches into these and allied subjects.

In support of my request, I enclose with this a statement giving the details of my career and experience, copies of a few testimonials from those under whom I have worked or studied. I am also giving at the end of this letter the names of a few scientists and engineers who know me and my work well.

ACADEMIC QUALIFICATIONS: I studied at the Universities of Berlin and Jena and hold the Doctorate degree in Physics, awarded to me on the basis of research. Besides this I passed the State examen for teaching.

SERVICE and WORK at the PHYSIKALISCH-TECHNISCHEN REICHSANSTALT: After 1 1/2 year of service on the teaching staff of the University of Jena and at the Technische Hochschule of Darmstadt I joined in December 1927 the staff of the High Voltage Department of the Physikalisch-Technische Reichsanstalt, Berlin-Charlottenburg. In 1935, after a service of 8 years, I was promoted to be the Head of the High Voltage Department and of the Insulation Laboratory with the title of Regierungsrat. Later on, in 1937 I got the title Regierungsrat und Mitglied of the P.T.R. By this long service at the P.T.R. I have first hand knowledge and experience of its organisation and activities with special reference to the above mentioned departments. I have also experience in gauging, testing and standardising, referring to the measuring system.

PUBLICATIONS: The results of my research and development work have been published in over 50 papers in well known German periodicals such as Annalen der Physik, Physikalische Zeitschrift,

Zeitschrift für Technische Physik, Elektrotechnische Zeitschrift, Helios and many others. I shall send you separately a list of these for your reference.

BOOKS: I have also published one book: Prüfung und Bewertung von elektrischen Isolierstoffen, Verlag Springer Berlin 1940, (Testing and Judging of Insulating Materials, Ed. Springer-Verlag Berlin 1940) and several parts of standard books as f.i. Elektrische Messtechnik in Fortschritte der Physik und Chemie der makromolekularen Stoffe, von Röhrs, Staudinger, Vieweg, (Progress of Physics and Chemistry of macromolecular materials), Fortschritte der Hochspannungstechnik von W.O. Schumann (Progress of High tension Engineering), Taschenbuch für Chemiker und Physiker von d'Ans und Lax (Guide book for chemists and physicists). I further was the editor of a serie of books "Chemie und Technologie der Kunststoffe in Einzeldarstellungen" (Chemistry and Technology of Synthetic Materials in single volumes) and was a member of the editor's staff for the periodical "Kunststoff-Technik Verlag Springer Berlin. Further I worked for the Physikalische Berichte (Physical Abstracts) preparing the abstracts in my line since 1931.

LANGUAGES: Besides German, my mother tongue, I know English and French. As representative of the P.T.R. I attended in 1937 the International Congress for Testing Materials in London, in 1939 la Conférence Internationale des Grands Réseaux électriques (C.I.G.R.E.) Besides these I have visited England and France several times as representative of the P.T.R., moreover Lithouania, Hungary, Austria and Italy.

The reason for my seeking an opening in my ling in India is that as a result of the war, the P.T.R. has to start from the beginning and my life work of two decades has disappeared in a moment. Therefore I moved recently from the Russian zone, where the main part of the P.T.R. was at the end of the war, to the smaller part of the P.T.R. in the British Zone, where we try to reactivate the laboratories with the help of the British Authorities. As far as I can see there seems to be little hope of regaining the old scientific life in Germany. This is why I and many other colleagues would like if possible to get the permission to emmigrate from Germany as soon as possible and to secure an outlet in India. I have a few Indian friends whom I have known for over 15 years and with whom I have been always in touch except during the years of war. I shall be glad to give you their names.

I shall be grateful if you will be so good as to let me have a line in replg at your early convenience, also if you have considered the emmigration of a group of scientists of the P.T.R. to your country. Closely connected with the high tension is the problem of nuclear disintegration. Dr. Salow, who has worked with this problem and constructed an efficient cyclotron is also very much interested to start a new laboratory.

Thanking you, I remain

Yours truly

G. Hestorf

References:

Prof. K. Sreenivasan, B.Sc., A.I.I.Sc., M.I.E.E., Department of Telecommunication, College of Engineering, Guindy, Madras, S. India
Prof. Dr. R. Vieweg, Rektor der Techn. Hochschule Darmstadt, DARMSTADT, Dachsbergweg 6, GERMANY, American Zone
Director W. R. P. Golby, 18 Ickworth Road, Sleaford, Lincs., England
Dr. R. Davis, National Physikal Labbratory, High Voltage Laboratory, Teddington Middääsex England

Translation.

Approved copy.

Allgemeine Elektrizität s- Gesellschaft
(General Electric Company)

Berlin NW 40, 30th November 1927
Friedrich Karl Ufer 2-4.

Leaving Certificate.

Dr. Gerhard Pfestorf was employed from 11th August 1927 to 30th November 1927 in the main department of our concern dealing with scientific calculations.

Dr. Pfestorf was found to be an intelligent and well versed worker, whose work and diligence gave us complete satisfaction. His conduct was blameless.

He leaves us at his own desire.

Berlin 30th November 1927

sig. General Electric Company

-- Signature.

Translation.

Approved Copy.

Physikalisches Institut
der Universität.

Jenn, 2nd December 1928
Herzlitweg 2

Physical Institute of the
University)

I hereby certify that Dr. Conrad Pfestorf has worked
from January 1926 to the end of February 1927 in my Institute as
auxiliary assistant.

(Signed) Prof. Dr. H. Wien

Translation.

Approved Copy.

Elektrotechnisches Institut
der Hess Technischen Hochschule

Darmstadt, 19th January 1929

(Electrotechnical Institute of
the Hess Technical College).

Certificate.

Dr. Gerinard Effertorf, D.Phil., was employed as assistant from the beginning of April to the end of July 1927 at the Electrotechnical Institute of the Technischen Hochschule, Darmstadt. During this time he had the opportunity to become acquainted with the various activities of the Institute, especially in high voltage measurements.

High-voltage Laboratory of the
Technischen Hochschule Darmstadt

(Signed)

Details of my career and experience.

Name: Dr. Gerhard Kurt Martin Pfestorf
born 22.10.1900 at Gotha Thuer.
father: Schoolmaster Director Richard Pfestorf living in Rohr near
Weinungen Thuer.
family: married since 22.10.1928 with Paula Pfestorf nee Kuehn
3 Children, 17, 14 and 4 years old

religion: protestant

education: secondary school from 1907 to 1911; from 1911 to 1920
I attended the Gymnasium Ernestinum at Gotha, passed the
matriculation examen, study of Physics, Mathematics and
Chemistry at the Universities in Berlin and Jena, hold the
Doctorate degree, awarded to me on the basis of research
in the field of optics. Moreover I passed the State Examen
and got the allowance for teaching.

appointments held: 1926 assistant at the University of Jena to
1927, then half a year assistant at the Techn. Hochschule
Darmstadt, from 1927 up to date on the staff of the
-physikalisch-Technischen Reichsanstalt *BERLIN-CHARLOTTENBURG*
1927 scientific employee *of the PTR*
1935 Head of the High tension and Insulating Laboratory
1936 Title Regierungsrat
1937 Regierungsrat and Mitglied der Physikalisch-Techni-
schen Reichsanstalt

publications: 57 scientific and technical papers in well known
German periodicals such as Annalen der Physik, Physikali-
sche Zeitschrift, Zeitschrift für technische Physik,
Elektrotechnische Zeitschrift, Kunststoffe and many others.
Books: 1 book Prüfung und Bewertung von elektrischen Iso-
lierstoffen, Springer-Verlag Berlin 1940, (Testing and
Judging of Insulating Materials) Elektrische Messtechnik
in Fortschritte der Physik und Chemie der makromolekularen
Stoffe von Böhrs, Staudinger und Vieweg, (Progress of
Physics and Chemistry of macromolecular materials, Section
Electrical measuring methods) Fortschritte auf dem Gebiete
der Isolierstoffe und der Isolierstoffmesstechnik in
W.O.Schumann, Fortschritte der Hochspannungstechnik, Leip-
zig 1943 (Progress in the field of Insulating Materials
and electrical measuring methods in W.O.Schumann, Progress
of High-tension engineering), Taschenbuch für Physiker und
Chemiker von d'Ans und Lax (Guide Book for physicists and
chemists).

Editor of a serie of books "Chemistry and Technology of
Synthetic Materials in single volumes" in Springer Verlag
Berlin

Member of the editorial staff of the periodical "Kunststoff
technik and Kunststoffanwendung", Ed. Springer Verlag Ber-
lin

Co-worker at the Physikalische Berichte (Physical Abstracts
where I prepare the abstracts in the line High tension
physics and engineering, synthetic materials since 1931

service at the Physikalisch-Technische Reichsanstalt: Development
and research work in high tension measuring methods, gau-
ging, standardising, electrical properties and molecular
structure of synthetic and insulating materials, experi-
ence of organisation and supervision

languages: English, French, German (mother tongue)

Address Dr. Gerh. Pfestorf, Regierungsrat
(206) GOETTINGEN
HAINBUNDSTRASSE 30
GERMANY, BRITISH ZONE

P.T.O.

Professional: Member of the Deutsche Physikalische Gesellschaft,
Member of the Gesellschaft für technische Physik since 1927,
1930 Member of the Verband Deutscher Elektrotechniker
1936 Chairman of the Sub committee Insulating Materials of
the Verband Deutscher Elektrotechniker
1937 Member of the Verein Deutscher Ingenieure
Member of the Committee Synthetic Materials of the
Verein Deutscher Ingenieure

Copy. (Abstract from the Personalacten)

Physikalisch-Technische
Reichsanstalt
Lab. II

Berlin-Charlottenburg, 18th November
1930

To
Director II

Ref. Z.B. 2943/30 v.29.9.30

Dr. Pfestorf entered the High-tension laboratory on 1st December 1927. Before then he was Auxiliary Assistant from January 1926 to March 1927 in the Physical Institute of the University of Jena; up to July 1927 Assistant in the Elektrotechnical Institute of the Technische Hochschule in Darmstadt; and from August to November 1927 on the scientific staff of the Allgemeine Elektrizitäts-Gesellschaft (General Electric Company) in Berlin. The deciding factor in his being taken on the staff of the High Voltage Laboratory of the Reichsanstalt was the fact that as Assistant to Prof. Petersen, he had already worked in the field of high voltages.

In the Reichsanstalt, Mr. Pfestorf has from the beginning been employed on tests in the field of high-tension and insulation techniques. He has always carried out all the work entrusted to him very satisfactorily and has shown himself capable both in his work and in his scientific knowledge. He is thoroughly reliable and has good judgement.

Also not infrequently, the laboratory has to conduct investigation and tests for outside bodies as part of its normal duties. These involve not only routine tests but sometimes special measurements which are in the nature of independent research work. Besides technical knowledge, the officer concerned must possess for such outside work considerable capacity for adaptability and to take decisions under unusual circumstances. Mr. Pfestorf has stood up well on all such occasions and proved himself to be a clever physicist and technician. I would specially mention here that due to insufficient High Voltage equipment, we cannot always fall back on previous experience in dealing with the difficulties arising out of work for outside agencies.

In spite of his heavy routine duties, Mr. Pfestorf carried out much scientific work. In collaboration with the head of the Laboratory, he published a report on the research work on high-tension measurements at low temperatures; together with Dr. Zickner, he worked on the measurement of very high electric capacities. Further researches are still in progress. Amongst his personal papers, the one on electrodes for insulating measurements may be mentioned. The British Electrical and Allied Industries

Research Association requested permission to translate this into English a proof of its originality.

Mr. Pfestorf has proved ability and energy for research work, and this is required in the scientific staff of the Reichsanstalt. As he has proved himself thus in only 3 years of his service here, it will be in the best interests of the Reichsanstalt to keep him on. If he were to leave the Reichsanstalt on the orders of the Ministry, both the routine and the research work of the High Voltage Laboratory will suffer; and this will aggravate the existing difficulties due to its inadequate technical equipment.

I therefore

I therefore recommend that Dr. Pfestorf should be continued in his position.

Signed R. Vieweg

I agree in every respect with the above report of the Head of the Laboratory and support his recommendation most warmly.

Signed. Giebe

Copy.

Certificate.

Gymnasium Ernestinum of Gotha.

Natural Science Section.

Certificate of completion.

Kurt Martin Gerhard Pfesterf, born on October 22nd 1900 in Gotha, country of Gotha, Germany, of protestant religion, and son of Richard Pfesterf, Director of Schools, in Gotha, has studied for 9 years in the Realgymnasium, 2 years in Prima, one year in Oberprima.

MORAL CONDUCT, ATTENTION AND DILIGENCE: His Personal conduct as well as his attention and diligence were very good. On account of his excellent character, his performance in the class and the high quality of his work, he was exempted from the oral examination.

German:	Fair.	History & Geography:	Good.
Latin:	Good.	Mathematics:	Good.
French:	Good.	Physics:	Good.
English:	Good.	Chemistry and Mineralogy: }	Good.

The undersigned Commission of Examiners has therefore awarded to him this certificate of completion as he leave now the Realgymnasium to take up the study of natural science.

Gotha, 24th February 1920.

The Commission of Examiners.

(Signed) Prof. Dr. Ans. Gymnasialdirektor, zugleich als staatl. Pruefungskommissar, Prof. Dr. Rosenstock, Prof. Forcke, Prof. Dr. P. Regel, Dr. Sejericht, Dr. Dr. Gerlach)

Translation.

Approved copy.

Verband der deutschen Fassfabriken G.m.b.H.
(Union of the German Barrel Factories Ltd.)
Director.

Berlin W 8, 31st August 1922
Unter den Linden 20

Certificate.

Mr. Gerhard Pfestorf studying for his D.Phil., has during his session in Berlin been working in our firm from 1st June 1921 upto date. At first, he worked with us only after his working hours in the University and during his vacations. But after a short while, he became a full time worker in our concern. His work with us was suited to his own bent, particularly in statistics. The more he became familiar with our business, the more was it possible for us to entrust to him duties in the day to day management. Both during the past summer and during his vacation, he has therefore had the opportunity to cooperate in the supervision of the works.

His quickness in learning things and his great interest made his work for us so valuable that we thought of taking him permanently into our concern. But he desires to complete his studies and so is leaving us.

He did all his work with great enthusiasm and diligence. He showed good judgment in news-cutting and capacity for leadership in the business. Our best wishes accompany him in his further studies and development.

Signed Dr. Dingeldey.

Stamp.

Verband der deutschen Fassfabriken.
Gesellschaft mit beschränkter Haftung.

Examination.

Approved copy.

TESTIMONIAL.

Mr. Kurt Martin Gerhard Pfestorf, son of Richard Pfestorf, Director of Schools in Gotha, born 22nd October 1900 in Gotha, protestant religion, passed the examination of Maturity at the Gymnasium in Gotha on the 20th February 1920; he studied Mathematics and Physical science from Easter 1920 to Easter 1921 in Jena, from Easter 1921 to Michaelmas 1922 in Berlin, and from Michaelmas 1922 to Easter 1926 in Jena.

On 23rd June 1926/^{he} passed the viva voce Doctorate examination (D.Phil.) of the Mathematics/Physical Science Faculty of the Thuringia University in Jena.

With a special scholarship from the Ministry to the Science Examination, he reported on 26th October 1926 at the Lehramt an hoeheren Schulen (office of higher schools); he was given the subject "How the problem of Transformation of Elements is being solved?" for his thesis.

As a substitute for one of the two written thesis, a paper written by him entitled "The determination of the optical constants of metals in the visible and ultra-violet part of the spectrum" was accepted.

The viva voce examination took place on the 15th, 17th, 19th and 22nd February 1927. Mr. Pfestorf has passed the examination for the "Lehramt an hoeheren Schulen" (teaching office of higher schools). In physics his main subject, he was marked "Good"; in chemistry his other main subject, the citation was "Fair"; and in Mathematics his secondary subject, the citation was "Fair".

According to the final result of the written and oral examination he got the citation "Fair". In regard to the preliminary service, he will be assigned to the practical training for the Lehramt an hoeheren Schulen (teaching office at higher schools).

Jena, 22nd February 1927

Stamp.
Thuringisches Pruefamt fuer
wissenschaftliche Lehrer an
hoeheren Schulen

Signed. Geh. Staatsrat Dr. Voller
Prof. Dr. Wien
Prof. Dr. Schneider
Geh. Hofrat Dr. Haussner
Prof. Dr. Raueh