



**POLITECNICO  
MILANO 1863**

DIPARTIMENTO DI ENERGIA



Department of Excellence 2018-2022

# Annual seminar 2023 Energy For Motion

## Energy technologies for the mobility revolution

Politecnico di Milano - Campus Bovisa - aula magna Carassa Dadda + live streaming

**17.03.2023**

(partecipazione libera previa registrazione/Free participation upon registration

<https://forms.office.com/e/9jiXDFMjSz> )

### PROGRAM:

|             |  |
|-------------|--|
| 09.00-09:10 | <b>Giovanni Lozza</b> Head of the Department of Energy - Politecnico di Milano<br><b>Opening of the seminar</b>  |
| 09.10-09:20 | <b>Alessandra Beretta</b> Laboratory of Catalysis and Catalytic Processes, Department of Energy - Politecnico di Milano<br><b>The Energy for Motion project</b>  |
| 09.20-10:00 | <b>Benedetto Bozzini, Jie Li, Elie Paillard</b> , Battery Materials Engineering Laboratory, Department of Energy - Politecnico di Milano<br><b>The new born "battery group"</b>  |
| 10:00-10:20 | <b>Sonia Leva, Giampaolo Manzolini</b> SolarTech Laboratory, Department of Energy - Politecnico di Milano<br><b>Microgrid, e-mobility and the city of the future</b>   |
| 10.20-10:35 | <b>Matteo Maestri</b> Technology Foresight - Politecnico di Milano<br><b>The future of sustainable urban mobility: how will we move in 2035?</b>   |
| 10.35-11:00 | Coffee break   |
| 11.00-11:20 | <b>Paolo Pollesel</b> Vice President Research & Technological Innovation. Renewable Energy & Environmental R&D - Eni spa<br><b>Alternative fuels for sustainable mobility</b>  |
| 11.20-11:40 | <b>Davide De Michino</b> Energy Services Lead - Enel X Way<br><b>The impact of EVs on the electricity grids: how vehicle grid integration will support the decarbonization of transportation</b>   |
| 11.40-12:00 | <b>Aleksey Yezerets</b> Director of Advanced Chemical Systems & Integration Team - Cummins Inc<br><b>Decarbonizing commercial power – from sustainable fuels to electrification</b>  |
| 12:00-12:20 | <b>Stefano Passerini</b> Università La Sapienza Roma - Department of Chemistry and Distinguished Senior Fellow - Karlsruhe Institute of Technology<br><b>Quasi solid state electrolytes for EV batteries</b>   |
| 12:20-13:30 | <b>Q&amp;A - Open discussion with advisors</b>   |
| 13:30-14:30 | Lunch (buffet)   |
| 14:30-16:00 | <b>Mobilità sostenibile in Italia: come affrontare le sfide ancora aperte?</b> <i>(in italiano)</i><br>Dibattito moderato da <b>Maurizio Delfanti</b> , Amministratore Delegato RSE<br>A confronto:<br><b>Francesco Naso</b> Segretario generale Motus-e<br><b>Gian Luca Pellegrini</b> Editorialista Quattroruore |
| 16:00       | <b>Closure</b>   |

Organized by:

Alessandra Beretta, Andrea Casalegno, Federica Foiadelli, Andrea Pola, Matteo Carmelo Romano e Lia Tagliavini

## ADVISORS BIOGRAPHIES



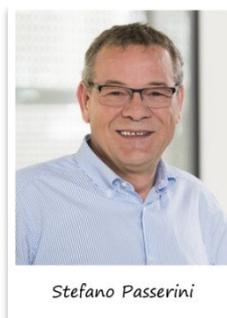
**Aleksey Yezerets** holds a Ph.D. in Physical Chemistry from the Mendeleev University of Chemical Technology, Moscow, Russia. After post-doctoral experiences at the Northwestern University of Evanston (Illinois) and the Mendeleev University (Russia) and visiting research period at Università degli Studi di Milano (Italy), he joined Cummins. At Cummins, a global power leader with a 100-year history of innovation, Dr. Yezerets leads the international Advanced Chemical Systems & Integration Team, responsible for applied science guidance and support for electrification and emission control products across their life cycle. He coordinates a portfolio of internal and collaborative programs with industrial and academic partners worldwide. He has contributed to the success of Cummins in the emissions arena as a member of the team that launched several generations of diesel and natural gas emission control products, including the award-winning system that was the first to meet the 2010 U.S. EPA regulations, three years ahead of competition. He maintains currency in his field through active engagement in professional and graduate education activities. He has co-authored 37 patents and 90 peer-reviewed

publications, with over 2500 citations, and has presented numerous invited lectures. His professional impact has been recognized by awards from Cummins, SAE, ACS, AIChE, NACS, Catalysis Club of Chicago, and R&D100. He is an SAE Fellow.



**Davide De Michino** received a master's degree in Management Engineering from the University "Federico II" of Naples in 2006. Then, he joined Enel Group having several roles connected to the electricity markets. After ten years, he moved inside Enel Group to drive the development of the first Global Smart Home product at Enel X, launching the new value proposition in Europe and LATAM.

Currently Davide is in Enel X Way, the e-Mobility branch of Enel Group, leading Energy Services business at a global level, trying to extract short term commercial value while design a long-term strategical role of EVs into flexibility value stream.



**Stefano Passerini** holds a PhD in Electrochemistry from La Sapienza University in Rome. After post-doc fellowship at La Sapienza University (1986-1989), senior research positions at the University of Minnesota Twin Cities (Minneapolis, 1993-1999), ENEA (Rome, 1996-2008), including a visiting period at Waseda University (Tokio, 2000), Stefano was appointed as professor at the University of Münster (2010), where he was among the co-founders of the Münster Electrochemical Energy Technology (MEET) Battery Research Center.

Since 2014, Stefano Passerini is professor at the Karlsruhe Institute of Technology and Head of Group Electrochemistry for Batteries of the Helmholtz Institute Ulm. His research activities are focused on electrochemical energy storage with special focus on improving the sustainability of high-energy batteries. Prof. Passerini co-author of more than 500 papers (Source:Scopus; H-Index: 81; > 24,000 citations), a few book chapters and several international patents. He has been awarded with the 2012 Research Award of the Electrochemical Society Battery Division, the ISE Fellow status and the membership

of the Leopoldina Akademie. He is the European Editor of the Journal of Power Sources.



**Paolo Pollesel** received a degree in industrial chemistry from the University of Milan and in 1990 he joined Eniricerche, the former corporate R&D company of the Eni Group, where he was involved in several projects mainly in the field of refinery and petrochemicals. From 2007 to 2012 he was in charge of the R&D Downstream Process Technology Department in the Refining & Marketing Division and in 2013 and 2014 he worked as Technology Planning Manager in the Corporate R&D Department. In 2014 he became Downstream Laboratories Vice President at Eni research center in San Donato Milanese. In January 2016 he became part of the Eni Energy Transition Program, focused on gas technologies, with main responsibility on H<sub>2</sub>S capture and conversion technologies. Since June 2018 he is Vice President for Renewable Energy and Environmental R&D and he is in charge of the Novara research center. He is inventor of more than 30 patents and co-author of about 70 scientific papers. He was the chairman of the Group of Catalysis of the Italian Chemical Society in the period 2015-2017.



Maurizio Delfanti

**Maurizio Delfanti** è amministratore Delegato di RSE e in aspettativa come Professore Ordinario di Sistemi Elettrici per l'Energia al Politecnico di Milano. Nel corso di venti anni di attività presso il Politecnico, responsabile di numerose attività di ricerca e consulenza per l'Autorità di Regolazione per Energia, Reti e Ambiente (ARERA), di industrie e utility elettriche, e Presidente di diversi comitati e commissioni tecniche su attività normative negli ambiti delle smart grid e dell'accumulo dell'energia. Autore di oltre 100 pubblicazioni nell'ambito delle tecnologie e della gestione delle reti elettriche sulle più prestigiose riviste scientifiche del settore.



Francesco Naso

**Francesco Naso** Ingegnere Meccanico–Energetico. Ha lavorato nell'O&M delle reti elettriche, in Network Technology sviluppando soluzioni SW e HW volte alla flessibilità, al demand response e all'integrazione dei veicoli elettrici. In Enel X è stato responsabile dello sviluppo business dei Bus Elettrici. In MOTUS-E è stato responsabile dell'area Technology, Market and Environment e da luglio 2021 è Segretario Generale dell'Associazione.



Gian Luca Pellegrini

**Gian Luca Pellegrini** ha svolto la propria intera vita professionale all'interno di Editoriale Domus. Dal 2014 è il direttore di tutte le attività editoriali della testata e delle sue consociate, responsabilità che ricopre tuttora. Nel 2022 ha affiancato alla guida di Quattroruote anche quella di Ruoteclassiche, che si occupa di auto storiche. È uno dei giurati italiani dell'Auto dell'anno.