



# UNIVERSITÀ DEGLI STUDI DELL'AQUILA

**Prof. Francesco Muzi**

## Curriculum scientifico

(Aggiornato il 2020/06/17)

Francesco Muzi, laureato con lode in Ingegneria Elettrotecnica nel 1981, è stato assunto come ricercatore di Impianti Elettrici, nel 1983, presso l'Università degli Studi dell'Aquila. Successivamente, ha perfezionato i suoi studi presso la Madison University (USA) e la Decision Systems Inc, London (UK).

Nel 1986, ancora giovane ricercatore, riceve un prestigioso apprezzamento dal prof. emeritus Hermann W. Dommel, conosciuto per il suo fondamentale lavoro sulla simulazione dei transitori elettromagnetici (EMTP software).

Attualmente è Professore Ordinario presso l'Università degli Studi dell'Aquila, dove è anche responsabile del gruppo di ricerca di Sistemi Elettrici per l'Energia.

Nella stessa Università, ha tenuto, a partire dal 1990, i seguenti corsi: Applicazioni Elettriche, Impianti Elettrici, Prevenzione degli Infortuni, Impiantistica Ospedaliera, Sicurezza Elettrica, Protezione ed Affidabilità dei Sistemi Elettrici, Distribuzione ed Utilizzazione dell'Energia Elettrica.

E' membro del Consiglio Direttivo EnSiEl (Consorzio Interuniversitario Nazionale per Energia e Sistemi Elettrici) e del Consiglio Scientifico Nazionale GUSEE (Gruppo Universitario Sistemi Elettrici per l'Energia), è inoltre Presidente per l'Abruzzo dell'Associazione Italiana di Illuminazione (AIDI).

I suoi principali interessi di ricerca riguardano: l'analisi dei sistemi elettrici di potenza, l'affidabilità e la power quality, la diagnostica e la protezione dei sistemi elettrici, le Smart Grid e le Supergrid. In questi campi ha pubblicato, principalmente su riviste o atti di convegni internazionali, oltre 120 articoli scientifici.

Ha ricevuto menzioni in libri editi da John Wiley & Sons, New York e Zanichelli, Bologna ed ha partecipato alla redazione della "IEEE Guide for improving the lightning performance of electric power lines", pubblicata da IEEE Standards Department, New York, USA. Ha svolto mansioni di rilievo in diversi comitati tecnici e scientifici IEEE-PES, international Working Groups e Task Forces.

E' titolare di un brevetto per invenzione industriale dal titolo: "Sistema di potenza regolato da microprocessore" depositato presso Ministero dell'Industria ed è co-autore del libro ?Metodologie Informatiche nei Processi di Misura?, Ed. SIDEREAL, Roma.

E' stato chairman o keynote lecturer in diversi convegni internazionali organizzati da prestigiose Associazioni scientifiche ed è stato nominato General Chairman della Opening Session of the 3rd IASME/WSEAS International Conference on Energy & Environment, EE 2008, Cambridge (UK).

E? revisore di autorevoli riviste internazionali, quali: IEEE Transactions on Power Delivery, Electric Power Systems Research by Elsevier Science, IET Generation Transmission & Distribution.

E? stato responsabile scientifico di rilevanti Progetti di Ricerca nazionali quali PRIN e RdS-CERSE. Attualmente, ricopre l?incarico di *Editorial Board Member* dell?International Journal of Systems Applications, Engineering & Development - University Press, London (UK) ed ha avuto rapporti di collaborazione con la rivista IEEE Transactions on Industrial Electronics nella veste di Invited Guest Editor.

Nel 2009, un suo articolo sull?affidabilità dei sistemi elettrici è stato citato da ricercatori della NASA, Intelligent Systems Division, California USA (978-1-4244-4524-0/09 ©2009 AACC pag. 4334, 4339).

Nel 2013, è stato nominato membro del ?Working Group P2030.4?, compartecipato da ?IEEE Standard Association? e?United States Department of Defense?, istituito per la redazione della norma internazionale: ?IEEE Standard Guide for Smart Grid Interoperability?.

Nello stesso anno, ha conseguito l'abilitazione scientifica nazionale alle funzioni di professore universitario di prima fascia, nel campo dei Sistemi Elettrici per l'Energia.

Nel 2016 è stato nominato membro del Comitato CT-10 "Fluids for electrotechnical applications", su proposta di: CEI, CIGRE, IET (International Electrotechnical Committee).

Il prof. Muzi è *Senior Member IEEE* ed ha tenuto *Invited Plenary Lectures* presso le Università di Cambridge (UK) ed Harvard (USA).

Settembre 2016

Francesco Muzi is a Full Professor of Power Systems at the University of L'Aquila, Italy, where he has also the scientific responsibility for the Power System Group. He graduated *cum laude*? in Electrical Engineering (1981) at the University of L'Aquila, Italy, and then completed his studies at the Madison University U.S.A. and the Decision Systems Inc, London, U.K. In 1986, while still a young researcher, he received a prestigious appreciation by prof. emeritus Hermann W. Dommel, the pioneer of the foundation of the electromagnetic transients program, (EMTP) software. His main research interests concern Power systems transients and dynamics, Reliability and power quality in distribution systems, Power systems diagnostics and protection, Smart grids and Supergrids. In these fields, he authored more than 120 scientific papers. He received mentions in books edited by John Wiley & Sons, New York and Zanichelli, Bologna, Italy, and participated to the outline of the ?IEEE Guide for improving the lightning performance of electric lines?, IEEE Standards, New York. He published the book: ?Information Methods on Measurement Processes?, Ed. Siderea Rome, Italy. He was a member of the IEEE Working Group (W.G.) on Lightning Performance of Distribution Lines and presently he is a member of the IEEE P2030.4 W.G. for the project ?IEEE Standard Guide for Smart Grid Interoperability? promoted by the IEEE Standards and the U.S. Department of Defense. He has also a patent for an industrial invention. He is a regional chairman of the Italian National Lighting Society and was a Chairman or Keynote Speaker in a number of International Conferences organized by different prestigious Societies. He is an editorial board member of the ?International Journal of Systems Applications, Engineering & Development?, University Press London, U.K. and was an

Invited Guest Editor of IEEE Trans. on Industrial Electronics. He is a reviewer of the following journals: IEEE Trans. on Power Delivery, Electric Power Systems Research by Elsevier Science, IET Generation, Transmission & Distribution. In 2009, one of his papers was cited by researchers from NASA (Ames Research Center, USA), (9781424445240/09 © 2009 AACC p. 4334, 4339). In 2013, he was appointed member of the "Working Group P2030.4", sponsored by "IEEE Standard Association" and the Department of Defense of the United States, for the preparation of the international standard, "IEEE Standard Guide for Smart Grid Interoperability". In 2013, he was also qualified as a Full Professor in Power Systems. From 2016, he is a member of the International Committee CT-10 "Fluids for electrotechnical applications", depending on CIGRE and IET (International Electrotechnical Committee). Prof. Muzi is a Senior Member IEEE and held "Invited Plenary Lectures" at the Universities of Cambridge (UK) and Harvard (USA).

September 2016

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- [2] U. Imprescìa, F. Muzi - Criteri di scelta delle lampade per l'illuminazione di grotte turistiche. Rivista Luce, Marzo-Aprile 1985.
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