



Design, implementation and production upscaling of novel, high-performance, cluster-based catalysts for CO₂ hydrogenation

Deliverable D6.7 (preliminary)
Secondment progress report



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Secondment progress report

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1. Introduction

As part of the network, each Early State Researcher (ESR) within CATCHY will be seconded to at least two other institutions associated to the network, with at least one of the secondments to a different sector (academic or commercial). All secondments are detailed in Table 1.3d of the grant agreement (GA), including the months in which they are scheduled to take place.

By the time of writing this report, the first secondments have been finished. Individual secondment reports will be written and collected in a Deliverable D6.7. However, because of several factors, such as recruitment problems, mismatches between summer holidays, but also because of new insights how secondments could better benefit the ESR's projects, several of the secondments will be executed at a different time than scheduled in the GA. In this first progress report, we include an overview of the secondments, their original scheduling as included in the GA, their current scheduling, and, if necessary, a motivation why the re-scheduling has occurred. For these motivations, we have adopted the criteria that delays of less than two months do not require such a motivation, and we have limited such to secondments that are scheduled (or were originally scheduled) to start before the end of 2022. In case of rescheduling, the duration as specified in the GA is maintained.

2. Secondment progress

Host	Schedule		Motivation for change
	GA	Current	
ESR1 Imran Abbas (KUL)			
DTU	Jan - Feb 2022	Jun - Aug 2023	The timing had to be changed because of late start ESR11. The new moment was chosen not to conflict with other incoming and outgoing secondments at KU Leuven and DTU and to make sure Imran has sufficient time at KU Leuven in 2022 and beginning of 2023 to produce the samples needed for WP1.
PSI	Sep - Oct 2022	Jun - Jul 2022 & Nov 22	Secondment will be split up in two periods to match the timing with activities taking place at PSI that are most suitable for both the training and the research (in particular school on synchrotron techniques and scheduled synchrotron beam time)

TCL	Apr - May 2023	Jan - Feb 2023	Moved forward to match with the secondments of ESR2 (at TCL) so that ESR1 and ESR2 can cooperate at both places."
ESR2 Joao Coroa (TCL)			
KUL	Mar - May 2022	Mar - May 2023	Timing of this secondment was postponed a few months so that it takes place within the academic year at KU Leuven (and not during the exam period), which allows Joao to fulfill the educational tasks that are required by the doctoral school. Joao will receive his PhD from KU Leuven.
UA	Dec 2022 - Jan 2023	Nov - Dec 2023	Comparing to the dates in the GA, this secondment is postponed by one year, which allows to finish the installation of cryo-chiller for cluster-source temperature control. Then the temperature influence on the cluster shape can be studied by TEM at Antwerp during the secondment
VITO	Apr 2023	Feb 2024	need to wait for detailed catalytic results on various cluster samples, and carry out device prototype development at Vito.
ESR3 Pavol Mikolaj (UU)			
FETI	Jan - Mar 2022	Ongoing Feb - Apr 2022	No significant delay
RU	Dec 2022 - Feb 2023	Mar - May 2023	The secondment is postponed by three months to match better with the beam time schedule at Radboud University. We will apply for Felix beam time in November 2022 for the beam time period Feb-July.
ESR4 Deepak Pradeep (RU)			
UU	May - Jun 2022	May - Jun 2022	No significant delays foreseen
FETI	Feb - Mar 2023	Apr - May 2023	
DTU	Sep - Oct 2023	Sep - Oct 2023	
ESR5 Renata Sechi (FETI)			
PSI	Jan - Mar 2022	Jun 22 & Feb 23	Secondment will be split up in two periods to match the timing with activities taking place at PSI. June 2022 coincides with a course on in-situ X ray spectroscopy and in Feb 2023 there is beam time for synchrotron experiments.
UU	Mar - Apr 2023	Oct - Dec 2023	Changed to coincide with a course on cluster kinetics
ESR6 Bárbara Zamora Yusti (BME)			
KUL	Aug - Sep 2021	Mar - Apr 2023	All secondments delayed due to late start of employment (Sep 1, 2021). The order of secondments was changed to better fit in project and training plans.
VITO	May-Jun 2022	Mar - Apr 2024	
RU	May-Jun 2023	Oct - Nov 2022	
ESR7 Waqas Pervez (RU)			
KUL	Nov -Dec 2021	Completed Feb - Mar 2022	Delayed starting date of November 15 due problematic recruitment and long visa procedure.
UA	Oct - Nov 2022	Oct - Nov 2022	No significant delays foreseen
TCL	Sep - Oct 2023	Sep - Oct 2023	

ESR8 Dimitra Papamichail (KUL)			
PSI	Oct - Nov 2021	June 2022 & Feb 2023	Postponed because of later start than expected and need to complete training at KU Leuven first and prepare samples for measurement during the secondment. Secondment will be split up in two months to match the timing with activities taking place at PSI that are most suitable for both the training and the research (in particular school on synchrotron techniques and scheduled beam times).
VITO	Sep-Oct 2022	Sep - Oct 2022	No significant delays foreseen
BME	Oct - Nov 2023	Oct - Nov 2023	
ESR9 Sumant Phadke (PSI)			
DTU	Sep-Oct 2021	May 2023	Delay due to the late employment of ESR11 at DTU with expertise in TC testing.
UA	May-Jun 2022	Sep - Oct 2022	Almost on time but after summer holidays.
HDE	Nov -Dec 2022	Jan - Feb 2024	Delayed because the topic is more relevant at the end of the PhD.
ESR10 Deema Balalta (UA)			
DTU	Oct - Nov 2021	Completed Jan - Feb 2022	Ms. Balalta started her employment August 18, 2021. Since an intensive training on the use of different electron microscopy techniques in the lab was foreseen and required, the secondment at DTU was postponed for a few months, also allowing her to interact with Mr Romaggio (ESR11) at DTU, who only started in January 2022.
PSI	Mar 2023	May 2023	No significant delays foreseen
FETI	June - July 2023	Aug - Sep 2023	
ESR11 Filippo Romeggio (DTU)			
PSI	Oct - Nov 2021	May - June 2023	Adapt to synchrotron general schedule
BME	Sep-Oct 2022	Feb - Mar 2024	Delay due to the late start of employment of ESR11 at DTU
ESR12 Esperanza Sedano Varo (DTU)			
TCL	Dec 2021 - Feb 2022	Feb - Mar 2023	Secondment swapped with the one at KUL to better fit training needs
KUL	Oct 2023	Completed Mar 2022	Secondment swapped with the one at TCL to better fit training needs; slight delay due to late recruitment and longer in-house training
PSI	June - July 2023	Jun 2022 & Jan 2023	Adapt to synchrotron general schedule
ESR13 Wenjian Hu (VITO)			
KUL	Feb - May 2022	Ongoing Mar - Jun 2022	No significant delay
DTU	Jan - Feb 2023	Sep - Nov 2022	No significant delays foreseen
ESR14 Maximilian Winzely (PSI)			

VITO	Feb - Mar 2022	Aug - Sep 2023	The secondment at VITO is delayed as to devote it to the implement in GDEs of the best catalyst(s) selected on the basis of Maximilian's own work (including in situ XAS measurements) and of his secondment at DTU
KUL	Dec 2022	Dec 2022	No significant delays foreseen
DTU	Aug 2023	May 2022	The secondment is intended to train Maximilian in the use of DTU's microfluidic cell and online analytics, and is scheduled earlier than originally planned to enable him to include this knowledge gained in his work on the design of a novel cell for in situ XAS measurements and the complementary analysis of the reaction products."

3. Individual secondments

Each secondment is reported through a templated report. In the following all secondments reports are gathered.