

Novel intensified processes for CO₂ capture and conversion to methanol



“Developments in Carbon Capture and Utilization Technologies”

Virtual Workshop, Wednesday 01 December 2021, 10:00 – 13:00 (EET)

Web-place: <https://certh.webex.com/certh/j.php?MTID=m0e5301382028ddb054ff98e2460208d7>

- 10:00–10:15** **Overview of the CO₂²MeOH project**
Professor Angeliki Lemonidou, AUTH, Greece

- 10:15–10:45** **The World’s largest open access post-combustion CO₂ capture deployment test centre**
Dr Christina Martavaltzi, Technology Centre Mongstad (seconded from Shell), Norway

- 10:45–11:15** **An update on CO₂ to methanol at Air Liquide**
Dr Stephane Haag, Air Liquide, Germany

- 11:15–11:30** **CO₂ capture via carbonate looping of CaO- and MgO-based sorbents derived from mineral ores and industrial wastes**
Mr Thodoris Papalas, AUTH, Greece

- 11:30–11:45** **Study of perovskite materials for the preparation of dual phase membranes for CO₂ separation**
Ms Charitini Matsouka, LIM/CERTH, Greece

- 11:45–12:00** **Sorption enhanced CO₂ hydrogenation to methanol: challenges and opportunities**
Ms Vasiliki Koidi, CPERI/CERTH, Greece

- 12:00–12:15** **Simulating the Plug Flow Reactor for Methanol production in CFD**
Mr Arsenios Chatzimichailidis, SIMTEC SA, Greece

- 12:15–12:30** **Design and feasibility assessment of a novel concept for capture and utilization of CO₂ towards methanol production in cement industry**
Dr Andy Antzara, AUTH, Greece

- 12:30–13:00** **Discussion**

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