



Turning Waste into Solutions: Silica-Based Sorbents for CO₂ Control

MARCH 25th 2026

SILCO Forward

Final Workshop on Circular Silica for Carbon Capture and Re-Use

| Time | Speaker | Title |
|---------------|--|---|
| 10:00 – 10:10 | SILCO Partnership | Welcome & General SILCO activities presentation |
| 10:10 – 10:50 | Prof. G. Centi Messina University (IT) | Carbon reuse and circularity: why and are we looking at the right problems? |
| 10:50 – 11:10 | | Virtual coffee break |
| 11:10 – 11:20 | Dr. M. Di Virgilio Politecnico di Milan (IT) | General overview and objectives |
| 11:20 – 11:30 | Dr. L. Viganò Milano Bicocca University (IT) | Design of waste-derived silica and CO ₂ capture application |
| 11:30 – 11:40 | Dr. S. Molina-Ramírez Genova University (IT) | FTIR surface analysis of silica-based Dual Function Materials |
| 11:40 – 11:50 | Ing. G. Nava Politecnico di Milan (IT) | Performance evaluation of silica-based Dual Function Materials |
| 11:40 – 12:05 | Dr. C. Cara Fluorsid (IT) | Circular economy applied to fluorine chemistry |
| 12:05 – 12:30 | Prof. N. Yullok Oulu University (FI) | Membrane-based CO ₂ capture for sustainable industrial processes |
| 12:30 – 13:30 | | Virtual lunch break |
| 13:30 – 13:55 | Prof. M. Herrera-Delgado University of Málaga (ES) | CO ₂ -SR Technology. CO ₂ Storage and <i>in situ</i> Regeneration with CH ₄ over a novel dual function Ni-Alk unsupported catalyst |
| 13:55 – 14:20 | Ing. A. Milani Saint Gobin NorPro (DE) | Enhancing multi-value chain catalyst carriers revalorization: key assets and challenges |
| 14:20 – 14:55 | Dr. S. Cimino (STEMS-CNR) Napoli (IT) | Durability and Sulfur Tolerance of Li-Ru/Al ₂ O ₃ Dual Function Material for the Integrated CO ₂ Capture and Methanation |
| 14:55 – 15:15 | Prof. M. Daturi Université de Caen (FR) | Metal-Organic Frameworks as outstanding materials for CO ₂ capture |
| 15:15 – 15:25 | SILCO Partnership | Concluding remarks |



<https://teams.microsoft.com/meet/33795474938744?p=mKNBepwc66yypHm4sv>

Meeting ID: 337 954 749 387 44

Passcode: hd3hh376

<https://www.silco.polimi.it/>

Acknowledgments

Authors acknowledge financial support of PRIN2022 PNRR SILCO (n. P2022SZANL) Project from the Italian Ministry of University and Research (MUR). CUP: D53D23018550001

