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**Daniele Bosich** is currently an Associate Professor at the University of Trieste (Italy). He received the M.Sc. degree (with honors) in Electrical Engineering from the University of Trieste (Italy) in 2010, and the Ph.D. degree in Industrial Engineering (curriculum Energy Engineering) at the University of Padua (Italy) in 2014.

He is involved in the IIND-08/B sector (Energy Electrical Systems), lecturing in “Electrical Power Systems” and “Digital Transformation Management, Green Energy User Experience & Artificial Intelligence” (B.Sc. in Industrial Engineering), “Principles of Marine Electrical Power Systems” (B.Sc. in Naval Architecture and Marine Engineering), “Management and Control of Power Systems” (M.Sc. in Electrical Energy and Systems Engineering) and “Fundamentals of Modern Power Systems” (M.Sc. in Engineering for the Energy Transition).

From the 2019-2020 academic year, Prof. Bosich is the lecturer and responsible for the course in “Microgrids for Sustainable Energy” (M.Sc. in Electrical Energy and Systems Engineering). From June 2023, he is the Coordinator of the M.Sc. degree in Electrical Energy and Systems Engineering. He has authored more than 95 scientific papers, mainly in the field of marine shipboard power systems, microgrid modeling, voltage control and nonlinear systems analysis. Prof. Bosich is an IEEE Senior Member taking part in PES, IAS, IES and VTS societies.

#### Research activities

The activities of Prof. Bosich can be grouped into three main research lines of investigation: a) control of microgrids and PEPDS (Power Electronics Power Distribution Systems); b) marine power systems; c) High Voltage Shore Connections (HVSC) and port electrification. In the first topic a), several studies have been focused on the islanded Medium Voltage DC microgrids, where Prof. Bosich has developed nonlinear Lyapunov analyses, nonlinear control for solving the CPL destabilizing effect and advanced studies for the analytical modeling. Regarding marine power systems b), the research focus has been placed on the early-stage design of shipboard power systems and on hybrid-electric power systems for reducing ship consumption/emission. On High Voltage Shore Connections and port electrification c), Prof. Bosich has studied several solutions to interconnect the shipboard power system and the terrestrial grid, as well as electrical safety issues.

#### Main research projects

Prof. Bosich has been involved in several projects during his career. To give a short recap from the most recent, it is possible to enumerate the PR FESR FVG 2021-2027 entitled “SEA2DEMO” (Shipboard Electrical Advanced ac/Dc DEMONstrator) 2024-2027, the Horizon project named “V-ACCESS” (Vessel Advanced Clustered and Coordinated Energy Storage Systems) 2023-2026, , the Interreg Europe “S3UNICA” (Smart SpecialiSation UNiversity Campus”) 2019-2022, , the Interreg project Italy-Croatia METRO (Maritime Environment-friendly TranspOrt systems) 2019-2021, the PNRM project named “ETEF - Electric Test Facility” 2018-2021, the project named GEI (Generazione Elettrica Innovativa) from the Italian Minister of Transport (MIT) 2017-2018, the POR FESR 2007-2013 project entitled “MVDC Large Ship” 2010-2014.

<p><b>Scientific conferences</b></p>	<p>Over the last years, Prof. Bosich has proposed his research achievements in several conferences, such as:</p> <ul style="list-style-type: none"> <li>• IEEE Electric Ship Technologies Symposium in 2011/2013/2017/2019/2021/2023/2025;</li> <li>• IEEE International Conference on DC Microgrids (ICDCM) in 2017/2021/2024/2025;</li> <li>• IEEE Power &amp; Energy Society General Meeting (PES GM) in 2013/2018/2020/2022/2023/2024/2025;</li> <li>• AEIT International Annual Conference (AEIT) in 2014/2015/2020/2021/2023/2024/2025;</li> <li>• IEEE ESARS-ITEC in 2016/2018/2023/2024;</li> <li>• International Conference on Ecological Vehicles and Renewable Energies (EVER) in 2013/2014/2017/2020/2021;</li> <li>• Annual Conference of the IEEE Industrial Electronics Society (IECON) in 2017/2018;</li> <li>• International Conference on Electrical Systems for Aircraft, Railway and Ship Prop. (ESARS) in 2012/2015;</li> <li>• IEEE Int. Electric Vehicle Conference (IEVC) in 2014;</li> <li>• IEEE Energy Conversion Congress and Exposition (ECCE) in 2012.</li> </ul>
<p><b>Seminars as invited speaker, and reviewing activity</b></p>	<p>In 2025, Prof. Bosich has been the lecturer at KU Leuven - Gent (Belgium) about “Smart Green Evolution of an Alpine Distribution System”. Prof. Bosich has discussed the topic “DC Microgrids Modeling and Control” during a lesson at University College Dublin (Ireland) in 2024. In 2023, Prof. Bosich has proposed his research entitled “DC Microgrids Modeling and Control” during a lesson at “Alma Mater Studiorum” University of Bologna (Italy). In 2019 and 2021, he has been lecturer at the Industrial/PhD Course on Maritime Microgrids (Aalborg University, Denmark), while in 2017 Prof. Bosich has taken part as an invited speaker in the seminar “DC microgrids of tomorrow: Constant Power Load stability issue, voltage control techniques and model parameters estimation” (Technische Universiteit Eindhoven, The Netherlands).</p> <p>Since 2016 he has been serving as a reviewer for international journals such as: IET Electric Power Applications, IEEE Transactions on Power Electronics, IEEE JESTPE, IEEE Transaction on Transportation Electrification, IEEE Power Engineering Letters, IEEE Access, IEEE Trans. on Power Systems, IEEE PES Transactions on Smart Grid, IEEE Trans. on Industrial Electronics, Int. Journal of Electrical Power &amp; Energy Systems (Elsevier), IEEE Systems Journal, MDPI Energies-Sustainability-Electronics. Moreover, Prof. Bosich has been part of the reviewing committee of the conferences in which I took part as chairman or author.</p>
<p><b>Chairman activities, awards, memberships</b></p>	<p>Prof. Bosich has served as chairman and co-chairman in several conferences during his career. For giving a not-complete list, chairman on IEEE International Conference on DC Microgrids (ICDCM) 2024, Columbia, South Carolina (USA), August 5-8, 2024. Chairman at International Conference on Electrical Systems for Aircraft, Railway and Ship Prop. (ESARS) 2023, Venezia (Italy), 28-31 March 2023, chairman at International Conference on Electrical Systems for Aircraft, Railway and Ship Prop. (ESARS) 2024, Napoli (Italy), 26-29 November 2024. Chairman at TRACK 1 - Session 1.6 -</p>

	<p>Electric Mobility: challenges, trends, safety and EMI issues at 2022 IEEE 21st Mediterranean Electrotechnical Conference (MELECON), Palermo, Italy, June 14-16, 2022. Chairman of Session “Power System III - Tools” in 1st International workshop on "Open Source Modelling and Simulation of Energy Systems", Aachen, E. On Energy Research Center, RWTH Aachen, April 4-5, 2022. Chairman of Session “Power Generation, Transmission, Distribution and Monitoring II” at 2021 IEEE 15th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Florence, Italy, July 14-16, 2021. Co-chairman of Special Session “Port electrical systems: analysis, operation and planning” at 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&amp;CPS Europe), Genova, Italy, June 11-14 2019. Co-chairman on Special Session “PEPDS (Power Electronics Power Distribution Systems) for transportation electrification” on 5th International Conference on Electrical Systems for Aircraft, Railway and Ship propulsion and Road Vehicles &amp; International Transportation Electrification Conference (ESARS-ITEC 2018), University of Nottingham, UK, November 7-9 2018. Chairman of Session “Electrical Systems” in NAV 2018 - 19th International Conference on Ship and Maritime Research, Trieste, June 20 – 22 2018. Co-chairman of Special Session “DC Shipboard Power Systems for the future All Electric Ships” in IECON 2018 conference, 44th Annual Conference of the IEEE Industrial Electronics Society, October 21-23, 2018, Washington D.C, USA. Co-chairman of Special Session “SS54 DC Shipboard Power Systems Future Electric Ships” and Special Session “SS54-SS28 DC Shipboard Power Systems and High Speed Electrical Machines” on IECON 2017 conference, 43rd Annual Conference of the IEEE Industrial Electronics Society (IES), October 29-November 1, China National Convention Center, Beijing, China.</p> <p>Prof. Bosich has been the recipient of the following awards: “Premio nazionale AEIT Volta-Badoni 2014” for the “Postdoctoral Research Work at the Technical University of Eindhoven” (2015); best session paper “Linearizing voltage control of MVDC power systems feeding constant power loads: Stability analysis under saturation” at IEEE PES GM (2013); “AEIT award” as the best student during the high-school last year (2003).</p> <p>Prof. Bosich is Member of AEIT (from 2004), IEEE (from 2007) and ATENA (from 2017).</p>
<p><b>Author performance on Scopus</b> Last refresh on 06/10/2025</p>	<ul style="list-style-type: none"> <li>• Citations: 1332</li> <li>• Documents: 99</li> <li>• Conference papers: 78</li> <li>• Journal papers: 19</li> <li>• Review paper: 1</li> <li>• Book chapter: 1</li> <li>• H-index: 19</li> </ul>