

## Curriculum vitae

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### GIANFRANCO CHICCO

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**GIANFRANCO CHICCO** graduated in Electrotechnics Engineering (honors) at Politecnico di Torino (POLITO), Italy, and obtained the Ph.D. in Electrotechnics Engineering in Italy. He is a Fellow of the IEEE (Power and Energy Society) since 2018. He received the title of "Doctor Honoris Causa" from the University Politehnica of Bucharest (Romania) and from the University "Gheorghe Asachi" of Iasi (Romania) in 2017 and 2018, respectively.

He is a Full Professor of Electrical Energy Systems at POLITO. He is the Scientific Responsible of the research group on Power and Energy Systems at POLITO, and the Responsible of the Torino unit of the Italian Consortium ENSIEL. He is a Member of the Executive Committee of the IEEE Power & Energy Society Italian Chapter (PE31). He is a Member of the Italian Association of Electrotechnics, Electronics, Automation, Informatics and Telecommunications (AEIT), and a registered professional Engineer in the Province of Torino, Italy.

In April-May 1999 he was a Visiting Assistant Professor at the University of Illinois at Urbana-Champaign, Electrical and Computer Engineering Department, Urbana, IL. In 2003 he was a Member of the Administration Board of POLITO and a Member of its "Budget and Accounting Management" and "Personnel Management" Commissions.

His research interests include Power System Analysis, Distribution System Analysis and Optimization, Electrical Load Management, Energy Efficiency and Environmental Impact of Multi-Energy Systems, Data Analytics, Artificial Intelligence Applications to Power and Energy Systems, Renewable Energy Sources and Distributed Generation, and Power Quality.

#### *Organization and technical activities for journals and conferences*

Gianfranco Chicco is an Editor of the IEEE Open Access Journal of Power and Energy, the IEEE Transactions on Smart Grid, and the IEEE Transactions on Sustainable Energy. He is also the Editor-in-Chief of the journal Sustainable Energy Grids and Networks, a Subject Editor of Energy (Elsevier), and an Editor of Energies (MDPI).

He was the Chairman of the IEEE PES Innovative Smart Grid Technologies (ISGT) Europe 2017, held in Torino (Italy) on 26-29 September 2017. He is the Chair of the 55th International Universities Power Engineering Conference (UPEC 2020, technically co-sponsored by the IEEE), to be held in Torino, Italy, on September 1-4, 2020 as a Virtual Conference. He was the Chairman of the Sixth edition of the World Energy System Conference (WESC), Torino, Italy, 10-12 July 2006, and the Conference co-Chairman of three editions of WESC held in Romania (Iasi, 2008, Targoviste, 2010, and Suceava, 2012).

He was a Member of the Technical Committee, Organizing Committee and Local Organizing Staff of the IREP International Symposium Bulk Power Systems Dynamics and Control - VI "Managing Complexity in Power Systems: from Micro-Grids to Mega Interconnections", Cortina D'Ampezzo, Italy, 22-27 August 2004, and a co-Editor of the Symposium Proceedings.

He was a Member of the Technical Committee of the IEEE Conferences (Melecon 2006, 2008 and 2010; EnergyCon 2014 and 2016; Environment and Electrical Engineering (EEEIC) since 2011), a Technical Program Track co-Chair for IEEE Melecon 2008, 2010, 2012 and IEEE Africon 2013, a member of the Basil C. Papadias Student Paper Award Committee for IEEE Powertech since 2009, and a Conference Session Chairman in various international Conferences. He is been a peer-Reviewer for hundreds of papers in various international journals published by Elsevier, IEEE, IET, and others.

### *Tutorials and lectures*

Gianfranco Chicco has delivered a number of tutorials (among which “Small-scale multigeneration systems” at IEEE Melecon 2008 in Ajaccio, France, and “Multi-Energy System Modelling and Flexibility” at IEEE PES Innovative Smart Grid Technologies (ISGT) Europe 2019 in Bucharest, Romania), and invited presentations, among which “Demand flexibility for load aggregations” at the IEEE SmartGridComm 2014 Workshop in Venice, Italy; “Challenges on the demand side”, at the International Conference on Smart Energy Systems and Technologies (SEST 2018) in Seville, Spain; and “Concepts and tools to categorise and exploit the electrical demand”, at the 8th Modern Power Systems Conference (MPS 2019) in Cluj-Napoca, Romania.

Gianfranco Chicco teaches the courses “Distribution and utilization of electrical energy” and “Smart electricity systems” for the Master students in Electrical Engineering at POLITO, and has been the responsible and lecturer of three courses offered to the Doctoral students in the official catalogue at POLITO: “Characterization and planning of small-scale multigeneration systems”, “Distributed generation in electrical systems”, and “Electrical load management, forecasting and control”. He has been the supervisor of more than 10 Doctoral students at Politecnico di Torino.

### *Projects*

He has been the scientific responsible and coordinator of various projects on energy resource deployment and sustainability, and participated in several other projects funded by national and European grants. Within POLITO, his participations in European projects include FP7 DIGENAS, FP7 SINGULAR, H2020 FLEXMETER, H2020 PLANET, H2020 STORE&GO, and Erasmus+ EU-MONG. Within ENSIEL, he has been the Scientific Coordinator of the activities for the European project H2020 MIGRATE, and his participations include the European projects FP7 eHighway2050 and H2020 OSMOSE.

### *Publications*

The International scientific production of Gianfranco Chicco includes one book, five book chapters, over 100 journal publications, and over 150 publications in conference proceedings. To August 2020, his h-index is 46 From Google Scholar (with i10-index 145), 34 from Scopus (excluding self-citations of all authors), and 34 from Web of science.

### *Five selected recent publications*

G. Chicco, S. Riaz, A. Mazza, and P. Mancarella, Flexibility from Distributed Multienergy Systems, Proceedings of the IEEE, in press

S. Bahramara, A. Mazza, G. Chicco, M. Shafie-khah, and J.P.S. Catalão, Comprehensive Review on the Decision-Making Frameworks Referring to the Distribution Network Operation Problem in the Presence of Distributed Energy Resources and Microgrids, International Journal of Electrical Power & Energy Systems, vol. 115, February 2020, art. 105466.

S. Bahramara, P. Sheikahmadi, A. Mazza, G. Chicco, and J.P.S. Catalão, A Risk-Based Decision Framework for the Distribution Company in Mutual Interaction with the Wholesale Day-ahead Market and Microgrids, IEEE Trans. on Industrial Informatics, vol. 16, no. 2, 2020, pp. 764-778.

G. Chicco and A. Mazza, Heuristic Optimization of Electrical Energy Systems: Refined Metrics to Compare the Solutions, Sustainable Energy, Grids and Networks, vol. 17, 2019, Article 100197

M.G. Flammini, G. Pretticco, A. Julea, G. Fulli, A. Mazza, and G. Chicco, Statistical Characterisation of the Real Transaction Data Gathered from Electric Vehicle Charging Stations, Electric Power Systems Research, vol. 166, 2019, pp. 136-150, doi: 10.1016/j.epsr.2018.09.022.

Torino, 17 August 2020