

## Monday 22<sup>nd</sup> November

9:00	Introduction to CO <sub>2</sub> chemistry (Ainara Nova, UiO) <i>50 minutes introduction with questions/short exercise</i>
9:50	Experimental technics to determine reaction mechanisms (Timo Repo, HU) <i>1 hour lecture with questions/short exercises</i>
10:50	Short break (10 minutes)
11:00	Computational modelling (Kathrin Hopmann, UiT) <i>1 hour lecture with questions/short exercises</i>
12:00	Lunch Break (1 hour)
13:00	Carboxylation reactions (Rubén Martín, ICIQ) <i>1h 20 minutes lecture with questions/short exercises</i>
14:20	Short break (10 minutes)
14:30	Carbonates, carbamates, amides & esters (Timo Repo, HU) <i>1h 20 minutes lecture with questions/short exercises</i>
15:50	Creation of student working groups (6 groups of 4 people)
19:00	Dinner

## Tuesday 23<sup>rd</sup> November

8:45	CO <sub>2</sub> to fuels with homogeneous catalysts (Vidar Jensen, UiB) <i>1h 15 minutes lecture with questions/short exercises</i>
10:00	Break (15 minutes)
10:15	CO <sub>2</sub> to fuels with heterogeneous catalysts (Egill Skúlason, UoI) <i>1h 15 minutes lecture with questions/short exercises</i>
11:30	Lunch Break (1 hour)
12:30	Group activity: Reaction Mechanisms <i>Each group propose the mechanism for two reactions and prepares a 10-minute presentation.</i>
14:30	Break (10 minutes)
14:40	Plenum: Presentations and discussions <i>Six 10-minutes presentations each followed by 10 minutes of discussion</i>
19:00	Dinner

## Wednesday 24<sup>th</sup> November

8:45	Introduction to isotope labelling (Chad Elmore, AZ) <i>1h 15 minutes lecture with questions/short exercises</i>
10:00	Break (15 minutes)
10:15	Application of CO <sub>2</sub> -derived isotopic sources in synthesis (Haraldur Guðmundsson, AU) <i>1h 15 minutes lecture with questions/short exercises</i>
11:30	Lunch Break (1 hour)
12:30	Group activity: Reaction Mechanisms <i>Each group propose the mechanism for two reactions and prepares a 10-minute presentation.</i>
14:30	Break (15 minutes)
14:45	Plenum: Presentations and discussions <i>Six 10-minutes presentations each followed by 10 minutes of discussion</i>