Curriculum Vitae

Personal details:

Name: David William Agar
Date of birth: 2nd February 1956
Place of birth: Danbury, Essex GB

Contact: david.agar@tu-dortmund.de

July 1977 — B.Sc. (Hons.) Biochemical Engineering, University of Wales, Swansea GB
1st. Class Degree + various prizes

Dec. 1980 — Ph.D. Chemical Engineering, University of Houston, Houston USA
Dissertation:
Flow microfluorometry studies of the fission yeast *Schizosaccharomyces pombe*' – Investigation of yeast cell cycle kinetics using population balance models to describe flow cytometry measurements (DNA and protein-distributions) on heterogeneous fermentor cultures
GPA 3.9 (max. 4.0)

Employment history:

09.77-09.78 — Research-/Teaching assistant, Grading and teaching duties for: Fundamentals of Biotechnology (Grad.), Reaction engineering (Sr.),
Chem. Engng. Dept., University of Houston, USA.

10.78-12.80 — Instructor (faculty appointment), teaching assignments for: Introduction to Chem. Engng. (Soph.), Fluid mechanics (Jr.), Reaction engineering (Sr.),
Chem. Engng. Dept., University of Houston, USA.

01.81-04.87 — Laboratory supervisor in central research with five technicians. Reactor and catalyst development, operation of test reactors; interpretation, modelling and evaluation of kinetic measurements.
Separations Group, Process Chemistry Division, Ammonia Laboratories
BASF AG, Ludwigshafen, D

05.87-01.90 — Assistant plant manager– Process development, troubleshooting and start-up of a 75 000 ton pa acid oximation plant; processing of reactor data; flow-sheeting, compilation of managerial spreadsheets.
Caprolactam Plant, Fibre Precursors Division, BASF AG, Ludwigshafen, D

02.90-04.94 — Group leader in research, process development and optimisation for Isocyanate production plants; research on unsteady-state reactor operation.
Polyurethane Precursors Group, Process Chemistry Division, Ammonia Laboratories, BASF AG, Ludwigshafen, D

05.94-01.97 Group leader in research, evaluation of novel reactor concepts, processes and feedstocks; technical support for amine sales for acid gas absorption, operation of a pilot-plant in Canada.
Reactor Technology Group, Process Chemistry Division, Ammonia Laboratories, BASF AG, Ludwigshafen, D

02.97-02.22 Chair for Chemical Reaction Engineering, (Full Professor for Reaction engineering) in the department of Biochemical and Chemical engineering (BCI) at the Technical University of Dortmund, Research topics: multifunctional reactors, process intensification, microreactors, reaction engineering for environmental and energy applications.

Publication record:

01.81-02.22 Scopus profile: 156 Publications, >95% peer-reviewed, h-factor: 28, citations: 2977

Google patent profile: 20 Patents

Teaching Duties:

10.96-02-22 Compulsory:
BSc Reaction Engineering for Chemical and Biochemical Engineers
MSc Reaction Engineering for Chemical Engineers (2011-2021)
MSc Process Balancing for Process System Engineers (2009-2022)
BSc Introduction to Technical Chemistry for Chemists
BSc Introduction to Chemical Engineering (2011)

Elective:
Chlorine chemistry and electrolysis BS, Introduction to catalysis, Heterogeneous catalysis, CFD for mixers and reactors, Multifunctional reactors, Applied mathematical and engineering numerics, LabView course, Control room experience, Ruhr teaching network "Catalysis", Seminar "1.5 or 4°C?"

Miscellaneous:

1999-2001	Chairman of the Dortmund chapter of the Gesellschaft deutscher Chemiker
2001	Chairman of the organising committee for ISMR-2 in Nürnberg, Germany
2003-2018	Chairman ‚Verein zur Förderung des Studiumstandorts Dortmund eV'
2002-2008	Advisory board of the microreactor company 'Syntics GmbH', Bochum
2006-2010	Chairman of the ProcessNet* section for chemical reaction engineering
2006-2011	Deputy Chairman of the ProcessNet section for process intensification
2006-2018	Chairman of the doctoral examination board of the Faculty BCI
2010-2017	Co-author of German textbook 'Introduction to Technical Chemistry' (awarded VDI prize 2011)
2010-2022	Editorial board 'Reviews in Chemical Engineering'
2018-2022	Advisory board of the CFD company 'Ianus Simulation GmbH', Dortmund

*ProcessNet is the national German umbrella organisation for chemical engineers