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Department of Chemical Engineering
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EDUCATION

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|--------------------------|---|
| 2010 Sep. –
2014 May | Ph.D., Chemical and Biomolecular Engineering, University of California–Berkeley, USA
Thesis: “Computational Study of Porous Materials for Gas Separations”
Advisor: Prof. Berend Smit |
| 2006 Feb. –
2007 Oct. | M.S., Chemical Engineering, National Taiwan University, Taiwan
Thesis: “Effects of Relative Volatility Ranking to the Design of Reactive Distillation: Excess-reactant Design”
Advisor: Prof. Cheng-Ching Yu |
| 2002 Sep. –
2006 Jan. | B.S., Chemical Engineering, National Taiwan University, Taiwan |

ACADEMIC APPOINTMENTS

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|--------------------------|--|
| 2021 Aug. – | Associate Professor, National Taiwan University, Chemical Engineering |
| 2021 Aug. – | Adjunct Associate Professor, The Ohio State University, Chemical and Biomolecular Engineering |
| 2016 Sep. – 2021
July | Assistant Professor, The Ohio State University, Chemical and Biomolecular Engineering |
| 2016 July – Aug. | Visiting Assistant Professor, The Ohio State University, Chemical and Biomolecular Engineering |
| 2016 Jan. – June | Research Scientist, Massachusetts Institute of Technology, Materials Science and Engineering (Prof. Jeffrey C. Grossman’s group) |
| 2015 Jan. – Nov. | Assistant Professor, Delft University of Technology (Netherlands), Process and Energy |
| 2014 July – 2014
Dec. | Postdoctoral Associate, Massachusetts Institute of Technology, Materials Science and Engineering (Prof. Jeffrey C. Grossman’s group) |
| 2014 May – June | Junior Specialist, University of California–Berkeley, Chemical and Biomolecular Engineering (Prof. Berend Smit’s group) |
| 2011 – 2014 | Graduate Student Researcher, University of California–Berkeley and Lawrence Berkeley National Lab (Prof. Berend Smit’s group) |
| 2009 – 2010 | Teaching Assistant, National Taiwan University, Chemical Engineering |

NON-ACADEMIC APPOINTMENTS

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|-------------|---|
| 2008 – 2009 | Integrating Process Engineer, Taiwan Semiconductor Manufacturing Corporation (TSMC) |
| 2007 – 2008 | Corporal, Army, Taiwan (Mandatory military service) |

SELECTED HONORS

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|------|---|
| 2021 | <i>I&EC Research</i> 2021 Class of Influential Researchers - The Americas |
| 2021 | 2020 World’s Top 2% of Scientists List, Elsevier |
| 2021 | AIChE (American Institute of Chemical Engineers) Futures |

2021	Yushan Young Scholar Award, Ministry of Education, Taiwan
2021	Alumni Award for Distinguished Teaching, The Ohio State University, USA (The highest teaching honor at OSU)
2020	2019 World's Top 2% of Scientists List, Elsevier
2020	Charles E. MacQuigg Award for Outstanding Teaching, College of Engineering, The Ohio State University, USA
2020	Lumley Research Award, College of Engineering, The Ohio State University, USA
2020	Scialog Fellow for Negative Emissions Science
2019 – 2021	Inaugural Holder of the Umit S. Ozkan Professorship, The Ohio State University, USA
2019	Excellence in Publications Award (triennial), International Adsorption Society (IAS)
2013	DOW Excellence in Teaching Award, University of California – Berkeley, USA
2012 – 2013	Chevron Fellowship, USA
2012	Graduate Student Research Award, AIChE Separation Division, USA
2012 – 2014	Government Fellowship for Study Abroad, Ministry of Education, Taiwan
2010	Power Top-off Award, University of California–Berkeley, USA
2005	Memorial Scholarship for Mr. Lin, Hsiung-Chen, Taiwan
2003 – 2005	Presidential Award (top 5% students, six awards – AU2002, SP2003, AU2003, SP2004, AU2004, SP2005), National Taiwan University, Taiwan
2003 – 2005	First Bank Scholarship for Outstanding College Students (three awards – 2003, 2004, 2005), Taiwan
2004	AZ Electronic Materials Scholarship, Taiwan
2003	TASCO Chemical Corporation Scholarship, Taiwan

PUBLICATIONS (92 Published Articles; h-index 35 and citations ~4900)

Google Scholar profile (<https://scholar.google.com/citations?user=9yluyaQAAAAJ&hl=en>)

2022

92. Deng, X.; Han, Y.*; **Lin, L.-C.***; Ho, W.S.W.*, Computational Prediction of Water Sorption in Facilitated Transport Membranes, *J. Phys. Chem. C*, DOI:10.1021/acs.jpcc.1c09259, in press, 2022.
91. Fu, M.; Deng, X.; Wang, S.-Q.; Yang, F.; **Lin, L.-C.***; Zaworotko, M.J.*; Dong, Y.*, Scalable Robust Nano-porous Zr-based MOF adsorbent with High-Capacity for Sustainable Water Purification, *Sep. Purif. Technol.*, 288, 120620, 2022.
90. Hung, T.-H.; Xu, Z.-H.; Kang, K.-Y.; **Lin, L.-C.***, Chemistry-encoded Convolutional Neural Networks for Predicting Gaseous Adsorption in Porous Materials, *J. Phys. Chem. C*, 126, 2813-2822, 2022.
89. Wang, X.; Lyu, Q.; Tong, T.; Sun, K.; **Lin, L.-C.**; Tang, C.Y.; Yang, F.; Guiver, M.D.*; Quan, X.*; Dong, Y.*, Robust Ultrathin Nanoporous MOF Membrane with Intra-crystalline Defects for Fast Water Transport, *Nature Communications*, 13, 266, 2022.
88. Chen, T.-Y.; Deng, X.; **Lin, L.-C.**, Ho, W.S.W.*, New Sterically Hindered Polyvinylamine-containing Membranes for CO₂ Capture from Flue Gas, *J. Membr. Sci.*, 645, 120195, 2022.

2021

87. Yang, C.-T.; Deng, X.; **Lin, L.-C.*** In Silico Screening of Zeolites for Highly Selective Adsorption of Central C-C Bonds Toward More Effective Alkane Cracking, *Ind. Eng. Chem. Res.*, 60, 15174-15183 2021. *** **Featured in “I&EC Research 2021 Class of Influential Researchers - The Americas”**
86. Datar, A.; Witman, M.; **Lin, L.-C.*** Monte Carlo Simulations for Water Adsorption in Porous Materials: Best Practices and New Insights, *AIChE J.*, 67, e17447, 2021. *** **Featured in the “2021 AIChE Futures” issue**

85. Hung, T.-H.; Lyu, Q.; **Lin, L.-C.*** & Kang, K.-Y.*, Transport-Relevant Pore Limiting Diameter for Molecular Separations in Metal-Organic Framework Membranes, *J. Phys. Chem. C*, 125, 20416-20425, 2021.
84. Hu, J.; Gu, X.; **Lin, L.-C.***; Bakshi, B.*, Toward Sustainable Metal-Organic Frameworks for Post-Combustion Carbon Capture by Life Cycle Assessment and Molecular Simulation, *ACS Sustain. Chem. Eng.*, 9, 12132-12141, 2021.
83. Kan, M.-Y.; Lyu, Q.; Chu, Y.-H.; Hsu, C.-C.; Lu, K.-L.; **Lin, L.-C.***; Kang, D.-Y.*, Suppressing Defect Formation in Metal-organic Framework Membranes via Plasma-assisted Synthesis for Gas Separations, *ACS Appl. Mater. Interfaces*, 13, 41904-41915, 2021.
82. Guo, J.-C.; Zou, C.; Chen, J.-J.*; **Lin, L.-C.*** & Kang, K.-Y.*, NaP1 Zeolite Membranes with High Selectivity for Water-alcohol Pervaporation, *J. Membr. Sci.*, 639, 119762, 2021.
81. Hung, T.-H.; Deng, X.; Lyu, Q.; **Lin, L.-C.*** & Kang, K.-Y.*, Coulombic Effect on Permeation of CO₂ in Metal-organic Framework Membranes, *J. Membr. Sci.*, 639, 119742, 2021.
80. An, H.; Cho, K.Y.; Lyu, Q.; Chiou, D.-S.; Nam, K.J.; Kang, K.-Y.*, **Lin, L.-C.*** & Lee, J.S.*, Facile Defect Engineering of Zeolitic Imidazolate Frameworks Towards Enhanced C₃H₆/C₃H₈ Separation Performance, *Adv. Funct. Mater.*, 32, 2105577, 2021.
79. Hsieh, Y.-H.; Zou, C.; Chen, J.-J.*; **Lin, L.-C.*** & Kang, D.-Y.*, Pillared-bilayer Metal-organic Framework Membranes for Dehydration of Isopropanol, *Microporous Mesoporous Mat.*, 326, 111344, 2021.
78. Shin, J.H.; Kan, M.-Y.; Oh, J.-W.; Yu, H.J.; Kim, J.-H., **Lin, L.-C.**; Kang, D.-Y.; Lee, J. S.* Solubility Selectivity-Enhanced SIFSIX-3-Ni-Containing Mixed Matrix Membranes for Improved CO₂/CH₄ Separation Efficiency, *J. Membr. Sci.*, 633, 119390, 2021.
77. Liu, Y.; Lyu, Q.; Wang, Z.; Sun, Y.; Li, C.; Sun, S.; **Lin, L.-C.*** & Hu, S.* A Flame-retardant Post-synthetically Functionalized COF Sponge as Absorbent for Spilled Oil Recovery, *J. Mater. Sci.*, 56, 13031-13042, 2021.
76. Cho, E.H. & **Lin, L.-C.*** Nanoporous Materials Recognition via 3D Convolutional Neural Networks: Prediction of Adsorption Properties, *J. Phys. Chem. Lett.*, 12, 2279-2285, 2021.
75. Datar, A.; Witman, M. & **Lin, L.-C.*** Improving Computational Assessment of Porous Materials for Water Adsorption Applications via Flat Histogram Methods, *J. Phys. Chem. C*, 125, 4253-4266, 2021.
74. Chiou, D.-S.; Yu, H. J.; Hung, T.-H.; Lyu, Q.; Chang, C.-K.; Lee, J. S.*; **Lin, L.-C.*** & Kang, D.-Y.* Highly CO₂ Selective Metal-Organic Framework Membranes with Favorable Coulombic Effect, *Adv. Funct. Mater.*, 31, 2006924, 2021.

2020

73. Cho, E.H.; Deng, X.; Zou, C. & **Lin, L.-C.*** Machine Learning-Aided Computational Study of Metal-Organic Frameworks for Sour Gas Sweetening, *J. Phys. Chem. C*, 124, 27580-27591, 2020.
72. Deng, X.; Zou, C.; Han, Y.*; **Lin, L.-C.*** & Ho, W.S.* Computational Evaluation of Carriers in Facilitated Transport Membranes for Post-Combustion Carbon Capture, *J. Phys. Chem. C*, 124, 25322-25330, 2020.
71. Zou, C. & **Lin, L.-C.*** Potential and Design of Zeolite Nanosheets as Pervaporation Membranes for Ethanol Extraction, *Ind. Eng. Chem. Res.*, 59, 12845-12854, 2020.
70. Chang, T.-A.; Hsu, W.-J.; Hung, T.-H.; Hu, S.-W.; Tsao, H.-K.; Zou, C.; **Lin, L.-C.**; Kang, Y.-H.; Chen, J.-J. & Kang, D.-Y. Toward Long-lasting Low-haze Anti-fog Coatings through the Deposition of Zeolites, *Ind. Eng. Chem. Res.*, 59, 13042-13050, 2020.
69. Datar, A.; Chung, Y.G.* & **Lin, L.-C.*** Beyond the BET Analysis: the Surface Area Prediction of Nanoporous Materials Using a Machine Learning Method, *J. Phys. Chem. Lett.*, 11, 5412-5417, 2020.

68. Lyu, Q.; Kang, D.-Y.; Hu, S.* & **Lin, L.-C.*** Exploiting Interior Surface Functionalization in Reverse Osmosis Desalination Membranes to Mitigate Permeability-selectivity Trade-off: Molecular Simulations of Nanotube-based Membranes, *Desalination*, 491, 114537, 2020.
67. Zou, C.; Penley, D. R.; Cho, E.H. & **Lin, L.-C.*** Efficient and Accurate Charge Assignments via a Multilayer Connectivity-based Atom Contribution (m-CBAC) Approach, *J. Phys. Chem. C*, 124, 11428-11437, 2020.
66. Risplendi, F.; Raffone, F.; **Lin, L.-C.**; Grossman, J.C. & Cicero, G. Fundamental Insights on Hydration Environment of Boric Acid and Its Role in Separation from Saline Water, *J. Phys. Chem. C*, 124, 1438-1445, 2020.

2019

65. Su, C.-Y.; Lyu, Q.; Kang, D.-Y.*; Yang, Z.-H.; Lam, C. H.; Chen, Y.-H.; Lo, S.-C.; Hua, C.-C.* & **Lin, L.-C.*** Hexagonal Superalignment of Nano-objects with Tunable Separation in a Dilute and Spacer-free Solution, *Phys. Rev. Lett.*, 123, 238002, 2019.
64. Cho, E.H. & **Lin, L.-C.*** Electrostatic Potential Optimized Molecular Models for Molecular Simulations: CO, CO₂, COS, H₂S, N₂, N₂O, and SO₂, *J. Chem. Theory Comput.*, 15, 6323-6332, 2019.
63. Kan, M.-Y.; Shin, J. H.; Yang, C.-T.; Chang, C.-K.; Lee, L.-W.; Chen, B.-H.; Lu, K.-L.; Lee, J. S.*; **Lin, L.-C.*** & Kang, D.-Y.* Activation-Controlled Structure Deformation of Pillared-Bilayer Metal-Organic Framework Membranes for Gas Separations, *Chem. Mater.*, 31, 7666-7677, 2019.
62. Sinha, P.; Datar, A.; Jeong, C.; Deng, X.; Chung, Y. G. & **Lin, L.-C.*** Surface Area Determination of Porous Materials Using the Brunauer-Emmett-Teller (BET) Method: Limitations and Improvements, *J. Phys. Chem. C*, 123, 20195-20209, 2019.
61. Lyu, Q.; Deng, X.; Hu, S.; **Lin, L.-C.*** & Ho, W.S.H. Exploring the Potential of Defective UiO-66 as Reverse Osmosis Membranes for Desalination, *J. Phys. Chem. C*, 123, 16118-16126, 2019.
60. Yu, Y.; Chien, S.-C.; Sun, J.; Hettiaratchy, E.C.; Myers, R.C.; **Lin, L.-C.*** & Wu, Y.* Excimer-Mediated Intermolecular Charge Transfer in Self-Assembled Donor-Acceptor Dyes on Metal Oxides, *J. Am. Chem. Soc.*, 141, 8727-8731, 2019.
59. Cho, E.H.; Lyu, Q. & **Lin, L.-C.*** Computational Discovery of Nanoporous Materials for Energy- and Environment-related applications, *Mol. Sim.*, 45, 1122-1147, 2019.
58. Yu, Y.; Click, K. A.; Chien, S.-C.; Sun, J.; Curtze, A.; **Lin, L.-C.*** & Wu, Y.* Decoupling pH-Dependence of Flat-Band Potential in Aqueous Dye-Sensitized Electrodes, *J. Phys. Chem. C*, 123, 8681-8687, 2019.
57. Mohona, T.M.; Gupta, A.; Masud, A.; Chien, S.-C.; **Lin, L.-C.**; Nalam, P.C. & Aich, N. Aggregation Behavior of Inorganic 2D Nanomaterials Beyond Graphene: Insights from Molecular Modeling and Modified DLVO Theory, *Environ. Sci. Technol.*, 53, 4161-4172, 2019.
56. Deshpande, N.; Cho, E.H.; Spanos, A.P.; **Lin, L.-C.** & Brunelli, N.A. Tuning Molecular Structure of Tertiary Amine Catalysts for Glucose Isomerization, *J. Catal.*, 372, 119-127, 2019.
55. Janda, A.; **Lin, L.-C.**; Vlaisavljevich, B.; Van der Mynsbrugge, J.; Bell, A.T., RE: "Impact of Zeolite Structure on Entropic-Enthalpic Contributions to Alkane Monomolecular Cracking: An IR Operando Study" by S. A. Kadam, H. Li, R. F. Wormsbacher, A. Travert, *Chem. Eur. J.*, 25, 7225-7226, 2019.

2018

54. Cho, E.H. & **Lin, L.-C.***, Systematic Molecular Model Development with Reliable Charge Distributions for Gaseous Adsorption in Nanoporous Materials, *J. Mater. Chem. A*, 6, 16029-16042, 2018.
53. Lim, J.R.; Yang, C.-T.; Kim, J. & **Lin, L.-C.***, Transferability of CO₂ Force Fields for Prediction of Adsorption Properties in All-Silica Zeolites, *J. Phys. Chem. C*, 122, 10892-10903, 2018.

52. Becker, T.; Luna-Triguero, A.; Vicent-Luna, J.M.; **Lin, L.-C.**; Dubbeldam, D.; Calero, S. & Vlugt, T. Potential of Polarizable Force Fields for Predicting the Separation Performance of Small Hydrocarbons in M-MOF-74, *Phys. Chem. Chem. Phys.*, 20, 28848-28859, 2018.
51. Becker, T.; **Lin, L.-C.**; Dubbeldam, D. & Vlugt, T. Polarizable Force Field for CO₂ in M-MOF-74 Derived from Quantum Mechanics, *J. Phys. Chem. C*, 122, 24488-24498, 2018.
50. Bien, C.E; Chen, K.K.; Chien, S.-C.; Reiner, B.R.; **Lin, L.-C.**; Wade, C.R.* & Ho, W.S.W. A Bioinspired Metal-Organic Framework for Trace CO₂ Capture, *J. Am. Chem. Soc.*, 140, 12662-12666, 2018.
49. Zou, C. & **Lin, L.-C.*** Exploring the Potential and Design of Zeolite Nanosheets as Pervaporation Membranes for Ethanol Extraction, *Chem. Commun.*, 54, 13200-13203, 2018. *** **Featured as the inside front cover of the issue**
48. Yang, C.-T.; Kshiragar, A.R; Charaf Eddin, A.; **Lin, L.-C.*** & Poloni, R.* , Tuning Gas Adsorption by Metal Node Blocking in Photoresponsive Metal-Organic Frameworks, *Chem. Eur. J.*, 24, 15167-15172, 2018. *** **Featured as the frontispiece of the issue**
47. Lyu, Q.; Sun, S.; Li, C.; Hu, S.* & **Lin, L.-C.***, Rational Design of Two-dimensional Hydrocarbon Polymer as Ultrathin-film Nanoporous Membranes for Water Desalination, *ACS Appl. Mater. Interfaces*, 10, 18778-18786, 2018.
46. Chen, Y.-R.; Liou, K.-H.; Kang, D.-Y.; Chen, J.-J. & **Lin, L.-C.***, Investigation of the Water Adsorption Properties and Structural Stability of MIL-100(Fe) with Different Anions, *Langmuir*, 34, 4180-4187, 2018.
45. Yang, C.-T.; Janda, A.; Bell, A.T.* & **Lin, L.-C.***, Atomistic Investigations of the Effects of Si/Al Ratio and Al Distribution on the Adsorption Selectivity of n-Alkanes in Brønsted-Acid Zeolites, *J. Phys. Chem. C*, 122, 9397-9410, 2018. *** **Featured as the cover of the issue**
44. Cho, J.W.; **Lin, L.-C.***, & Grossman, J.C.* , Role of Structural Defects in the Water Adsorption Properties of MOF-801, *J. Phys. Chem. C*, 122, 5545-5552, 2018.
43. Van der Mynsbrugge, J.; Janda, A.; **Lin, L.-C.**; Van Speybroeck, V.; Head-Gordon, M. & Bell, A.T., Understanding Brønsted-Acid Catalyzed Monomolecular Reactions of Alkanes in Zeolite Pores by Combining Insights from Experiment and Theory, *ChemPhysChem*, 19, 341-358, 2018. *** **Featured as the cover of the issue and highlighted in the cover profile**

2017

42. Jamali, S.H.; Vlugt, T.J.H & **Lin, L.-C.***, Atomistic Understanding of Zeolite Nanosheets for Water Desalination, *J. Phys. Chem. C*, 121, 11273-11280, 2017. *** **Selected as the ACS Editors' Choice and featured as the cover of the issue**
41. **Lin, L.-C.**; Paik, D. & Kim, J., Understanding Gas Adsorption in MOF-5/Graphene Oxide Composite Material, *Phys. Chem. Chem. Phys.*, 19, 11639-11644, 2017.
40. Deshpande, N.; Pattanaik, L.; Whitaker, M.W.; Yang, C.-T.; **Lin, L.-C.** & Brunelli, N.A., Selectively Converting Glucose to Fructose Using Immobilized Tertiary Amines, *J. Catal.*, 353, 205-210, 2017.
39. Van der Mynsbrugge, J.; Janda, A.; Mallikarjun Sharada, S.; **Lin, L.-C.**; Van Speybroeck, V.; Head-Gordon, M. & Bell, A., Theoretical Analysis of the Influence of Pore Geometry on Monomolecular Cracking and Dehydrogenation of n-Butane in Brønsted-Acid Zeolites, *ACS Catal.*, 7, 2685-2697, 2017.
38. Liou, K.-H.; Kang, D.-Y.* & **Lin, L.-C.***, Investigating the Potential of Single-walled Aluminosilicate Nanotubes in Water Desalination, *ChemPhysChem*, 18, 179-183, 2017. *****Featured as the back cover of the issue**
37. Becker, T.; Heinen, J.; Dubbeldam, D.; **Lin, L.-C.** & Vlugt, T., Polarizable Force Fields for CO₂ and CH₄ Adsorption in M-MOF-74, *J. Phys. Chem. C*, 121, 4659-4673, 2017.
36. Janda, A.; Vlaisavljevich, B.; Smit, B.; **Lin, L.-C.*** & Bell, A.T.* , Effects of Zeolite Pore and Cage Topology on Thermodynamics of n-Alkane Adsorption at Brønsted Protons in Zeolites at High Temperature, *J. Phys. Chem. C*, 121, 1618-1638, 2017.

2016

35. De Lange, M.F.; **Lin, L.-C.**; Gascon, J.; Vlugt, T.J.H. & Kapteijn, F., Assessing the Surface Area of Porous Solids – Limitations, Probe Molecules and Methods, *Langmuir*, 32, 12664-12675, 2016.
34. (†Contributed equally) †Cohen-Tanugi, D.; †**Lin, L.-C.** & Grossman, J.C., Multilayer Nanoporous Graphene Membranes for Water Desalination, *Nano Lett.*, 16, 1027-1033, 2016.
33. Fan, Z.; **Lin, L.-C.**; Buijs, W.; Vlugt, T.J.H. & van Huis, M.A., Atomistic Understanding of Cation Exchange in PbS Nanocrystals Using Simulations with Pseudoligands, *Nature Communications*, 7, 11503, 2016.
32. Braun, E.; Zurhelle, A.F.; Thijssen, W.; Kchnell, S.K.; **Lin, L.-C.**; Kim, J.; Thompson, J.A. & Smit, B., High-Throughput Computational Screening of Nanoporous Adsorbents for CO₂ Capture from Natural Gas, *Mol. Syst. Des. Eng.*, 1, 175-188 2016. ***Featured as the cover of the issue
31. Mercado, R.; Vlasisavljevich, B.; **Lin, L.-C.**; Lee, K.; Lee, Y.; Mason, J.A.; Xiao, D.J.; Gonzalez, M.I.; Kapelewski, M.T.; Neaton, J.B. & Smit, B., Force Field Development from Periodic Density Functional Theory Calculations for Gas Separation Applications Using Metal-Organic Frameworks, *J. Phys. Chem. C*, 120, 12590-12604, 2016.
30. Janda, A.L.; Vlasisavljevich, B.; **Lin, L.-C.**; Smit, B. & Bell, A.T., Effects of Zeolite Structural Confinement on Adsorption Thermodynamics and Reaction Kinetics for Monomolecular Cracking and Dehydrogenation of n-butane, *J. Am. Chem. Soc.*, 138, 4739-4756, 2016.
29. Becker, T.; Dubbeldam, D.; **Lin, L.-C.** & Vlugt, T., Investigating Polarization Effects of CO₂ Adsorption in MgMOF-74, *J. Comput. Sci.*, 15, 86-94, 2016.

2015

28. **Lin, L.-C.** & Grossman, J.C., Atomistic Understandings of Reduced Graphene Oxide as an Ultrathin-Film Nanoporous Membrane for Separations, *Nature Communications*, 6, 8335, 2015.
27. **Lin, L.-C.**; Choi, J. & Grossman, J.C., Two-dimensional Covalent Triazine Framework as an Ultrathin-Film Nanoporous Membrane for Desalination, *Chem. Commun.*, 51, 14921-14924, 2015.
26. (†Contributed equally) †Lee, K.; †Howe, J.; †**Lin, L.-C.**; Smit, B. & Neaton, J.B., Small Molecule Adsorption in Open-Site Metal-Organic Frameworks: a Systematic Density Functional Theory Study for Rational Design. *Chem. Mater.*, 27, 668-678, 2015.
25. (†Contributed equally) †Peng, X.; †**Lin, L.-C.**; Sun, W. & Smit, B., Water Adsorption in Metal-Organic Frameworks with Open-Metal Sites. *AIChE J.*, 61, 677-687, 2015.
24. Braun, E.; Chen, J.J.; Schnell, S.K.; **Lin, L.-C.**; Reimer, J.A. & Smit, B., Nanoporous Materials can Tune the Critical Point of a Pure Substance, *Angew. Chem. Int. Ed.*, 54, 14349-14352, 2015.
23. De Lange, M.; Van Velzen, B.; Ottevanger, C.; Verouden, K.; **Lin, L.-C.**; Vlugt, T.; Gascon, J. & Kapteijn, F., Metal-Organic Frameworks in Adsorption Driven Heat Pumps: The Potential of Alcohols as Working Fluid, *Langmuir*, 31, 12783-12796, 2015.
22. Janda, A.L.; Vlasisavljevich, B.; **Lin, L.-C.**; Sharada, S.M.; Smit, B.; Head-Gordon, M. & Bell, A.T., Adsorption Thermodynamics and Intrinsic Activation Parameters for Monomolecular Cracking of N-alkanes on Brønsted-acid Sites in Zeolites, *J. Phys. Chem. C*, 119, 10427-10438, 2015.

2014

21. (†Contributed equally) †Liu, H.; †Liu, B.; †**Lin, L.-C.**; Chen, G.-J.; Wu, Y.-Q.; Wang, J.; Gao, X.-T.; Lv, Y.-L.; Pan, Y.; Zhang, X.-X.; Zhang, X.-R.; Yang, L.-Y.; Sun, C.-Y.; Smit, B. & Wang, W.-C., A Hybrid Absorbent-Adsorbent Method to Efficiently Capture Carbon. *Nature Communications*, 5, 5147, 2014.
20. **Lin, L.-C.**; Lee, K.; Gagliardi, L.; Neaton, J.B. & Smit, B., Force Field Development from Electronic Structure Calculations with Periodic Boundary Conditions: Applications to Gaseous Adsorption and Transport in Metal-Organic Frameworks. *J. Chem. Theory Comput.*, 10, 1477-1488, 2014.

19. (†Contributed equally) †Borycz, J.; †**Lin, L.-C.**; Bloch, E.D.; Kim, J.; Dzubak, A.L.; Maurice, R.; Semrouni, D.; Lee, K.; Smit, B. & Gagliardi, L., CO₂ Adsorption in Fe₂(dobdc): A Classical Force Field Parameterized from Quantum Mechanical Calculations, *J. Phys. Chem. C*, 118, 12230-12240, 2014.
18. Huck, J.M.; **Lin, L.-C.**; Berger, A.; Shahrak, M.N.; Martin, R.L.; Bhowan, A.S.; Haranczyk, M.; Reuter, K. & Smit, B., Evaluating Different Classes of Porous Materials for Carbon Capture, *Energy Environ. Sci.*, 7, 4132-4146, 2014.
17. Sun, W.; **Lin, L.-C.**; Peng, X. & Smit, B., Screening of Porous MOFs and Zeolites for the Removal of SO₂ and NO_x in the Flue Gases: a Molecular Simulation Study. *AIChE J.*, 60, 2314-2323, 2014.
16. Simon, C.; Kim, J.; **Lin, L.-C.**; Martin, R.L.; Haranczyk, M. & Smit, B., Optimizing Nanoporous Materials for Gas Storage, *Phys. Chem. Chem. Phys.*, 16, 5499-5513, 2014. ***Featured as the cover of the issue
15. Lee, J.; Isley, W.C.; Dzubak, A.L.; Verma, P.; Stoneburner, S.J.; **Lin, L.-C.**; Howe, H.D.; Bloch, E.D.; Reed, D.A.; Hudson, M.R.; Brown, C.M.; Long, J.R.; Neaton, J.B.; Smit, B.; Cramer, C.H.; Truhlar, D.G. & Gagliardi, L., Design of a Metal-Organic Framework with Enhanced Back Bonding for the Separation of N₂ and CH₄, *J. Am. Chem. Soc.*, 136, 698-704, 2014.
14. Kim, J.; **Lin, L.-C.**; Lee, K.; Neaton, J.B. & Smit, B., Efficient Determination of Accurate Force Fields for Porous Materials Using Ab-initio Total Energy Calculations, *J. Phys. Chem. C*, 118, 2693-2701, 2014.
13. Bloch, E.D.; Hudson, M.R.; Mason, J.A.; Chavan, S.; Crocella, V.; Howe, J.D.; Lee, K.; Dzubak, A.L.; Queen, W.K.; Zadrozny, J.M.; Geier, S.J.; **Lin, L.-C.**; Gagliardi, L.; Smit, B.; Neaton, J.B.; Brodiga, S.; Brown, C.M. & Long, J.R., Reversible CO Binding Enables Tunable CO/H₂ and CO/N₂ Separations in Metal-Organic Frameworks with Exposed Divalent Metal Cations, *J. Am. Chem. Soc.*, 136, 10752-10761, 2014.

2013

12. **Lin, L.-C.**; Kim, J.; Kong, X.; Scott, E.; McDonald, T.M.; Long, J.R.; Reimer, J.A. & Smit, B., Understanding CO₂ Dynamics in Metal-Organic Frameworks with Open Metal Sites, *Angew. Chem. Int. Ed.*, 52, 4410-4413, 2013. ***Featured as the inside cover of the issue
11. Kim, J.; Abouelnasr, M.; **Lin, L.-C.** & Smit, B., Large-scale Screening of Zeolite Structures for CO₂ Membrane Separation, *J. Am. Chem. Soc.*, 135, 7545-7552, 2013.
10. Swisher, J.A.; **Lin, L.-C.**; Kim, J. & Smit, B., Evaluating Mixture Adsorption Models Using Molecular Simulation, *AIChE J.*, 59, 3054-3064, 2013.
9. Haranczyk, M.; **Lin, L.-C.**; Lee, K.; Neaton, H.B. & Smit, B., Methane Storage Capabilities of Diamond Analogues, *Phys. Chem. Chem. Phys.*, 15, 20937-20942, 2013.
8. Martin, R.L.; **Lin, L.-C.**; Jariwala, K.; Smit, B. & Haranczyk, M., Mail-Order Metal-Organic Frameworks (MOFs): Designing Isorecticular MOF-5 Analogues Comprising Commercially Available Organic Molecules, *J. Phys. Chem. C*, 117, 12159-12167, 2013. ***Featured as the cover of the issue
7. Planas, N.; Dzubak, A.L.; Poloni, R.; **Lin, L.-C.**; McManus, A.; McDonald, T.M.; Neaton, J.B.; Long, J.R.; Smit, B. & Gagliardi, L., The Mechanism of Carbon Dioxide Adsorption in an Alkylamine-Functionalized Metal-Organic Framework, *J. Am. Chem. Soc.*, 135, 7402-7405, 2013.
6. Kim, J.; Maiti, A.; **Lin, L.-C.**; Stolaroff, J.K.; Smit, B. & Aines, R.D., New Materials for Methane Capture from Dilute and Medium-concentration Sources, *Nature Communications*, 4, 1694, 2013.

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5. (†Contributed equally) †Kim, J.; †**Lin, L.-C.**; Swisher, J.A.; Haranczyk, M. & Smit, B. Prediction Large CO₂ Adsorption in Aluminosilicate Zeolites for Postcombustion Carbon Dioxide Capture, *J. Am. Chem. Soc.*, 134, 18940-18943, 2012.
4. Martin R.L.; Willems, T.F.; **Lin, L.-C.**; Kim, J.; Swisher, J.A.; Smit, B. & Haranczyk, M., Similarity-driven Discovery of Porous Materials for Adsorption-based Separations, *ChemPhysChem*, 13, 3595-3597, 2012. ***Featured as the cover of the issue

3. (†Contributed equally) †Kim, J.; †Lin, L.-C.; Martin, R.L.; Swisher, J.A.; Haranczyk, M. & Smit, B., Large-scale Computational Screening of Zeolites for Ethane/Ethene Separation, *Langmuir*, 28, 11914-11919, 2012.
2. (†Contributed equally) †Dzubak, A.L.; †Lin, L.C.; Kim, J.; Swisher, J.A.; Poloni, R.; Maximoff, S.N.; Smit, B. & Gagliardi, L., *Ab Initio* Carbon Capture in Open-site Metal-Organic Frameworks, *Nature Chemistry*, 4, 810-816, 2012.
1. Lin, L.-C.; Berger, A.H.; Martin, R.L.; Kim, J.; Swisher, J.A.; Jariwala, K.; Rycroft, C.H.; Bhowan, A.S.; Deem, M.W.; Haranczyk, M. & Smit, B., In Silico Screening of Carbon-Capture Materials, *Nature Materials*, 11, 633-641, 2012.

PRESENTATIONS

40. Lin, L.-C., Computational Study of Nanoporous Materials for Energy-Related Applications, Department of Chemical and Materials Engineering, Tamkang University, Taiwan, 2022.
39. Lin, L.-C., Computational Study of Nanoporous Materials for Energy-Related Applications, Institute of Polymer Science and Engineering, National Taiwan University, Taiwan, 2021.
38. Lin, L.-C., Computational Study of Nanoporous Materials for Energy-Related Applications, Department of Chemistry, National Taiwan University, Taiwan, 2021.
37. Lin, L.-C., Computational Study of Nanoporous Materials for Energy-Related Applications, Department of Chemical and Biomolecular Engineering, KAIST, Korea, 2021.
36. Lin, L.-C., Computational Study of Nanoporous Materials for Energy-Related Applications, Department of Chemical and Biomolecular Engineering, Sogang University, Korea, 2021.
35. Lin, L.-C., Computational Study of Nanoporous Materials for Energy-Related Applications, Department of Chemical and Biomolecular Engineering, NTU-KAIST workshop, 2021.
34. Lin, L.-C., Computational Study of Porous Materials for Water Adsorption Applications, 2021 *International Symposium on Porous Materials (ISPM)*, Japan, 2021.
33. Lin, L.-C., Computational Materials Discovery for Reverse Osmosis Desalination and Water Harvesting, 2021 KICHe Annual Meeting, South Korea, 2021.
32. Lin, L.-C., Computational Material Discovery and Design, School of Environmental Science & Technology, Dalian University of Technology, China, 2021.
31. Lin, L.-C., Computational Study of Zeolite Nanosheets for Filtration Applications, 2020 *International Symposium on Porous Materials (ISPM)*, virtual meeting, 2020.
30. Lin, L.-C., Computational Material Discovery and Design, Department of Chemical Engineering, National Taiwan University, Taiwan, 2020.
29. Lin, L.-C., Computational Material Discovery and Design, Department of Chemical Engineering, National Tsing Hua University, Taiwan, 2020.
28. Lin, L.-C., Computational Study of Nanoporous Materials for Energy-related Applications, Department of Chemical & Petroleum Engineering, University of Pittsburgh, Pennsylvania, USA, 2020.
27. Lin, L.-C., Computational Study of Nanoporous Materials for Energy-related Applications, Department of Chemical Engineering, Pusan University, South Korea, 2020. (cancelled due to the pandemic)
26. Lin, L.-C., Computational Discovery of Nanoporous Materials for Energy-related Applications, 13th International Conference on Fundamentals of Adsorption, Cairns, Australia, 2019. ***Invited presentation for receiving the “Triennial Award for Excellence in Publications by a Young Scientist Below 35 of the International Adsorption Society (IAS)”
25. Lin, L.-C., Computational Discovery of Nanoporous Materials for Energy-related Applications, the Kang Research Group, Department of Chemical Engineering, National Taiwan University, Taiwan, 2019.

24. **Lin, L.-C.**, Computational Discovery of Nanoporous Materials for Energy-related Applications, the Chiang Research Group, Department of Chemical Engineering, National Taiwan University of Science and Technology, Taiwan, **2019**.
23. **Lin, L.-C.**, Computational Discovery of Nanoporous Materials for Energy-related Applications, Department of Chemistry, University of South Dakota, South Dakota, USA, **2018**.
22. **Lin, L.-C.**, Computational Discovery of Nanoporous Materials for Energy-related Applications, Department of Physics, University of Maryland – Baltimore County, Maryland, USA, **2018**.
21. Zou, C. & **Lin, L.-C.***, Computationally Investigating Zeolite Nanosheets as Pervaporation Membranes for Ethanol Extraction and the Role of Membrane Surfaces, *AICHE 2018 Annual Meeting*, Pittsburgh, USA, **2018**.
20. Yang, C.-T.; Eddin, A.C.; Poloni, R. & **Lin, L.-C.***, Atomistic Understandings of the CO₂ Uptake Difference in Photo Responsive Metal-Organic Frameworks, *AICHE 2017 Annual Meeting*, Minnesota, USA, **2017**.
19. **Lin, L.-C.***; Jamali, S.H. & Vlugt, T.J.H., Molecular Dynamics Simulations of Zeolite Nanosheets for Water Desalination, *AICHE 2017 Annual Meeting*, Minnesota, USA, **2017**.
18. **Lin, L.-C.**, Computational Discovery of Nanoporous Materials for Energy Applications, Department of Chemical and Biomedical Engineering, Cleveland State University, Ohio, USA, **2017**.
17. **Lin, L.-C.**, Computational Study of Porous Materials for Energy-Related Applications, Department of Chemical and Biomolecular Engineering, The Ohio State University, Ohio, USA, **2015**.
16. **Lin, L.-C.**, Molecular Simulations to Gas Separation Applications, Chevron Corporation, California, USA, **2014**.
15. **Lin, L.-C.**, Computational Study of Porous Materials for Gas Separations, Department of Chemical and Biomolecular Engineering, UC-Berkeley, California, USA, **2014**.
14. **Lin, L.-C.**, Computational Carbon Capture, *2014 MRS Spring Meeting*, California, USA, **2014**.
13. **Lin, L.-C.**, Molecular Simulations to Gas Separation & Storage Applications, the Grossman Research Group, MIT, Massachusetts, **2014**.
12. **Lin, L.-C. et al.**, *Ab Initio* Carbon Capture in Open-Site Metal-Organic Frameworks - Force Field Development and Its Applications, *AICHE 2013 Annual Meeting*, California, USA, **2013**.
11. **Lin, L.-C. et al.**, Computational Carbon Capture, *GRC meeting-Nanoporous Materials and its Applications*, New Hampshire, USA, **2013**.
10. **Lin, L.-C. et al.**, A New Pathway of Deriving Force Fields from Periodic Density Functional Theory Calculations, *2013 EFRC/NETL/BES/APRA-e All Hand Meeting*, California, USA, **2013**.
9. **Lin, L.-C. et al.**, Computational Carbon Capture, *EFRC PI Meeting*, Washington, D.C., USA, **2013**.
8. **Lin, L.-C. et al.**, Large-scale Computational Screening of Adsorbent Materials for Carbon Capture, *AICHE 2012 Annual Meeting*, Pittsburgh, USA, **2012**.
7. Dubach, A.; **Lin, L.-C. et al.**, *Ab initio* Studies for CO₂ Capture: Non-Empirical Force Field Development for Open-site MOFs and CO₂ Fixation on Amine-Grafted Mg₂dobpdc, *2012 EFRC/NETL/BES/APRA-e All Hand Meeting*, California, USA, **2012**.
6. **Lin, L.-C.**, Nonempirical Force Field Development for Carbon Capture, Molecular Foundry, Lawrence Berkeley National Laboratory, California, USA, **2012**.
5. Poloni, R.; **Lin, L.-C. et al.**, A Computational Approach to Understand Carbon Capture by Metal-Organic Frameworks exhibiting Open-Metal sites, *2011 EFRC/NETL/BES/APRA-e All Hand Meeting*, California, USA, **2011**.
4. **Lin, L.-C. et al.**, Computational Screening of Adsorbent Materials for Carbon Dioxide Capture, *2011 EFRC/NETL/BES/APRA-e All Hand Meeting*, California, USA, **2011**.

2. **Lin, L.-C.** & Smit, B., Computational Screening of Adsorbent Materials for Carbon Dioxide Capture, *GRC meeting- Nanoporous Materials and its Applications*, New Hampshire, USA, **2011**.
3. **Lin, L.-C.** & Yu, C.-C., Development of Temperature Predictive Model for Low Pressure Chemical Vapor Deposition Reactor, *JTK Chemical Engineering Conference*, Kagoshima, Japan, **2006**.
1. Chen, T.-Y.; **Lin, L.-C.** *et al.*, Model-Based Control for Improved Uniformity in Low-Pressure Chemical Vapor Deposition, *AEC/APC Symposium Asia*, Taipei, Taiwan, **2006**.

TEACHING EXPERIENCES

Lecturing as an Associate Professor – National Taiwan University

- Autumn 2021
 - ChemE 7007 Advanced Fluid Dynamics
 - Class size: approx. 65 students
 - Core course for graduate students

Lecturing as an Assistant Professor – The Ohio State University

- **Recipient of the 2021 Alumni Award for Distinguished Teaching (the highest teaching honor at the Ohio State University)**
- Autumn 2020
 - CBE2420 Transport Phenomena I
 - Class size: approx. 75 students
 - Core course for undergraduate students
 - Student evaluation for instructor: **4.9/5.0** (cf. College of Engineering Average: 4.2/5.0)
 - CBE8815 Advanced Transport Phenomena
 - Class size: approx. 15 students
 - Core course for first year Ph.D. students
 - Student evaluation for instructor: **4.9/5.0** (cf. College of Engineering Average: 4.6/5.0)
- Spring 2020
 - **Recipient of the 2020 Charles E. MacQuigg Award for Outstanding Teaching**
 - CBE5194 Computational Methods for Chemical Engineering Problems
 - Class size: approx. 10 students
 - Developed a technical elective to discuss various numerical methods and their applications to solve chemical engineering problems
 - Student evaluation for instructor: **5.0/5.0** (cf. College of Engineering Average: 4.5/5.0)
 - CBE2420 Transport Phenomena I
 - Class size: approx. 50 students
 - Core course for undergraduate students
 - Student evaluation for instructor: **4.9/5.0** (cf. College of Engineering Average: 4.4/5.0)
- Spring 2019
 - CBE2420 Transport Phenomena I
 - Class size: approx. 55 students
 - Core course for undergraduate students
 - Student evaluation for instructor: **4.8/5.0** (cf. College of Engineering Average: 4.3/5.0)

- Spring 2018
 - CBE2420 Transport Phenomena I
 - Class size: approx. 70 students
 - Core course for undergraduate students
 - Student evaluation for instructor: **4.8/5.0** (cf. College of Engineering Average: 4.1/5.0)
- Spring 2017
 - CBE2420 Transport Phenomena I
 - Class size: approx. 50 students
 - Core course for undergraduate students
 - Student evaluation for instructor: **4.7/5.0** (cf. College of Engineering Average: 4.2/5.0)

Lecturing as an Assistant Professor – Delft University of Technology

- OPST course on Advanced Thermodynamics (June 2015)
 - Discuss fundamentals and applications of basic and more advanced concepts in the field of thermodynamics and transport processes

Graduate Student Instructor (GSI) – University of California, Berkeley

- CBE 154 Chemical Engineering Laboratory (Spring 2013)
 - **Recipient of the 2013 DOW Excellence in Teaching Award**
- CBE C295Z Berkeley Lecture on Energy: Carbon Capture and Sequestration (Autumn 2011)
 - Elective course for graduate-level students

RESEARCH MENTORING

Postdoctoral researchers

- Dr. Chi-Ta Yang (2021; 2016 – 2018)
- Dr. Martijn de Lange (2015)

Research assistances

- Min-Hsien Lin (2021 – present)

Graduate students

Ph.D.

- I-Ting Sung (Ph.D., 2022 – present)
- Shuangxiu Ma (Ph.D., 2021 – present)
- Changlong Zou (Ph.D., 2016 – present)
- Archit Datar (Ph.D., 2017 – 2022)
- Ting-Hsiang Hung (Ph.D., 2017 – 2021)
- Andrew Deng (Ph.D., 2016 – 2021)
- Eun Hyun Cho (Ph.D., 2016 – 2021)
- Lyu Qiang (Visiting Ph.D. student, 2017 – 2019)

M.S.

- Yi-Ming Wang (M.S., 2021 – present)

- Mao-Yuan Huang (M.S., 2021 – present)
- Ting-Yuan Wang (M.S., 2021 – present)
- Jingying Hu (M.S., 2017 – 2019)
- Drace Penley (M.S., 2017 – 2019)
- Ruiqi Hu (M.S., 2016 – 2018)
- Priya Sinha (M.S., 2016 – 2018)

Undergraduate students

- Xuan-Zhu Chen (2022 – present)
- Ming-Yen Tsai (2021 – present)
- You-Wei Hsieh (2021 – present)
- Yen-Yung Wu (2021 – present)
- Jacob Belding (2019 – present)
- Jim Bradcovich (2020 – 2021)
- Zahra Amin (2019 – 2021)
- Shreyas Sudhaman (2019 – 2020)
- Syahidah Mohd Khairi (2018 – 2019)
- Albert Lim (2016 – 2018)

PROFESSIONAL SOCIETIES

American Chemical Society (ACS), American Institute of Chemical Engineers (AIChE), AIChE Separations Division, International Adsorption Society (IAS), 台灣化學工程學會

PROFESSIONAL/FACULTY SERVICES & ACTIVITIES

Conference

- **Chair**, “Molecular and Data Science Modeling of Adsorption” session, 2021 AIChE annual meeting
- **Chair**, “Diffusion, Transport, and Dynamics in Adsorption Systems” session, 2020 AIChE annual meeting
- **Co-chair**, “Molecular and Data Science Modeling of Adsorption” session, 2020 AIChE annual meeting
- **Co-chair**, “Molecular Simulation of Adsorption II” session, 2018 AIChE annual meeting
- **Co-chair**, “Molecular Simulation of Adsorption II” session, 2017 AIChE annual meeting

Editorial Board

- **Early Career Editorial Board Member**, *Separation and Purification Technology* (Elsevier, 2021 – present)

Peer Review

- **Journal Reviewer** for >300 articles, invited by more than 50 journals such as *ACS Nano*, *ACS Appl. Nano Mater.*, *Adsorption*, *Adv. Mater.*, *ACS Appl. Mater. Interfaces*, *Appl. Surf. Sci.*, *ACS Omega*, *Appl. Sci.*, *APL Mater.*, *Chem. Eng. J.*, *Chem. Rev.*, *ChemPhysChem*, *Chem. Phys. Lett.*, *Chem. Eng. Sci.*, *Carbon*, *Chem. Methods*, *Chem. Eng. Res. Des.*, *Desalination*, *Energy & Fuels*, *Environ. Sci. Nano*, *Fuel Process. Technol.*, *Greenh Gases*, *iScience*, *Int. J. Heat Mass Transf.*, *Ind. Eng. Chem. Res.*, *J. Phys. Chem. C*, *J. Phys. Chem. Lett.*, *J. CO₂ Util.*, *J. Chem. Theory Comput.*, *J. Mol. Graph. Model.*, *J. Am. Chem. Soc.*, *J. Mem. Sci.*, *J. Mater. Chem A*, *J. Environ. Chem. Eng.*, *J. Mol. Liq.*,

Langmuir, Membranes, Mater. Chem. Phys., Mol. Sim., Materials Advance, Nanomater. Nanotechnol., Microporous Mesoporous Mater., Phys. Chem. Chem. Phys., Polymers, Phys. Status Solidi B, RSC Adv., Sep. Purif. Technol., Nature, Nat. Energy, Nat. Commun.

Committee

- Dissertation and Ph.D. candidacy/qualify committee:**

Committee	Name (Year)
Ph.D. Defense	Da-Shiuan Chiou (2022), Ming-Yang Kan (2021), Yu-Yen Chen (2021), Kuan-Hsuan Shen (2020), Fanhe Kong (2020), Eric McClure (2019), Zhang Qiang (2018), Parulkar_Aamena (2018), Ethan Chaleff (2016)
M.S. Defense	I-Ting Sung (2022), Yu-Chi Cheng (2021), Jian-Yi Li (2021), Yi-Jui Hsieh (2021), Tsung-Shun Ko (2021), Jia-Cheng Guo (2021), Rajdeep Mamtani (2021), Ruonan Zhao (2019), Shubhankar Upasani (2018), Xiangming Gu (2018), Muzhapaer Motianlifu (2017)
Ph.D. Candidacy Exam	Dongjoon Kim (2021), Jee-Yee Chen (2020), Mengdi Fan (2020), Nickolas Liesen (2020), Kai Chen (2019), Alex Spanos (2019), Mengqing Quo (2018), Cheng Chung (2017), Kuan-Hsuan Shen (2017), Qiang Zhang (2017), Jeffrey Ethier (2016)
Ph.D. Qualify Exam	Yutong Yang (2020), Jingying Hu (2020), Nickolas Liesen (2019), Mengdi Fan (2019), Ashwin Kane (2019), Jackelyn Miozzi (2019), Utkarsh Shah (2018), Kuan-Hsuan Shen (2017), Sourabh Nadgouda (2017), Mengqing Guo (2017), Richard Hickey (2017), Dikai Xu (2016), Cheng Chung (2016)

- External/Departmental committee**

Time Period	Committee	Institution
2021 – present	Computer Committee (Chair)	Department of Chemical Engineering, National Taiwan University
2021 – present	Environment and Safety Committee	Department of Chemical Engineering, National Taiwan University
2016 – 2021	Allocation Committee	Ohio Supercomputer Center, USA
2016 – 2021	Hardware Committee	Ohio Supercomputer Center, USA
2016 – 2019	Computer Committee	Department of Chemical and Biomolecular Engineering, The Ohio State University, USA
2017 – 2021	Graduate Study Committee	Department of Chemical and Biomolecular Engineering, The Ohio State University, USA
2020 – 2021	Awards Committee	Department of Chemical and Biomolecular Engineering, The Ohio State University, USA