

COMET Centre (K1)

CHASE	
Chemical Systems Engineering	
Main location	Linz, Upper Austria
Other locations	Vienna
Research programme	CHASE develops a new knowledge platform for the energy, resource and cost intensive steps of the process industry. To achieve this CHASE will establish a highly interlinked methods portfolio in the industrial environment focusing on three research areas: process digitalisation, process intensification and circular process streams.
Planned realisation and outcomes	
CHASE addresses the critical parameter spaces in time and space relevant scales. The industrial chemical processes will be transferred to relevant and flexible scales (via existing and new pilot lines) and the chemical systems will be evaluated applying new process analytical techniques as well as hybrid models. The overall goal is to develop a digital twin describing the respective process chain in order to enable an efficient, flexible and predictive process management and control.	
History of establishment	CHASE builds on the successful COMET K-projects "PAC" (analytics and data analysis) and "imPACTs" (process analytics and model development) and extends the methods portfolio in direction of a systemic approach towards chemical systems engineering (digitalisation, intensification, circularisation).
Selected company partners (max. 10)	Selected scientific partners (max. 5)
1. Agrana	1. Johannes Kepler University Linz
2. Bilfinger	2. Technical University Vienna
3. Borealis	3. University Bayreuth
4. Covestro	4. University of Chemistry and Technology Prague
5. Engel	5. Princeton University
6. Erema	Selected international partners ¹ (max. 5)
7. Greiner	1. Maastricht University
8. Metadynea	2. Humboldt University Berlin
9. OMV	3. Covestro
10. Sappi	4. Renolit
	5. Motan
Duration of the COMET Centre	01.04.2019 – 31.03.2027 (8 years)
Staff employed at the Centre	49 FTE (thereof 35,5 scientists)
Management of the Centre	Univ.-Prof. DI Dr. Christian Paulik, Johannes Kepler University Linz Head of the Institute for Chemical Technology of Organic Materials
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¹ Partners with headquarters outside Austria