AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS 33 WEST THIRTY-NINTH STREET NEW YORK



TELEPHONE PENNSYLVANIA 9220 CABLE, CYANDRIC

NOMINATIONS FOR 1929 LAMME MEDAL

(CONFIDENTIAL - For members of the Lamme Medal Committee only)

GUISEPPE FACCIOLI

Nominated by C. C. Chesney

Copies of supporting statements from the gentlemen named below are attached:

Walter S. Moody L. T. Robinson F. Darlington

Summary of Mr. Guiseppe Faccioli's Achievements

Development of high voltage oil-filled bushings. Contribution to the development and standardization of capacitors and lightning arresters and numerous features in high voltage transformers and transmissions. Studies and experiments with reference to the laws governing Corona both in air and in oil, and their practical application. Contributions to the art of electric heating and a patent on a special form of induction furnace.

Mr. Faccioli's association with Dr. Steinmetz was very intimate and much of value was brought about by their cooperation on high voltage problems.

9 patents granted covering various electrical apparatus, systems, etc.

GENERAL ELECTRIC COMPANY Schenectady, N. Y.

August 28, 1929

Dear Sir:

In accordance with your letter of August 15th to the members of the Lamme Medal Committee, I would be glad to submit the name of Mr. G. Faccioli, Pittsfield, Mass. as a suitable recipient for the Lamme Medal.

Very truly yours,

(Signed) C. C. Chesney

GENERAL ELECTRIC COMPANY Schenectady, N.Y.

Sentember 17, 1929

Dear Mr. Henline:

In reply to your letter of August 29th in regard to the nomination of Mr. G. Faccioli for the Lamme Medal, I enclose you a statement of Mr. Faccioli's accomplishments as prepared by Mr. W. S. Moody, to all of which I subscribe.

The three engineers whose names I submit as references are -

W. S. Moody, Pittsfield, Mass.

L. T. Robinson, Schenectady, N.Y.

Frederick Darlington, whose immediate address is - Union League Club, 5th Ave. and 39th St., New York, N.Y.

Messrs. Robinson and Darlington will each send you a statement shortly.

Verytruly yours,

(Signed) C. C. Chesney

GENERAL ELECTRIC COMPANY

100 Woodlawn Ave., Pittsfield, Mass.

MR. GUISEPPE FACCIOLI
AN ENDORSEMENT BY THE UNDERSIGNED THAT HE BE CONSIDERED
A CANDIDATE FOR RECEPTION OF THE
"SECOND LAMME MEDAL AWARD".

Born in Rome, Italy, in 1887: graduated with high honors from the Institute of Technology, Milan, Italy, in 1899 as an Electrical and Mechanical Engineer.

His first American experience was in the Laboratory of the New York Edison Commany in 1902, followed by practical experience with the Interborough Ramid Transit Commany of New York.

In 1904, he joined the Engineering Department of the Crocker-Wheeler Company, where he was assigned work on a new design of Induction Alternator, in accord with the ideas of the late Wm. Stanley. His contributions to this work were considered so valuable by Mr. Stanley that he induced Mr. Faccioli to join his laboratory in Great Barrington, as his chief assistant.

In 1906, the Stanley Laboratories having been absorbed by the General Electric Company, Mr. Faccioli was given broader opportunities in the Engineering Department of the Pittsfield Works, becoming by 1911, Asst. Chief Engineer of the Transformer Department, and three years later, Works Engineer. In 1928, he also became Associate Works Manager.

From the time he joined the General Electric forces, Mr. Faccioli's association with Dr. Steinmetz was very intimate and much of value was brought about by their cooperation on high voltage problems.

Mr. Faccioli's unusual accomplishments during the past 25 years, are difficult to properly describe, because they consist to so large an extent in valuable aid given to his associated designing engineers. In simplifying and clarifying their problems, as well as in promoting complete cooperation between engineers and those who must execute their designs, Mr. Faccioli has done his best work.

While it is true that Mr. Faccioli has accomplished much by his independent efforts, as partially shown by his numerous patents and published papers, (lists of which are in the Appendix) yet these give little idea of his total contributions to High Voltage problems.

In the development of high voltage oil-filled bushings, we perhaps find the best single illustration of his methods of accomplishing unusual results.

Through an elaborate theoretical personal study of the dielectric stresses within and without such structures, Faccioli worked out just how maximum strength could be obtained with minimum space and minimum materials, and so guided the Engineers responsible for the details of the bushing design as to embody in their standardized designs, the full benefit of his theoretical studies.

Similar results are perhaps not extremely rare in engineering organizations, but having accomplished this, Faccioli was not satisfied and turned to the equally important factor of standard-izing these designs so that with little or no modification, they could be used on Transformers, Circuit Breakers, Lightning Arresters, Entrance Bushings, etc., convincing all interested engineers of the importance of using such uniform and yet semiflexible designs.

His convincing arguments with his associates and the complete range of his interest in this all-important product, from theoretical study down through design and manufacture to the mcrest detail, is characteristic of his thorough methods in all lines of his endeavor.

In addition to this well-solved problem of high voltage bushings, Mr. Faccioli has similarly contributed to the development and standardizing of Capacitors and Lightning Arresters and numerous features in high voltage transformers and transmissions. His studies and experiments with reference to the laws governing Corona both in air and in oil, and their practical application, deserve special mention.

His contributions to the art of electric heating are worthy of mention, and include a patent on a special form of Induction Furnace.

As Vice-President of his District in the A.I.E.E., and as a member of its National Executive Committee, and perhaps still more on the Committee on Electrical Machinery, Mr. Faccioli has contributed exceptionally to A.I.E.E. accomplishments.

He was the first, I think I may say, to appreciate the need of giving more responsibilities to the Local A.I.E.E. Sections, and largely through his efforts, the first Regional Convention was held in Worcester, Mass., in June 1924, during his Vice-Presidency.

Mr. Faccioli's personal accomplishments stand out conspicuously in our profession, but even more noteworthy, is all that he has indirectly accomplished through his associates.

His keen desire to help all who come to him for advice and his ability to clearly analyze their problems for them, and make their solution easier has multiplied many-fold the value of the results obtained as compared with what could be expected if he attempted to work independently. In other words, Mr. Faccioli is an ideal teacher and consultant, in both the technical and practical problems of his profession.

Very truly yours,

(Signed) Walter S. Moody

APPENDIX

PAPERS BY G. FACCIOLI

- "Alternating Current Machinery Induction Alternators" (in collaboration with Tm. Stanley)
 A.I.E.E., June, 1905, Vol. XXIV, P. 851
- "A New Induction Watt-Hour Meter"
 Electrical World, June 16, 1906, Vol. XLVII, P. 1265.
- "Image Current Alternators"
 Electrical World, July 14, 1906, Vol. XLVIII, P. 94
- "Self-Exciting Low Frequency Alternator"
 Electrical World, September 15, 1906, Vol. XLVIII, P. 524
- "Corona Phenomena in Air and Oil and their Relation to Transformer Design" (in collaboration with 7. S. Moody)
 A.I.E.E., June 1909, Vol. XXVIII, P. 769
- "Reactance of Shell Type Transformers"
 Electrical World, April 1910, Vol. LV, P. 941
- "Apparent Change of Ratio of Transformation in Three-phase Transformers"

 G.E. Review, May 1910, P. 235
 - "Tests of Losses on High Tension Lines" A.I.E.E., January 1911, Vol. XXX, P. 99
 - "Electric Line Oscillations"
 A.I.E.E., July 1911, Vol. XXX, P. 1621
 - "High Tension Switching Phenomena"
 International Electric Congress, Turin, Italy, Sept. 1911
 - "Factors in Line Transients"
 G. E. Review, June, 1912, P. 355
 - "Corona in High Tension Lines"
 N.E.L.A., Seattle Convention, June, 1912
 - "Forze meccaniche negli avvolgimenti vei trasformatori" L'Ellettricista, February 1, 1913
 - "Elements of Electric Transients"
 G. E. Review, June 1913
 - "Rectangular Waves"
 G. E. Review, July, 1914

"Phase Transformation"
General Electric Review, May, 1917, P. 352

"High Frequency Absorbers" (in collaboration with H. G. Brinton - G. E. Review, April, 1921

"Triple Harmonics in Transformers" A.I.E.E. Journal, May 1922

"High Voltage Phenomena"

An address delivered before the New York Electrical Society on October 26, 1923. Also delivered at the Dixville Notch Convention, September 1923.

Published in booklet form on March 24, 1924

"Review of Transient Phenomena"

Paper read at Third International Conference on

High Voltage Systems held in Paris, France in

June, 1925.

PATENTS - G. Faccioli

#1160702	- "Insulator" - November 16,1915
#1171936	- "Means for Preventing
	Corona Losses" - February 15,1916
#1208530	- "System of Distribution" - December 12 1916
#1350925	- "Insulation - HV Bushing" - August 24, 1920
#1396563	- "Insulation - HV Bushing" - August 24, 1920 - "Electrical Apparatus" - November 8, 1921
	(increasing the space between sections at the
	electro-magnetic neutrals of windings for
	the inclusion to clamps or exploring coils)
#1401682	- "Electrical Distributing - December 27,1921
	System"
	(for segregating mixed loads)
#1423926	- "Voltage Regulating System" - September 25,1922
#1491385	- "Insulator" - April 22, 1924
#1595971	- "Electric Furnace" - August 10, 1926
	(charge is contained in a looped channel
	connecting to a reservoir)

GENERAL ELECTRIC CO. Schenectady, N. Y.

September 20, 1929

Dear Mr. Henline:

Herewith is a statement with regard to Mr. Faccioli, referred to in my letter to you of September 19.

My acquaintance with Mr. Faccioli and my knowledge of his work dates from a year or to prior to 1911 at which time he became Assistant Engineer of the Transformer Department at the Pittsfield works.

Shortly before this I was familiar with what he had been doing with Mr. Stanley, particularly his contributions to a unique type of watthour meter which Mr. Stanley's laboratory was then constructing. This meter involved most intricate problems of mechanical, electrical, and magnetic design and I was impressed by the very clever way in which the final satisfactory results were brought about. Of course the fundamental conception was Mr. Stanley's, but I do not believe the development could have been satisfactorily completed if it had not been for Mr. Faccioli's work.

Shortly after this, in connection with Mr. Faccioli's work at Pittsfield, his influence was more and more felt in connection with transformer designs and general problems in connection with high tension transmission and distribution. This influence gradually extended itself until his ability was generally recognized throughout the whole General Electric organization. During this time and up to the death of the late Dr. Steinmetz his collaboration with him in many matters was influential and of great benefit to all.

It is rather difficult, especially in view of the short time available, to look up matters to give many definite references to specific work accomplished by Mr. Faccioli. This is particularly so because of his very marked tendency to minimize the importance of his own extensive contributions and to be unnecessarily insistent on the final results being, in most cases, considered as the work of others to whom the original conceptions were communicated. Because of Mr. Faccioli's physical condition which prevents him from moving around freely in connection with his work it has become more and more necessary for him to

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do his work through others, which has tended to restrict his efforts more and more to those of a consulting nature and to prevent him from accomplishing things completely with his unaided efforts.

I can, however, refer to one specific thing for which I think Mr. Faccioli was almost entirely responsible and which has resulted in direct accomplishments which I believe are definitely within the terms of the Lamme Medal.

Prior to sometime in 1914 Mr. Faccioli realized the necessity of improvements in design and construction of terminals for high tension apparatus, particularly transformers and he personally devoted considerable time to the theoretical analysis of this problem and to the construction and testing of experimental terminals to verify his results. All this work, I think was the direct cause which brought about the oil filled high tension terminals which are at present in use. Unfortunately, due to Mr. Faccioli's method of working and his persistent insistence on not having his name directly associated with some important undertakings, I am unable to refer to publications to verify my statements. I am, however, able to submit herewith copies of some letters from Mr. Faccioli to Dr. Steinmetz which I think reasonably confirm the statements which have been made. This preliminary work of Mr. Faccioli which received his attention and substantial contributions throughout was, I think, directly responsible for the work which was later done by Mr. C. W. Rice and was communicated as an Institute paper under date of November 9, 1917. The work done by Mr. Rice, was, I consider important, and a substantial contribution to the art as a generalization of the problem which had already been solved by Faccioli in a practical way as far as the high tension oil filled bushing is concerned.

Possibly you may have received this preliminary report from other sources. However, I have not had an opportunity to check up on this and if I am duplicating information which you have received I trust that no harm will be done.

If it is desired that the foregoing statement be further amplified or that additional specific achievements be referred to I would be glad to supply more information to the Committee at any time.

Very truly yours,

(Signed) L. T. Robinson

General Engineering Laboratory

Contraction (

FREDERICK DARLINGTON 150 Broadway New York

September 24, 1929

Re: Mr. Guiseppe Faccioli

Dear Sir:

I am informed that Mr. Guiseppe Faccioli's name has been submitted as a nominee for the Lamme Medal and I esteem it a privilege to endorse his nomination and commend the suggestion.

I have known Mr. Faccioli for more than twenty years, commencing at the time he was associated with William Stanley in research and development work, particularly in alternating current motor and transformer design. I was delighted with his technical skill and accomplishments and have kept in touch with him ever since whenever I could do so.

Mr. Faccioli has contributed wisely and brilliantly to the engineering profession and greatly aided in its development and. while actively carrying on technical work, has won for himself a high place in the personal regard of his business associates and a legion of friends and admirers among whom I am pleased to subscribe myself.

One side in particular of Mr. Faccioli's character I would like to speak of from personal acquaintance with him and association with his friends. Throughout his engineering and scientific work, he has maintained to an unsurpassed degree an admiral spirit of kindly wisdom and friendship to those around him and, by example of precept, brought into their lives and profession, friendliness and wisdom and right-mindedness thereby contributing much to those things that are most valuable both to his many friends and to the engineering profession, a spirit of friendliness, courage and persistence in doing the most worth while things in the best way.

I find it hard to put into words the extent of the service that I confidently know Mr. Faccioli has rendered to the engineering profession as a whole and to many of its individual members through his technical contributions and the example he sets of a broad, generous, fine attitude in all of his relations. Certainly his technical contributions, in themselves deserving high honors, are enhanced in value by his fine personal qualities which add to the effectiveness of his technical work. I feel that he is most deserving of the Lamme award.

Very truly yours,

(Signed) F. Darlington

of the Institute in Cleveland, Chio. I am thus confidentially advising you of this award so that you may be prepared to distribute (if you so desire) the official announcement and full details which & will be sent to you so that you can effect a satisfactory distribution of any item you may wish to prepare prior to the formal

release date which will be March 1, 1982.

In the meantime I would appreciate your assistance on two matters:

1. It is desirable, I believe, that photographic prints of Mr. Paccioli should be available for distribution with the news release. Will it be possible for you to arrange to supply us with at least two such photographs, and preferably five or six photographic prints

2. Any information that you may uncover pertaining to Mr. Faccioli personally or to his technical labors we would be glad to have to supplement what we already have on the subject.

We should like very much to have this matter completed by February 10, and will appreciate whatever assistance you are able to give.

> With kindest personal regards, I am Yours very truly,

GENERAL COMPANY GENERAL OFFICE SCHENECTADY, N. Y. G. ROSS NEWNINGER 100 Woodlawn Ave. NUOLEU ESVOTA Mr. G. Ross Henninger, Associate Editor, Electrical Engineering,

PITTSFIELD, MASS. Feb. 5, 1932.

The American Institute of Electrical Engineers. 33 West 39th Street, New York City.

Dear Mr. Henninger:

Mr. Guy Bartlett of our News Bureau at Schenectady has given me your letter of February 2. I am in close touch with Mr. Faccioli and am preparing copy to cover the specification of the Lamme Medal. I also have photographs and I shall be very glad to send you an advance copy of the story together with as many photographs as you may require. Mr. Faccioli, as you know, is now retired as Associate Manager and Works Engineer at the Pittsfield Works of the Company.

Very truly yours,

Alex. Smith

News Bureau

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GENERAL OFFICE SCHENECTADY, N. Y.

100 Woodlawn Ave. PITTSFIELD, MASS.

February 9, 1932

G. Ross Henninger Associate Editor American Institute of Electrical Engineers 33 West Thirty-Ninth Street New York City

Dear Mr. Henninger:

At the request of Mr. Guy Bartlett of the News Bureau at Schenectady to whom you wrote recently concerning Mr. Faccioli's forthcoming award, I am sending you the enclosed sketch of him written at the time of his retirement in 1930. I am also sending you 8 photographs taken recently in his car. As you probably know, Mr. Faccioli's health is not of the best and it is difficult to take a more formal picture of him. I hope that these prints will be satisfactory for your purpose.

I would appreciate any information you can give me concerning the scheduled presentation of the Lamme Medal as I am planning the news releases.

Very truly yours,

AS:S