



**DEMO PROJECT**

***Hands-on Technology and Transferable Skill Workshop #2  
(Lille, France)***

***24<sup>th</sup> afternoon, 25<sup>th</sup> and 26<sup>th</sup> March***

***REALCAT - Centrale Lille. Cité Scientifique CS 20048, Bd Paul Langevin, 59651 Villeneuve d'Ascq,  
France.***

***27<sup>th</sup> March***

***Ecole de Char à voile & Fort des Dunes Museum (Dunkirk, France)***

***Tutors:***

***Svetlana HEYTE, Quentin HAGUET, Ophélie PARADIS, Joelle THURIOT***

***Trainers:***

***Egon HEUSON***



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**Tuesday, March 24, 2026**

**14:00 – 17:00 Afternoon Session**

Project update + Visit of REALCAT + Safety Training	Groups 1, 2 and 3
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18:00 – 19:00 Visit of Lille city center



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***Hands-on Technology and Transferable Skill Workshop #2  
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**Wednesday, March 25, 2026**

**9:00 – 13:00 Morning Session**

<p><b><i>Svetlana HEYTE</i></b> <i>High-throughput MOF synthesis on REALCAT robots</i></p> <p>The objective of this session will be to programme the Autoplant robot (Chemspeed) so that it can automatically synthesise a panel of eight MOFs using predefined reagents and conditions.</p> <p><b>Objectives:</b> Create a programme that takes as little time as possible and uses as little solvent as possible.</p>	Group 1
<p><b><i>Ophélie PARADIS</i></b> <i>Characterization of MOFs</i></p> <p>A panel of MOFs was synthesised in advance by the REALCAT team. Their identity is unknown. Participants will use characterisation techniques to determine which MOF they are. To do this, they will need to perform various high-throughput characterisations of the MOFs in the panel, including: PXRD, Elementary Analysis (CHNOS) and XRF.</p> <p><b>Objectives:</b> Determine the nature and structure of unknown MOFs, as well as the potential presence of impurities/defects in the structure, or any peculiarities.</p>	Group 2
<p><b><i>Quentin HAGUET</i></b> <i>High-throughput enzyme screening on other robots</i></p> <p>Participants will learn how to programme a pipetting robot to test a panel of enzymes under a wide range of conditions. At the same time, they will learn how to measure enzyme activity using a spectrophotometer.</p> <p><b>Objectives:</b> To create a programme that allows as many reaction conditions as possible to be tested in the shortest possible time taking into account the constraints specified by the team (enzyme reading time, etc.)</p>	Group 3

13:00 –14:00 Lunch break

**14:00 – 18:00 Afternoon session**

<p><b>Svetlana HEYTE</b> <u>High-throughput MOF synthesis on REALCAT robots</u></p> <p>The objective of this session will be to programme the Autoplant robot (Chemspeed) so that it can automatically synthesise a panel of eight MOFs using predefined reagents and conditions.</p> <p><b>Objectives:</b> Create a programme that takes as little time as possible and uses as little solvent as possible.</p>	Group 3
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18:30 – 20:30 Socializing with some food and drinks



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**Thursday, March 26, 2026**

**9:00 – 13:00 Morning Session**

<p><b>Svetlana HEYTE</b> <i>High-throughput MOF synthesis on REALCAT robots</i></p> <p>The objective of this session will be to programme the Autoplant robot (Chemspeed) so that it can automatically synthesise a panel of eight MOFs using predefined reagents and conditions.</p> <p><b>Objectives:</b> Create a programme that takes as little time as possible and uses as little solvent as possible.</p>	Group 2
<p><b>Ophélie PARADIS</b> <i>Characterization of MOFs</i></p> <p>A panel of MOFs was synthesised in advance by the REALCAT team. Their identity is unknown. Participants will use characterisation techniques to determine which MOF they are. To do this, they will need to perform various high-throughput characterisations of the MOFs in the panel, including: PXRD, Elementary Analysis (CHNOS) and XRF.</p> <p><b>Objectives:</b> Determine the nature and structure of unknown MOFs, as well as the potential presence of impurities/defects in the structure, or any peculiarities.</p>	Group 3
<p><b>Quentin HAGUET</b> <i>High-throughput enzyme screening on other robots</i></p> <p>Participants will learn how to programme a pipetting robot to test a panel of enzymes under a wide range of conditions. At the same time, they will learn how to measure enzyme activity using a spectrophotometer.</p> <p><b>Objectives:</b> To create a programme that allows as many reaction conditions as possible to be tested in the shortest possible time taking into account the constraints specified by the team (enzyme reading time, etc.)</p>	Group 1

13:00– 14:00 Lunch break

**14:00 – 18:00 Afternoon session**

Debrief of the workshop + Iker's presentation + 3-minute PhD presentation	Groups 1, 2 and 3
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19:00 – 21:00 Dinner @L'ArrièrePays restaurant (<https://www.arrierepayslille.fr/la-carte>)



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**Friday, March 27, 2026**

Appointment at [train station Lille Flandres](#) at 10:30 for a departure at 10:50 by train to the city of Dunkirk (with sandwiches)

**12:30 – 14:30 First session**

Sand yachting course at Dunkirk water sports center	Group 1
Visit to Fort des Dunes Museum	Group 2

**15:00 – 17:00 Second session**

Sand yachting course at Dunkirk water sports center	Group 2
Visit to Fort des Dunes Museum	Group 1

Departure at 18:08 by train from [Dunkirk train station](#) + *Drink* for those who want