



## DC1 - Open Position

Position Description		
Reference	DC1	
Project title	First principles mathematical modeling radical of water-based (emulsion) polymerization	
Recruiting Institution	UGENT – Ghent University	
Secondment	Short secondments in CINEMA academic and industrial partners are expected	
Expected Start Date (estimated)	July 1st, 2023 (or earlier if possible)	

Job Offer Description		
Keywords	Machine learning, polymer, rheology	
Objectives	First principles modeling for individual and joint prediction of macromolecular structure, architecture, molar mass distribution (MMD), and particle size distribution (PSD) under radical homogeneous bulk/solution and emulsion polymerization.	
Expected Results	(i) First principles modeling for individual prediction of macromolecular structure, architecture, MMD, and PSD, the latter in case of emulsion conditions; increasing sustainability. (iii) Reliably determined chemical reactivities (main and side reactions) and interphase mass transfer parameters. These parameters are also highly relevant beyond the project and the emulsion polymerization field.	
Supervisors	Prof. Dagmar R. D'hooge and Dr. Yoshi W. Marien	

Vacancy requirements		
Qualifications	MSCA-recruiting rules are applied: not having resided in Belgium 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 Belgium during this period.  Having a master degree or equivalent diploma, and not having a doctoral degree.  Solid background in polymeric materials, chemical kinetics and modeling, experimental analysis	
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.	
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 Belgium: (3400€ per month*CCC Belgium (100,0%)) 3400,00€ + 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	Ghent (Belgium). Ghent University	