



## DC3 - Open Position

Position Description		
Reference	DC3	
Project title	Optimization using hybrid machine learning models	
Recruiting	RWTH Aachen University	
Institution		
Secondment	Short secondments in CINEMA academic and industrial partners	
	are expected	
Expected Start	July 1st, 2023 (or earlier if possible)	
Date (estimated)		

Job Offer Description		
Keywords	Machine learning, models	
Objectives	Development of hybrid machine learning models and their use for	
	optimizing process conditions	
Expected Results	(i) Improvements in optimization methods, benefiting from experimental validation. (ii) Hybrid mechanistic/data driven models for dynamic simulations for complex emulsion polymerization systems. (iii) Offline optimization of polymerization processes using hybrid machine learning models.	
Supervisors	Prof. Alexander Mitsos	

Vacancy requirements		
Qualifications	MSCA-recruiting rules are applied: not having resided in Germany for more than 12 months in the 3 years immediately before the recruitment date, and not having carried out their main activity (work, studies, etc.) in Germany during this period. Having a master degree or equivalent diploma, and not having a doctoral degree.  Master's degree in chemical/process engineering, polymer engineering, computational engineering, mathematics, computer science, energy systems engineering, or a related subject	
Languages	Excellent command of written and spoken English is a must	
Skills	Ability for research management, dissemination, communication with colleagues and supervisors, strong teamwork spirit, creativity and problem solving. Solid programming skills, basic knowledge of numerical optimization.	
Experience	Research experience in the academic or industrial sector will be considered	





Job Details		
Salary	Salary and benefits will follow the rules of the MSCA-DN, as foreseen in the Marie Skłodowska-Curie Actions Work Programme. Gross salary per month in Germany: (3400€ per month*CCC Germany (98,3%)) 3342,20€ + 600 € mobility allowance	
Other benefits	Other benefits: Gross family allowance: 660€ per month - if applicable*  *The family allowance will also be made available to researchers whose parental status changes during their project.	
Duration	36 months	
Type of contract	Full time	
Place of work	Aachen (Germany). RWTH Aachen University	