Curriculum Vitae Geraldine J.J. Heynderickx

1. Name, address

Heynderickx Geraldine J.J. (°1966)
Department of Materials, Textiles and Chemical Engineering
Laboratory for Chemical Technology
Technologiepark 914
B9052, Zwijnaarde

2. Academic career

2012-now : Senior full professor
2006-2012 : Full professor
2000-2006 : Associate professor
1994-2000 : Assistent professor
1993-1994 : Postdoctoral researcher (FWO Flanders)
1989-1993 : Doctoral researcher (FWO Flanders)

3. Research topics

- Reactor hydrodynamics
- Thermal cracking radiation section hydrodynamics/radiative transfer/coating technology
- Thermal cracking convection section hydrodynamics/heat transfer/tube fouling
- Fluidized bed reactor technology
- Circulating fluidized bed reactor technology (riser)/hydrodynamics
- Rotating fluidized bed reactor technology (vortex unit)/hydrodynamics/heat and mass transfer/segregation
- CFD modelling
- ….

4. Function in research

- Research team: 1 postdoc, 5 PhD students, 2 undergraduate students
- Promotor of 14 PhD theses
- Promotor of master theses

5. Scientific output

- Peer reviewed published papers (A1): 80
- Several A2, C1, C3 publications
- …

6. Five key peer reviewed publications

- CFD simulations of steam cracking furnaces using detailed combustion mechanisms, Stefanidis G.D., Merci B., Heynderickx G.J. , Marin G.B., 2006, Computers and Chemical Engineering 30 (4), 635-649
- Modeling the evaporation of a hydrocarbon feedstock in the convection section of a steam cracker. S.C.K. De Schepper, G.J. Heynderickx, G.B. Marin, 2009, Computers and Chemical Engineering 33, 122-132
- 3D Simulation of a Fluid Catalytic Cracking Riser Reactor, A.K. Das, E. Baudrez, G.B. Marin, G.J. Heynderickx, , Industrial & Engineering Chemistry Research, 2003, 42(12), 2601-2617
- Modeling fast biomass pyrolysis in a gas-solid vortex reactor, Ashcraft, R., Heynderickx, G.J., Marin, G.B., 2012, Chemical Engineering Journal 207-208, 195-208
- Thermal fouling of heat exchanger tubes due to heavy hydrocarbon droplets impingement, Verhees, P., Mahulkar, A.V., Van Geem, K.M., Heynderickx, G.J., 2017, Heat Transfer Engineering 38(7-8) 712-720