

CURRICULUM VITAE - Jens Ejbye SCHMIDT

EDUCATION AND EMPLOYMENT HISTORY

Oct 2018

Department of Chemical Engineering, Biotechnology and Environmental Technology (KBM) - The University of Southern Denmark
Department Chair and Professor

2012 – Sept 2018

Department of Chemical and Environmental Engineering (CEE) Masdar Institute for Technology and Science; Abu Dhabi, UAE, from 2017 Khalifa University, Department of Chemistry
Professor of Chemical Engineering
Head of Institute Center for Energy – iEnergy (2013-2017)

2007 - 2012

The Biofuels and Biorefinery programme (NRG), Biosystems Department, Risø - National Laboratory for Sustainable Energy, Technical University of Denmark (Risø DTU) - from 2012 DTU Chemical and Biochemical Engineering
Head of Program for the Biofuels and Biorefinery programme (2009-2012)
Senior Researcher (2007-2009)

2003 - 2011

LearningLab, DTU
Educational consultant

2000 - 2007

Department of Environment & Resources DTU (M&R DTU)
Head of Wastewater Group
Associate Professor

2000 - 2007

Consultant for EnvironCon I/S

1998 - 2000

Department of Biotechnology (IBT)/Department of Applied Chemistry
Acting Head of Anaerobic Microbiology and Biotechnology Research Group
Associate Professor

1994 - 1997

Department of Environmental Engineering (IMT), DTU
Research Assistant

1994 - 2000

Consultant for various companies: BioWaste A/S, Biotechnology - Technological Institute

1991 - 1994

Department of Biotechnology, DTU
PhD in Biotechnology

1990 - 1991

Wadsworth Center for Laboratories and Research, New York State Health Department, USA Research assistant

1985 -1990

Department of Biotechnology, DTU
M.Sc. in Chemical Engineering,

RESEARCH INTERESTS AND RECORD

My research activities fall into several categories with a common theme of sustainable valorization of waste & wastewaters, green engineering and renewable energy. Particular interest in waste/biomass to energy technologies, power to x, sustainable biorefinery concepts and innovative wastewater treatment methods. The wastes include municipal solid waste (the organic fraction) and waste from the hospitality sector, agricultural residuals and manure from livestock. The biomasses include energy crops, biomass grown in arid regions including halophytes and algae biomass. Conversion technologies include both physical-chemical processes like gasification, pyrolysis, catalytic conversion (hydrogenation), solvent extraction, absorption purification and pretreatment. Biological processes include biochemical conversion (enzymatic hydrolysis and synthesis) and fermentation (photosynthetic, aerobic and anaerobic). All technologies are assessed focusing on economically and environmental feasibility.

My research has led to

- Publication of over 300 articles, book chapters, patents, invention disclosures etc mostly as the senior, corresponding author
- Peer review papers, books chapters and books publications: 115.
- Citations counts 4857; giving an h-index of 36 and i10-indeks of 70 using google scholar 5.5.2020. Citations counts 3042; giving an h-index of 28 using Scopus 5.5.2020.
- 25 invited lectures the last 5 years at conferences both nationally and internationally in addition be member of organizing/technical committees
- Research grants funding of over 20 mill US\$ with 13 mill US\$ as principal investigator. Internal funding, external funding incl. EU, with and without industrial partners (e.g. Boeing, NovoZymes, Etihad, Dong)
- International research collaboration based on joint applications resulting in joint papers (EU projects, Danida, Flagship project with MIT)
- Been PI on several large interdisciplinary research projects (EU projects, flagship project with MIT, Danida projects, ICROFS)
- 46 MSc students and 21 PhD students has worked under my supervision - See teaching activities.
- Several projects with industrial partners and have been forming different network of industries, universities and public sectors: Network for waste, Risø DTU, Network for biorefinery Risø DTU, Network for biomass (EBST) and Unlocking the value of waste – integrated sustainable waste management, 3GF
- Invention Disclosures/Filed Patent
- Expert for the Bio-Based Industries concerning proposal for demonstrations projects in EU in addition to different research councils.

External recognition

- External Examiner: Member of evaluation committees for defense of Bachelor, Master and Ph.D. thesis
- Granting review bodies: On evaluation boards for research programs both national and international
- Journals: Member of editorial boards and reviewing papers for different international journals
- Member of the European Energy Research Alliance (EERA), network for biomass