

**Thursday September 27<sup>th</sup>**

08:00 – 09:30 Registration and welcome coffee – posters hang up

**09:30 -09:40 Participants welcome and Introduction**

Gérard PIGNAULT, CPE Lyon

**SESSION 1 CO<sub>2</sub> : the context**

Chair: Claude FUSSLER, Cleantech and Innovation advisor

**09:40 – 10:00 Climate mitigation – the scientific context**

Rajendra PACHAURI, IPCC.

**10:00-10:20 Carbon capture – technology and economic perspectives**

Juho LIPPONEN, International Energy Agency

**10:20 – 10:40 CO<sub>2</sub> markets, taxes and quotas**

Oliver SARTOR, CDC Climat Research (F)

**10:40 – 11:00 Energy and Climate policy**

Russel MILLS, DOW (US)

**11:00 – 11:40 Questions to speakers' round table and Chair's conclusions**

12:00 – 13:30 Lunch Break

**SESSION 2 Materials by carboxylation**

Chairs: Michel GIMENEZ, Lafarge

**13:30 – 14:00 Availability of CO<sub>2</sub> : Potential routes for recovery and valorization**

Sophie JULLIAN, IFPEN (F)

**14:00 – 14:30 Multi-scale modelling for in silico screening of carbon-capture materials**

Berend SMIT, University of California at Berkeley (US)

**14:30 – 15:00 Polycarbonates**

Jim MAHONEY, NOVOMER (US)

 15:00 – 15:30 *5 Short oral communications from selected poster-presenters*

T. KAJINO Selective CO<sub>2</sub> Conversion to Formate ... by Semiconductor/Complex Hybrid Photocatalysts  
 N. SIVASANKAR Electrocatalytic Reduction of Carbon Dioxide to Multi-Carbon Organic Chemical  
 C. THIEULEUX Low-temperature dry reforming of CH<sub>4</sub> with well-defined Ni based heterogeneous catalysts  
 N von der ASSEN The Dos and Don'ts of Life Cycle Assessment for Carbon Capture and Utilization  
 L. WANG Clean synthesis of methyl diphenylene diisocyanate via phosgene-free route:

15:30 – 15:50 Tea Break

**SESSION 2 Materials and chemicals**

Chair: Martina PETERS, Bayer (D)

**15:50 – 16:20 Copolymerization of epoxides and CO<sub>2</sub>**

Walter LEITNER, RWTH, U. of Aachen (D)

**16:20 – 16:50 Industrial research in acrylates synthesis**

Michael LIMBACH, BASF (D)

**16:50 – 17:20 LCA analysis in CO<sub>2</sub>-to-carbonates technologies**

Benjamin SCHÄFFNER, EVONIK (D).

**17:20 – 18:00 Questions to speakers' round table and Chairs' conclusions**

 18:00 –20:00 **POSTER SESSION and Cocktail**

## Friday September 28<sup>th</sup>

08:00- 09:00 Welcome coffee

### SESSION 3 **CO<sub>2</sub> reduction to fuels**

Chair: David FARRUSSENG, CNRS Lyon (F)

**09:00-09:30 Industrial methanol production from renewable energy**  
Mathías JÓHANSSON, Shareholder of CRI (Iceland)

**09:30-10:00 KOGAS DME Synthesis**  
Sang-Eon PARK, INHA (SKR)

**10:00-10:30 Upgrading CO<sub>2</sub> in biogas to methane**  
John B. HANSEN, Haldor Topsoe (DK )

10h30 – 11:00 Coffee Break

### SESSION 3 **CO<sub>2</sub> reduction to fuels**

Chair: Michele ARESTA, CIRC (I)

**10:45- 11:15 Engineering Microbes for Biofuel Production from Renewable Resources.**  
Greg STEPHANOPOULOS, MIT (US)

**11:15- 11:45 CO<sub>2</sub> to fuels en route to olefins**  
Gabriele CENTI, U. Messina (I)

**11:45 – 12:30 Questions to speakers' round table and Chairs' conclusions**

12:30 – 14:00 Lunch Break

### SESSION 4 **Renewable Energies**

Chair : Virginie PEVERE, Axelera (F)

**14:00-14:30 Electrochemical CO<sub>2</sub> transformation**  
Edward RODE, DNV (US/N)

**14:30- 15:00 CO<sub>2</sub> transformation for storage of off-peak energy**  
Robert GRESSER, Solvay/Rhodia (B/F)

**15:00- 15:30 Solar Fuels and Power-to-Gas technologies**  
Stephan RIEKE, Solar Fuel (D)

15:30 –16:00 Tea Break

### SESSION 5 **Business perspectives and funding opportunities**

Chair Ger SPORK, CEFIC

**16:00 – 16:10 Addressing the CO<sub>2</sub> Challenge in Horizon 2020**  
Helge WESSEL, European Commission (EU)

**16:10 - 16:20 NSF vision on CO<sub>2</sub> recycling**  
George ANTOS NSF (US)

**16:20 – 16:30 CCSV perspective and demonstrators funding opportunities in France**  
François MOISAN, ADEME (F)

**16:30 – 17:20 Questions to speakers' round table and Chairs' conclusions**

### 17:20– 17:30 **Closing remarks**

Alessandra Quadrelli, CPE Lyon and CNRS (F)