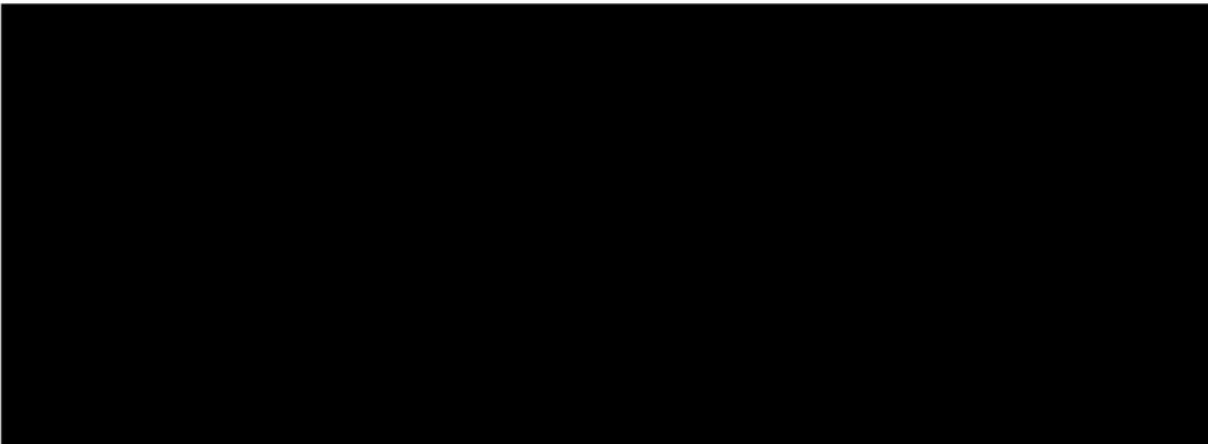


PERSONAL INFORMATION **Luciano Martini**



WORK EXPERIENCE

- Jan. 2025 - present Director, “Generation Technologies and Materials” Department
Ricerca sul Sistema Energetico - RSE
Via Rubattino 54, 20134 Milano, Italy

- 2015 – 2024 Director, “Transmission and Distribution Technologies” Department
Ricerca sul Sistema Energetico - RSE

- 2012 – 2015 Deputy Director of RSE “Transmission and Distribution Technologies” Department and coordinator for international collaborations. Program manager for Smart Grids. Member of RSE scientific committee.

- 2006 – 2012 Head of the “Innovative Network Technologies” Research Group whose R&D activities included plug-in electric vehicles, applied superconductivity, and pilot applications of smart grids. Program manager for smart grids; Head of the Superconductivity Laboratory; Project manager for Innovative Technologies and Applied Superconductivity projects.

- 2004 – 2006 Head of “Renewable Energy Sources” Area of the Power Generation Department. Head of the Superconductivity Laboratory; Project Manager for Applied Superconductivity projects.

- 2000 – 2004 Project Manager for Applied Superconductivity projects. Head of the Superconductivity Laboratory; Product Leader and Coordinator of Innovative Products for the “Tests and Components” Business Unit.

- 1989 – 2000 In this period, I held several positions with increasing responsibilities at the CISE Research Center and at the ENEL-Research Division in Milano.

EDUCATION AND TRAINING

- 2025 - 2017 Managers’ periodic training courses on health and safety at work for all risk sectors in accordance with the State-Regions Agreements 21 December 2011 and 7 July 2016 and the Italian Legislative Decree n.81 of 2008.

- 2016 Anti-bribery and transparency training course for state-owned companies’ managers.

- 2015 – 2016 Periodic update of Safety, Health and Quality training course for managers and officers pursuant to art. 37.7 of the Italian legislative decree 81/08.

- 2014 Leadership and Planning in Quality Management course.

- 2013 Safety, Health and Quality training for managers and officers pursuant to art. 37.7 of the Italian Legislative Decree n.81 of 2008.

- 2010 – 2013 Numerous certified 1-2 days courses including “Customer satisfaction” and “Public Speaking”.
- 1990 – 1991 Professional Stage as visiting scientist at the Texas Center for Superconductivity at the University of Houston (TCSUH), Houston (TX) U.S.A. The activity included HTS single crystal growing and setting up of powder-in-tube HTS wires and tapes manufacturing and related electrical characterizations. Supervisors: Dr. Paul Chu, Dr. Kamel Salama and Dr. Ruling Meng.
- 1983 – 1988 Doctor’s Degree in Chemistry from the University of Genoa – Italy with full marks and honors. Thesis work on "Preparation and physical characterization of high temperature superconductor oxides".

PERSONAL SKILLS

Mother tongue Italian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Spanish	C1	C1	C1	C1	B2
French	A2	A2	A1	A1	A1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

- Communication skills**
 - Very good communication skills gained through hundreds of presentations at international meetings, Workshops and Conferences. Chairman or Moderator at many conference sessions and round tables. Frequent interactions with funding agencies and EC representatives as well as national policy makers.
- Organizational / managerial skills**
 - Leadership coordinating international team of researchers and project managers involved in European Projects and initiatives; Coordinator of research programmes and Chairman of international working groups and teams. Supervision and management of Department’s staff and personnel (more than 80 people), including specific experience in personnel selection and recruiting.
- Job-related skills**
 - Knowledge about European funding tools and instruments; Experience in writing project proposals in reply to European open calls and in managing European projects both technically and financially; Experience in writing and reviewing position papers and scientific articles. Large experience in setting up and implementation of international cooperation activities among governmental bodies, funding agency and research organization representatives in the framework of European and global initiatives.
- Computer skills**
 - Computer proficiency in most PC standard packages.

PROFESSIONAL EXPERIENCE

- 2023 – 2024 Co-coordinator of the Working Group 3 on “Fusion Technologies” of the National Platform for Sustainable Nuclear (PNNS) created by the Italian Ministry for Environment and Energy Security (MASE).
- 2021 – present Director of the Green Powered Future Mission (GPFM), one of the seven international R&I missions launched in June 2021 in the framework of the Mission Innovation (MI) second phase. The GPFM is a public-private partnership, co-led by China, Italy and the UK, relying on 28 members from MI countries, key actors from the private sector, and international organizations to accelerate power system modernization and decarbonization.

- 2021 – present Member of the Italian delegation led by MASE participating to international ministerial conferences, meetings and events such as COP, Mission Innovation, CEM, and G20.
- 2018 – present RSE coordinator within the “Management Committee” for the TERNA-RSE research collaboration agreement and for the service supply agreement.
- 2017 – present Chair and Italian delegate within the Executive Committee of the International Energy Agency (IEA) TCP ISGAN (International Smart Grids Action Network); Previously, member of Budget Review Group, and of Annex 4 “Synthesis of Insights for Decision Makers”, since 2011. Vice-Chair since 2017.
- 2016 – present Chairman of the Italian Electrotechnical Committee (CEI) TC 90 “Superconductivity” and member of several working groups of the International Electrotechnical Committee (IEC) TC 90. Secretary of CEI TC 90 since 2000, member since 1994.
- 2016 – present Co-Chair of the National Stakeholder Coordination Group (NSCG) of the European Technology and Innovation Platform (ETIP) on Smart Networks for the Energy Transition (SNET) representing the European Energy Research Alliance (EERA).
- 2016 – present Governing Board member of the European Technology and Innovation Platform (ETIP) on Smart Networks for the Energy Transition (SNET) representing the European Energy Research Alliance (EERA).
- 2016 – 2021 Mission Innovation (MI) Innovation Challenge 1 (IC1) smart grids, nominated co-Lead for Italy, teaming up with representatives from India and China to lead the activity on this Innovation Challenge and to effectively involving all the other participating countries.
- 2016 – 2020 EERA AISBL appointed representative for the Intensys4EU project, a Coordination and Support Action to the ETIP SNET, responsible for the coordination of the technical contributions of 10 EU research organizations as third party.
- 2013 – 2018 Project Coordinator, EU FP7 ELECTRA IRP, the European Integrated Research Program on smart grids (4-year, 21 Partners, 10 MEuro EC grant).
- 2011 – present Chair Emeritus and past Chairman and Italian representative within the Executive Committee of the International Energy Agency (IEA) Technology Collaboration Programme (TCP) for a “Co-Operative Programme for Assessing the Impacts of High-Temperature Superconductivity on the Electric Power Sector”. Vice-chairman since 2004 and Italian member since 1999.
- 2011 – present Italian National Committee member of CIRED (the International Conference and Exhibition on Electricity Distribution) and Italian member within the CIRED Session Advisory Group 4 “Distributed Energy Resources and Active Demand Integration”.
- 2011 – present Member of the Scientific Committee of several national and international conferences and in particular of IRED 2012, 2014 and 2016: The International Conference on Integration of Renewable and Distributed Energy Resources.
- 2010 – present Coordinator, of the Joint Programme on smart grids of the European Energy Research Alliance (EERA) which includes 5 technical sub-programmes, and the participation of 40 European Research Organizations as full or associate participants in representation of 17 European countries.
- 2008 – present Organization of many international workshops and technical seminars in collaboration with European and extra-EU research organizations, utilities, and funding agencies.
- 2006 – present Member of several CIGRE working groups: WG D1.64 “Electrical insulation systems at cryogenic temperatures” and of the former WG D1.38 “Emerging Test Techniques Common to High Temperature Superconducting (HTS) Power Applications”; WG A3.23 “Application and Feasibility of Fault Current Limiters in Power Systems” and previous WG D1.15 and WG A3.16.
- 2006 – present Deep knowledge of European funding programmes by contributing to (FP5), FP6, FP7 and H2020 research projects with increasing responsibilities from Task and WP Leader up to project Coordinator. Extensive experience in R&I project proposals preparation and submission as well as in EU project management and periodic financial reporting.

- 2011 – 2015 Member of the SET Plan European Electricity Grid Initiative (EEGI) EEGI-Team lead by the EC and Steering Committee member of the European Technology Platform SmartGrids.
- 2014 Nominated Reviewer by the US Department of Energy's (DOE) to review, score and evaluate the progress of smart grids DOE funded projects at the Smart Grid R&D Program Peer Review held at Brookhaven National Laboratory Upton, NY (USA) in June 2014.
- 2012 – 2013 Coordinator of the "Active networks, distributed generation and storage systems" national project - in the framework of the Research Dealing with the System (RdS); a large research program (>50 Full Time Equivalent per year) committed to sustain the competitiveness of the Italian electric and energy system.
- 2010 – 2013 Support to the European Commission in several meetings and events aimed at exploring mutual interest for International Cooperation activities on storage and smart grids with US DOE, METI/NEDO in Japan and KETEP in Korea. Support to the European Commission during the SET-Plan Material road mapping exercise for the consultation hearings on materials research and innovation for Electricity Grids and Storage.
- 2008 – 2013 External examiner, appointed to examine thesis of candidates for the degree of Doctor of Philosophy at Universities in Italy, Finland and in the UK. Tutoring: Supervisor of the thesis work of bachelor and PhD students as well as of the research activity of post-doc fellows.
- 2008 – 2013 Reviewer of scientific papers submitted to International Conferences and Journals as IEEE Transactions on Applied Superconductivity and Superconductor Science and Technology.
- 2005 – 2012 Appointed as independent expert by the European Commission, to evaluate proposals submitted in the Sixth and in the Seventh Framework Programme (FP6 and FP7) of the European Community for research, technological development and demonstration activities contributing to the creation of the European Research Area and Innovation.
- 2005 – 2010 Nominated Reviewer by the US Department of Energy's (DOE), in the "Superconductivity Partnerships with Industry Panel", to review, score and evaluate the progress of Applied Superconductivity DOE funded projects at the DOE Superconductivity Peer Review.
- 2000 – 2002 Design and development of 13 kA and 600 A hybrid metal-HTS current leads for the Large Hadron Collider at CERN, Geneva (CH). Current lead prototypes have been delivered and successfully tested at CERN at operating conditions.

ADDITIONAL INFORMATION

Publications Author or co-author of more than 200 scientific and review papers presented at international conferences and/or published on International Journals reporting the main scientific and technical achievements obtained during the working activity. Authoring and co-authoring of several book chapters. List of papers available on request.

As reported by Google Scholar: 180+ papers, more than 2630 citations, H-index of 27, and i10-index of 50.

Patents Inventor of no.3 industrial patents related to Applied Superconductivity.

Oral Presentations The main results of the scientific activity and of the collaboration with international organizations have been presented at many international conferences, workshops and Ministerial meetings including: CEM & MI, G20, COP, SET Plan Conferences, CIRED, CIGRE General Session, Innogrid2020+, IRED, ASC, ISS, and EUCAS. Keynote presentations at several international conferences as well as University expert lectures and summer school courses.

SELECTED PUBLICATIONS

E. Guerra, M. Simonazzi, F. Mimmi, A. Morandi, M. Bocchi, A. Musso, G. Angeli, L. Martini, A. Bertinato, P. Steckler, C. Creusot, "Modular Multi-level Converter Model for the Analysis, the Design and the Optimization of DC Power Systems Involving Superconducting Power Cables Cooled by Liquid Hydrogen", IEEE Transactions on App. Superconductivity, 2024.

- L. Cavallucci, A. Musso, G. Angeli, L. Martini, M. Bocchi, A. Macchiagodena, M. Breschi, "Optimization Procedure to Design a DC Transmission Line with MgB₂ Wires in Liquid Hydrogen", IEEE Transactions on Applied Superconductivity, 2024.
- B. Marchionini, S. Eckroad, L. Serri, G. Angeli, H. Ohsaki, D. Mosteller, L. Martini, "High temperature superconductivity application readiness map-energy delivery-transmission, substation and distribution, IEEE Transactions on App. Superconductivity 33 (5), 1-5, 2023.
- E. Bionda, F. Soldan, M. Cabiati, L. Martini, "The Smart Grids Innovation Accelerator-SGIA: an international open platform to boost smart grids innovation through knowledge sharing", 2022 AEIT International Annual Conference (AEIT), 1-6, 2022.
- N. Hayakawa, C.-E. Bruzek, B.e Du, J. Kephart, B. Lee, R. Ross, S. Samoilenkov, X. Zong, J.J. Smit, L. Martini, "Electrical insulation systems at cryogenic temperatures", CIGRE' Technical Brochure n.846, 2021.
- I. Oleinikova, L. Martini, E. Rodriguez, "A Transparent Market Design for Balancing and Voltage Control Products", Paper 1891, 25th International Conference on Electricity Distribution, CIRED 2019, 3-6 June 2019, Madrid (Spain).
- B.G. Marchionini, L. Martini, H. Ohsaki, "High temperature superconductor-based technologies as enabler for efficient and resilient energy systems", IEEE Transactions on Applied Superconductivity 33 (5), 1-5, 2019.
- P. Tixador, M. Bauer, C.-E. Bruzek, A. Calleja, G. Deutscher, B. Dutoit, F. Gomory, L. Martini, M. Noe, X. Obradors, M. Pekarčíková, F. Sirois, "Status of the European union project FASTGRID", IEEE Transactions on Applied Superconductivity 29 (5), 1-5, 2019.
- L. Martini and A. Iliceto, "*In My View: A European Perspective of DER Integration*" invited editorial accepted for publication in IEEE Power & Energy Magazine, vol. 16, no. 6, Dec. 2018.
- L. Martini, H. Brunner, E. Rodriguez C. Caerts, T.I. Strasser, G. Burt, "*Grid of the Future and the Need for a Decentralized Control Architecture: The ELECTRA Web-of-Cells Concept*", Paper 0484, 24th International Conference on Electricity Distribution, CIRED 2017, 12-15 June 2017, Glasgow (UK).
- G. Kariniotakis, L. Martini, C. Caerts, H. Brunner, N. Retiere, "*Innovative Architectures and Control Strategies for Future Networks: the Web-of-Cells, Fractal Grids and other concepts*", Paper 1287, 24th International Conference on Electricity Distribution, CIRED 2017, 12-15 June 2017, Glasgow (UK).
- M.A. Biviji, L. Martini, M. De Nigris, DJ Kang, D. Ton, "*Global Survey of Smart Grid Activities*", Chapter 5 for the Wiley Smart Grid Handbook, 3 Volume Set, Chen-Ching Liu (Editor) ISBN: 978-1-118-75548-8, 1900 pages, July 2016.
- T. Strasser, F. Andr en, G. Lauss, R. Br undlinger, H. Brunner, C. Moyo, C. Seidl, S. Rohjans, S. Lehnhoff, P. Palensky, P. Kotsampopoulos, N. Hatzigargyriou, G. Arnold, W. Heckmann, E.C.W. De Jong, M. Verga, G. Franchioni, L. Martini, A.M. Kosek, O. Gehrke, H. Bindner, F. Coffele, G. Burt, M. Calin, J.E. Rodrigues, "*Towards Holistic Power Distribution System Validation and Testing – An Overview and Discussion of Different Possibilities*", C6-165 paper, General Session, CIGRE 2016, Paris, August 2016.
- L. Martini, M. Bocchi and G. Angeli, "*The first Italian SFCL: From design to live-grid testing activity and effective current limitation of a severe 3-phase short-circuit*", Chapter 10 in World Scientific Series in Applications of Superconductivity and Related Phenomena - Vol. 4: Fault Current Limiters, Editor P. Tixador (in press).
- A. Ballarino, C-E. Bruzek, N. Dittmar, S. Giannelli, W. Goldacker, G. Grasso, F. Grilli, C. Haberstroh, S. Hol e, F. Lesur, A. Marian, J.M. Mart nez-Val, L. Martini, C. Rubbia, D. Salmieri, F. Schmidt, M. Tropeano, "*The BEST PATHS Project on MgB₂ Superconducting Cables for Very High Power Transmission*", IEEE Trans. on Applied Superconductivity, Vol. 26, No. 3, April 2016.
- L. Martini, M. Bocchi and G. Angeli, "*Resistive-Type Fault Current Limiter*", Chapter 3.4 in World Scientific Series in Applications of Superconductivity and Related Phenomena - Vol. 1: Research, Fabrication and Applications of Bi-2223 HTS Wires, Edited by K. Sato, Published by World Scientific Publishing in Singapore – February 2016.

- M. Noe, N. Hayakawa, Y. Bi, J. Cho, D.W. Hazelton, S. Hwang, M. Kurrat, B. Lukasik, L. Martini, F. Moriconi, A. Polasek, I. Sauers, C. Schacherer, F. Schmidt, J. Smit, G. Snitchler, C. Sumereder, R. Taylor, P. Tixador, T. Watanabe, D. Willén, A. Wolsky, Y. Xin, K. Sato, “*Common characteristics and emerging test techniques for high temperature superconducting power equipment*”, CIGRE Technical Brochure No. 644, December 2015.
- L. Martini, L. Radaelli, H. Brunner, C. Caerts, A. Morch, S. Hanninen, C. Tornelli, “*ELECTRA IRP Approach to Voltage and Frequency Control for Future Power Systems with High DER Penetration*”, Paper 1357, 23rd International Conference on Electricity Distribution, CIRED 2015, 15-18 June 2015, Lyon (France).
- L. Martini, M. Bocchi, V. Rossi, M. Ascade, G. Angeli, A. Valzasina, C. Ravetta: “*Fault Current Limitation: Results of the Grid Field-Testing and 3-Phase Fault Event on the First Italian Superconducting Fault Current Limiter*”, Paper 1256, 23rd International Conference on Electricity Distribution, CIRED 2015, 15-18 June 2015, Lyon (France).
- L. Martini, “*Trends of Smart Grids Development as fostered by European Research Coordination: The contribution by the EERA JP on Smart Grids and the ELECTRA IRP*”, keynote at IEEE PowerEng2015, May 16-18, 2015, Riga (LV).
- L. Martini, M. Bocchi, G. Angeli, M. Ascade, V. Rossi, A. Valzasina, C. Ravetta, S. Fratti, E. Martino, “*Live grid field-testing final results of the first Italian Superconducting Fault Current Limiter and severe 3-phase fault experience*”, IEEE Transactions on Applied Superconductivity 2015.
- L. Martini, M. Bocchi, M. Ascade, A. Valzasina, V. Rossi, C. Ravetta and G. Angeli, “*The first Italian Superconducting Fault Current Limiter: Results of the field testing experience after one year operation*”, IOP Publishing, Journal of Physics: Conference Series 507 (2014) 032003.
- L. Martini, M. Bocchi, M. Ascade, A. Valzasina, V. Rossi, C. Ravetta, and G. Angeli, “*Live-grid installation and field testing of the first Italian Superconducting Fault Current Limiter*”, IEEE Transactions on Applied Superconductivity, Vol. 23, Issue 3 (2013).
- L. Martini, G. Angeli, M. Bocchi, “*Recent Test Experience on Medium Voltage Fault Current Limiters*”, Applied Superconductivity and Electromagnetics, Vol. 4, No. 1, November 2013.
- M. Noe, A. Hobl, P. Tixador, L. Martini, B. Dutoit, “*Conceptual Design of a 24 kV, 1 kA Resistive Superconducting Fault Current Limiter*”, IEEE Transactions on Applied Superconductivity, Vol. 22, No. 3, June 2012.
- L. Martini, “*European Energy Research Alliance JP on Smart Grids: Activity Update*”, METERING INTERNATIONAL, Issue - 3 | 2012.
- H. Schmitt, J. Amon Filho, R. Adapa, D. Braun, Y. Brissette, G. Buchs, D. Cvoric, F. Darmann, K. Edwards, P. Fernandez, D. Folts, K.H. Hartung, O. Hyun, J. Jäger, D. Iio, H. Kameda, Y. Kim, M. Kleimaier, F. Lambert, L. Martini, M. Noe, K. Park, J.-L. Rasolonjanahary, M. Steurer, J. van der Burgt, “*Application and Feasibility of Fault Current Limiters in Power Systems*”, CIGRE Technical Brochure No. 418, June 2012. (ISBN: 978- 2- 85873- 105-3).
- H. Schmitt, J. Amon Filho, R. Adapa, D. Braun, Y. Brissette, G. Buchs, D. Cvoric, F. Darmann, K. Edwards, P. Fernandez, D. Folts, K.H. Hartung, O. Hyun, J. Jäger, D. Iio, H. Kameda, Y. Kim, M. Kleimaier, F. Lambert, L. Martini, M. Noe, K. Park, J.-L. Rasolonjanahary, M. Steurer, J. van der Burgt, “*Application and Feasibility of Fault Current Limiters in Power Systems*”, ELECTRA No. 250, pp. 61-62, June 2012. (ELT-250).
- L. Martini, M. Noe, P. Tixador, A. Hobl, M. Bocchi: “*The ECCOFLOW Project: Design and Simulations Results of a Superconducting Fault Current Limiter for Operation in Electricity Networks*”, Paper 1162, 21st International Conference on Electricity Distribution, CIRED 2011, Frankfurt 6-9 June, Session No 1.

June 2025, Milano, Italy

I hereby agree for processing the personal information reported in the present CV strictly for the purposes of job recruitment in accordance with the regulation for the protection of personal data passed on the following day: 29.08.97r. DzU nr. 133 poz. 883.