

BRADLEY P. LADEWIG

Professor

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EXPERIENCE

Paul Wurth Chair in Energy Process Engineering

University of Luxembourg

April 2022 – present Belval Campus, Luxembourg

Visiting Professor

Imperial College London

Nov 2018 – present London, UK

Scientist & Group Leader

Institute for Micro Process Engineering /(IMVT), KIT

November 2018 – March 2022 Karlsruhe, Germany

Senior Lecturer in Chemical Engineering

Imperial College London

May 2015 – Nov 2018 London, UK

Associate Professor of Chemical Engineering

Monash University

Jan 2009 – May 2015 Melbourne, Australia

- Recruited as Lecturer in 2009, promoted to Senior Lecturer in 2011 and Associate Professor in 2012

Postdoctoral Research Fellow

Australian Institute of Bioengineering and Nanotechnology

Sep 2007 – Dec 2008 Brisbane, Australia

Postdoctoral Research Engineer

École nationale supérieure des industries chimiques (ENSIC)/CNRS

Jun 2006 – Aug 2007 Nancy, France

EDUCATION

Graduate Certificate in Higher Education

Monash University

2009 – 2010

PhD in Chemical Engineering

The University of Queensland

2002 – 2006

Bachelor of Engineering (Chemical), with Honours I

The University of Queensland

1998 – 2001

SELECTED AWARDS

- 2019 Alexander von Humboldt Research Fellowship for Experienced Researchers
- 2018 President's Award for Excellence in Teaching, Imperial College London 2017 Student Academic Choice Award: Best Innovation
- 2013 VESKI Victoria Fellowship - Victorian State Government
- 2013 Shortlisted for the 2013 Global IChemE Awards - Sustainable Technology Award
- 2013 Special Commendation Vice-Chancellor's Award for Teaching Excellence - Monash University
- 2013 Deans Award for Excellence in Teaching - Monash University
- 2012 Finalist in the SACS Leadership Awards (State Government Non-Executive Category)
- 2008/09 Australian Academy of Science International Science Linkage Grant for Scientific Visits to Europe
- 2008 Australian Institute of Energy - Energy Council of Australia Travel Scholarship
- 2004 Australian Academy of Technological Sciences and Engineering Young Science Ambassador Award
- 2003 British Chevening Scholarship, funded nine months as a visiting researcher at Imperial College, London

LANGUAGES

English
German



TOP 10 PUBLICATIONS

- [1] C. Chen, A. Ozcan, A. O. Yazaydin, and B. P. Ladewig, "Gas permeation through single-crystal ZIF-8 membranes," **J. Memb. Sci.**, vol. 575, pp. 209–216, 2019.
- [2] N. Prasetya and B. P. Ladewig, "New Azo-DMOF-1 MOF as a Photoresponsive Low-Energy CO₂ Adsorbent and Its Exceptional CO₂/N₂ Separation Performance in Mixed Matrix Membranes," **ACS Appl. Mater. Interfaces**, vol. 10, no. 40, pp. 34291–34301, 2018.
- [3] N. Prasetya, B. C. Donose, and B. P. Ladewig, "A new and highly robust light-responsive Azo-UiO-66 for highly selective and low energy post-combustion CO₂ capture and its application in a mixed matrix membrane for CO₂/N₂ separation," **J. Mater. Chem. A**, vol. 6, no. 34, pp. 16390–16402, 2018.
- [4] N. Prasetya, A. A. Teck, and B. P. Ladewig, "Matrimid-JUC-62 and Matrimid-PCN-250 mixed matrix membranes displaying light-responsive gas separation and beneficial ageing characteristics for CO₂/N₂ separation," **Sci. Rep.**, vol. 8, no. 1, 2018.
- [5] S. Jiang and B. P. Ladewig, "High Ion-Exchange Capacity Semihomogeneous Cation Exchange Membranes Prepared via a Novel Polymerization and Sulfonation Approach in Porous Polypropylene," **ACS Appl. Mater. Interfaces**, vol. 9, no. 44, 2017.
- [6] B. Slater, Z. Wang, S. Jiang, M. R. Hill, and B. P. Ladewig, "Missing Linker Defects in a Homochiral Metal-Organic Framework: Tuning the Chiral Separation Capacity," **J. Am. Chem. Soc.**, vol. 139, no. 50, pp. 18322–18327, 2017.
- [7] N. Prasetya and B. P. Ladewig, "Dynamic photo-switching in light-responsive JUC-62 for CO₂ capture," **Sci. Rep.**, vol. 7, no. 1, 2017.
- [8] R. Lyndon, K. Konstas, B. P. Ladewig, P. D. Southon, P. C. J. Kepert, and M. R. Hill, "Dynamic photo-switching in metal-organic frameworks as a route to low-energy carbon dioxide capture and release," **Angew. Chemie - Int. Ed.**, vol. 52, no. 13, pp. 3695–3698, 2013.
- [9] R. Lyndon, K. Konstas, R. A. Evans, D. J. Keddie, M. R. Hill, and B. P. Ladewig, "Tunable Photodynamic Switching of DArE@PAF-1 for Carbon Capture," **Adv. Funct. Mater.**, vol. 25, no. 28, 2015.
- [10] R. Lyndon, K. Konstas, A. W. Thornton, A. J. Seeber, B. P. Ladewig, and M. R. Hill, "Visible Light-Triggered Capture and Release of CO₂ from Stable Metal Organic Frameworks," **Chem. Mater.**, vol. 27, no. 23, 2015.

DOCTORAL SUPERVISION



PhD Students

19 PhD students supervised to completion, graduates now working in industry, academia, consulting and entrepreneurs

CITATION DETAILS



Citations

90 publications, 3,807 citations, *h*-index=35

EDITORSHIP



Subject Editor (Separations)

Chemical Engineering Research & Design, Elsevier

RESEARCH FUNDING



€7m over the period 2010-2021

Competitive research grants as a named investigator