



<b>Academic Appointments &amp; Education</b>	<i>Professor</i>	National Taiwan University Department of Chemical Engineering	2021–present
	<i>Associate Professor</i>	National Taiwan University Department of Chemical Engineering	2017–2021
	<i>Assistant Professor</i>	National Taiwan University Department of Chemical Engineering	2013–2017
	<i>Postdoc</i>	Georgia Institute of Technology School of Chemistry & Biochemistry <i>Advisor: Prof. Seth Marder</i>	2012–2013
	<i>PhD</i>	Georgia Institute of Technology School of Chemical & Biomolecular Engineering <i>Advisors: Profs. Sankar Nair and Christopher Jones</i>	2008–2012
	<i>M.S.</i>	National Taiwan University Institute of Applied Mechanics	2004–2006
	<i>B.S.</i>	National Taiwan University Department of Chemical Engineering	2000–2004

<b>Awards, Honors, Editorial Boards</b>	• LCY Young Faculty Award for Outstanding Academic Performance, <i>Taiwan Institute of Chemical Engineers</i>	2021
	• Excellent Paper Award, <i>Taiwan Institute of Chemical Engineers</i>	2021
	• Young Scholars' Creativity Award, <i>Foundation for Advancement of Outstanding Scholarship</i>	2021
	• Early Career Editorial Board Member of <i>Journal of Membrane Science</i>	2021
	• SCEJ Award for Outstanding Asian Researcher and Engineer, <i>The Society of Chemical Engineers, Japan</i>	2020
	• Ta-You Wu Memorial Award, <i>Ministry of Science and Technology of Taiwan</i>	2020
	• Excellent Teaching Award (5 times), <i>National Taiwan University</i>	2016, 2018, 2019, 2020, 2021
	• MOST Young Scholar Fellowship - The Columbus Program, <i>Ministry of Science and Technology of Taiwan</i>	2019–2023
	• Associate Editor of <i>Journal of the Taiwan Institute of Chemical Engineers</i>	2019–present
	• Excellent Mentor Award, <i>National Taiwan University</i>	2019
	• Outstanding Mentor Award, <i>ChE at National Taiwan University</i>	2018
	• Young Faculty Award, <i>Taiwan Institute of Chemical Engineers</i>	2016
	• Outstanding Young Faculty Grants, <i>Ministry of Science and Technology of Taiwan</i>	2015–2018
• Young Scientist Award – Gold Award, <i>IUMRS-ICA</i>	2014	

- Merit Pay Award for Distinguished Scholars, *Ministry of Science and Technology of Taiwan* 2013–2016

<b>Research Interests</b>	<ul style="list-style-type: none"> <li>• Metal-organic framework (MOF) membranes</li> <li>• Membrane gas separations</li> <li>• Pervaporation</li> </ul>		
<b>Professional Service</b>	<ul style="list-style-type: none"> <li>• Board of Supervisor in Taiwan Membrane Society</li> <li>• Co-organizer of 1<sup>st</sup> ChemE Workshop between KAIST and NTU</li> <li>• Co-organizer of International Symposium on Porous Materials 2021</li> <li>• Co-chair of Taipei International Conference on Catalysis</li> <li>• Co-organizer of International Symposium on Porous Materials 2020</li> <li>• Guest Editor of Journal of Chemical Engineering Japan for the special issue of IWPI</li> <li>• Organizing committee of International Conference of Inorganic Membranes (ICIM 2021)</li> <li>• Co-organizer of 1<sup>st</sup> ChemE Symposium between Sogang University and NTU</li> <li>• Secretary of International Workshop of Process Intensification (IWPI) 2018</li> <li>• Preparatory committee of International Symposium on Transport Phenomena and Applications (STPA)</li> <li>• Technical committee of International Conference of Advanced Materials Research</li> <li>• Co-PI of MOST project management: development of high-value added materials and technologies from waste and renewable resources in circular economy</li> <li>• Session chair of the 12<sup>th</sup> World Filtration Congress</li> <li>• Session chair of the 9<sup>th</sup> Conference of Asian Membrane Society</li> <li>• Organizing committee member of International Conference on Nanospace Materials</li> <li>• Organizing committee member of Taiwan Symposium on Catalysis and Reaction Engineering</li> </ul>		2021-present 2021 2021 2021 2020 2019 2019–2020 2018 2018 2018 2018 2017-2021 2016 2015 2015 2015
<b>Research Grants</b>	24. Metal-organic frameworks for solvent dehydration, <i>Industrial Technology Research Institute of Taiwan, PI.</i> 23. Metal-Organic Frameworks: from Molecular-Level Microstructural Engineering to Industrial-Scale Membrane Separation Processes, <i>Young Scholar Fellowship - The Columbus Program (3<sup>rd</sup> year out of 4), Ministry of Science and Technology of Taiwan, PI.</i> 22. Porous Materials for Sorption of Volatile Organic Solvent and for Membrane Fabrication, <i>Industrial Technology Research Institute of Taiwan, PI.</i>	NT\$ 400,000 NT\$ 5,681,000 NT\$ 400,000	2021/04–2021/11 2021/02–2022/01 2020/04–2020/11

21.	Metal-Organic Frameworks: from Molecular-Level Microstructural Engineering to Industrial-Scale Membrane Separation Processes, <i>Young Scholar Fellowship - The Columbus Program (2<sup>nd</sup> year out of 4), Ministry of Science and Technology of Taiwan, PI.</i>	NT\$ 7,733,000	2020/02– 2021/01
20.	Metal-Organic Frameworks: from Molecular-Level Microstructural Engineering to Industrial-Scale Membrane Separation Processes, <i>Young Scholar Fellowship - The Columbus Program (1<sup>st</sup> year out of 4), Ministry of Science and Technology of Taiwan, PI.</i>	NT\$ 9,500,000	2019/02– 2020/01
19.	Applications of microporous materials on acoustic devices, <i>Luxshare, PI</i>	NT\$ 660,000	2019/02– 2019/12
18.	Fabrication and applications in solvent recovery of metal-organic framework membranes, <i>Industrial Technology Research Institute of Taiwan, PI</i>	NT\$ 400,000	2019/04– 2019/11
17.	Zeolite/ceramic nanotube thin films: fundamentals of wet deposition, key techniques, and device applications, <i>Ministry of Science and Technology of Taiwan, PI.</i>	NT\$ 1,345,000	2018/08– 2019/04
16.	Development of core capability on dispersion and thin film engineering via personnel training (Phase I), <i>LCY Chemical Corp., PI.</i>	NT\$ 1,000,000	2018/08– 2019/07
15.	Simulation and Fabrication of Thermally Driven Drying Devices, <i>Industrial Technology Research Institute of Taiwan, PI</i>	NT\$ 400,000	2018/04– 2018/11
14.	Grant for Academic-Research Careers Development Program, <i>National Taiwan University, PI.</i>	NT\$ 2,300,000	2018/06– 2020/12
13.	Investigation on Water Adsorption Stability of Metal Organic Frameworks, <i>Industrial Technology Research Institute of Taiwan, PI</i>	NT\$ 400,000	2017/04– 2017/11
12.	Ultrasonic Spray for Fabrication of Nanoporous Thin Films, <i>Ministry of Science and Technology of Taiwan – LCY Chemical Corp. (industry-university cooperative research project), PI.</i>	NT\$ 1,354,760	2016/11– 2017/10
11.	Development of a Generalized Methodology for the Fabrication of Thin Films with Microporous Metal Organic Frameworks, <i>Ministry of Science and Technology of Taiwan, PI.</i>	NT\$ 3,451,000	2016/08– 2018/07
10.	Investigation on Water Adsorption Stability of Metal Organic Frameworks, <i>Industrial Technology Research Institute of Taiwan, PI</i>	NT\$ 400,000	2016/04– 2016/11
9.	Concentration Enhancement and Deionization of Polymeric Solutions, <i>LCY Chemical Corp., PI.</i>	NT\$ 700,000	2016/03– 2016/12
8.	Wetting and separation efficiency of polypropylene packing	NT\$ 874,000	2016/01–

	modified by nanoparticles, (Taiwan-South Africa joint project), <i>Ministry of Science and Technology of Taiwan, PI.</i>		2017/12
7.	Predictions of the cyclic stability of porous CO <sub>2</sub> adsorbent, <i>Industrial Technology Research Institute of Taiwan, PI.</i>	NT\$ 200,000	2015/09–2015/12
6.	Low-Dimensional Nanoporous Materials: Synthesis Mechanism, Membrane Fabrication, and Application in Separations, <i>Outstanding Young Faculty Grant, Ministry of Science and Technology of Taiwan, PI.</i>	NT\$ 4,638,000	2015/08–2018/07
5.	Structure-Property-Device Performance Relationships of Inorganic Nanotubes (Career Development Project), <i>National Taiwan University, PI.</i>	NT\$ 1,257,600	2015/08–2016/12
4.	Microporous Metal-Organic Frameworks (MOFs)-Containing Mixed Matrix Membranes (MMMs) for Pervaporation, <i>NIMS-NTU SMART Center joint grant, co-PI.</i>	NT\$ 650,000	2014/10–2015/07
3.	Advanced Technique for Fabrication Subnanoporous Films, 2014-2015, <i>Taliang Technology Co., Ltd., PI.</i>	NT\$ 126,000	2014/08–2015/07
2.	Fundamental Study on the Microstructure of Inorganic Nanotube, <i>The Tsung Cho-Chang Foundation, PI.</i>	NT\$ 380,000	2014/01–2014/12
1.	Fundamentals of Inorganic Nanotubes: Self-assembly Mechanisms, Morphology Control, and Surface Properties, <i>Ministry of Science and Technology of Taiwan, PI,</i>	NT\$ 2,007,000	2013/09–2015/07

---

**Peer Reviewed  
Journal  
Articles**

71. Eguchi, M.\*; Konarova, M.; Torad, N. L.; Chang, T.-A.; **Kang, D.-Y.**; Shapter, J. G.; Yamauchi, Y., Highly Adhesive and Disposable Inorganic Barrier Films: Made from 2D Silicate Nanosheets and Water, *J. Mater. Chem. A*, 2021, accepted.
70. Chang, C.-K.; Yu, H.J.; Jang, H.; Hung, T.-H.; Chang, C.-K.; Kim\*, J.; Lee, J.S.\*; **Kang, D.-Y.\***, Conformational-change-induced selectivity enhancement of CAU-10-PDC membrane for H<sub>2</sub>/CH<sub>4</sub> and CO<sub>2</sub>/CH<sub>4</sub> separation, *J. Membr. Sci. Lett.*, 2021, 1, 100005.
69. Hung, T.-H.; Lyu, Q.; Lin, L.-C.\*; **Kang, D.-Y.\***, Transport-Relevant Pore Limiting Diameter for Molecular Separations in Metal-Organic Framework Membranes, *J. Phys. Chem. C.*, **2021**, 125, 20416–20425.
68. 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*, **2021**, 13, 41904–41915.
67. Guo, J.-C.; Zou, C.; Chiang, C.-Y.; Chang, T.-A.; Chen, J.-J.\*; L.-C. Lin\*; **Kang, D.-Y.\***, NaP1 zeolite membranes with high selectivity for water-alcohol pervaporation, *J. Membr. Sci.*, **2021**, 639, 119762.
66. Hung, T.-H.; Deng, X.; Lyu, Q.; Lin, L.-C.\*; **Kang, D.-Y.\***, Coulombic effect on permeation of CO<sub>2</sub> in metal-organic framework membranes, *J. Membr. Sci.*, **2021**, 639, 119742.
65. An, H.; Cho, K.Y.; Lyu, Q.; Chiou, D.-S.; Nam, K.J.; **Kang, D.-Y.\***; Lin, L.-C.\*; Lee, J.S.\*; Facile Defect Engineering of Zeolitic Imidazolate Frameworks Towards Enhanced C<sub>3</sub>H<sub>6</sub>/C<sub>3</sub>H<sub>8</sub> Separation Performance, *Adv. Funct. Mater.*, **2021**, 31, 2105577.

64. Hsieh, Y.-J.; Zou C; Chen, J.-J.\*; Lin, L.-C.\*; **Kang, D.-Y.\***, Pillared-bilayer metal-organic framework membranes for dehydration of isopropanol, *Microporous Mesoporous Mater.*, **2021**, 326, 111344.
63. Shin, J.H.; Kan, M.-Y.; Oh, J.-W.; Yu, H.J.; Lin, L.-C.; **Kang, D.-Y.\***; Lee, J.S.\*, Solubility selectivity-enhanced SIFSIX-3-Ni-containing mixed matrix membranes for improved CO<sub>2</sub>/CH<sub>4</sub> separation efficiency, *J. Membr. Sci.*, **2021**, 633, 119390.
62. Chiou, D.-S.; Yu, H.J.; Hung, T.-H.; Lyu, Q.; Chang C.-K.; Lee, J.S.\*; Lin, L.-C.\*; **Kang, D.-Y.\***, Highly CO<sub>2</sub> Selective Metal-Organic Framework Membranes with Favorable Coulombic Effect, *Adv. Funct. Mater.*, **2021**, 31, 2006924.
61. Tao, T.-L.; Chang, C.-K.; Kang, Y.-H.; Chen, J.-J.; **Kang, D.-Y.\***, Enhanced pervaporation performance of zeolite membranes treated by atmospheric-pressure plasma, *J. Taiwan Inst. Chem. Eng.*, **2020**, 116, 112–120.
60. 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.*, **2020**, 59(29), 13042–13050.
59. 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*, **2020**, 491, 114537.
58. Ren, L.-X.; Chang, F.-L.; **Kang, D.-Y.**; Chen, C.-L.\*, Hybrid membrane process for post-combustion CO<sub>2</sub> capture from coal-fired power plant, *J. Membr. Sci.*, **2020**, 603, 118001.
57. Chen, J.-J.; Chiu, H.-C.; Chang, C.-W.; Shen, C.-Y.; Kang, Y.-H.; Chi, H.-Y.; Chang, C.-K.; Chuang, Y.C.; **Kang, D.-Y.\***, Core-shell metal-organic frameworks with improving cyclic stability for water adsorption, *J. Chem. Eng. Japan*, **2020**, 53(8), 1–7.
56. Lee, L.-W.; Chi, H.-Y.; Kao, Y.-C.; Hung, T.-H.; Chiou, D.-S.; Lee, G.-H. Peng, S.-M., **Kang, D.-Y.\***; Wang, C.-M.\*, Zinc(II)–Organic Framework Films with Thermochromic and Solvatochromic Applications, *Chem. Eur. J.*, **2020**, 26, 4204–4208.
55. Oh, J.W.; Cho, K.Y.; Kan, M.-Y.; Yu, H.J.; **Kang D.-Y.\***; Lee, J.S.\*, High-flux mixed matrix membranes containing bimetallic zeolitic imidazole framework-8 for C<sub>3</sub>H<sub>6</sub>/C<sub>3</sub>H<sub>8</sub> separation, *J. Membr. Sci.*, **2020**, 117735.
54. 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.*, **2019**, 123, 238002.
53. Hsu, W.-J.; Ibrahim, I.; Lin, Y.-H.; Yang, Z.-H.; Yucelen, G.I.; Han, J.W.\*; **Kang, D.-Y.\***, Transparent Conductive Films Derived from Single-Walled Aluminosilicate Nanotubes, *ACS Appl. Nano Mater.*, **2019**, 2(10), 6677–6689.
52. 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.*, **2019**, 31, 7666–7677.
51. Huang, Y.-C.; Hsu, W.-J.; Wang, C.-Y.; Tsao, H.-K.; Kang, Y.-H. ; Chen, J.-J.\*; **Kang, D.-Y.\***, Wetting Properties and Thin Film Quality in the Wet Deposition of Zeolites, *ACS Omega*, **2019**, 4, 13488–13495.
50. Lee, L.-W.‡; Pao, S.-Y.‡; Pathak, A.; **Kang, D.-Y.\***; Lu, K.-L.\*, Membrane adsorber containing new

- Sm(III)-organic framework for dye removal, *Environ. Sci. Nano*, **2019**, 6, 1067-1076 (inside cover).
49. Hsu, W.-J.; Huang, P.-S.; Huang, Y.-C.; Hu, S.-W.; Tsao, H.-K.; **Kang, D.-Y.\***, Zeolite-Based Anti-Fogging Coating via Direct Wet Deposition, *Langmuir*, **2019**, 35 (7), 2538-2546.
  48. Chi, H.-Y.‡; Hung, S.-H.‡; Kan, M.-Y.; Lee, L.-W.; Lam, C. H., Chen, J.-J.\*; **Kang, D.-Y.\***, Metal-organic frameworks for dye sorption: structure-property relationships and scalable deposition of the membrane adsorber, *CrystEngComm*, **2018**, 20, 5465-5474.
  47. Huang, P.-S.; Lam C.H.; Su, C.-Y.; Chen, Y.-R.; Lee, W.-Y.; Wang, D.-M.; Hua, C.-C.\*; **Kang, D.-Y.\*** Scalable Wet Deposition of Zeolite AEI with a High Degree of Preferred Crystal Orientation, *Angew. Chem. Int. Ed.*, **2018**, 57, 13271-13276.
  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*, **2018**, 34(14), 4180-4187.
  45. Lam, C. H.; Hsu, W.-J.; Chi, H.-Y.; Kang, Y.-H.; Chen, J.-J.\*; **Kang, D.-Y.\***, High-Throughput Fabrication of Zeolite Thin Films via Ultrasonic Nozzle Spray Deposition, *Microporous Mesoporous Mater.*, **2018**, 267, 171-180.
  44. Huang, K.-Y.; Chi, H.-Y.; Kao, P.-K.; Huang, F.-H.; Jian, Q.-M.; Cheng, I.-C.; Lee, W.-Y.; Hsu, C.-C.\*; **Kang, D.-Y.\***, Atmospheric Pressure Plasma Jet Assisted Synthesis of Zeolite-Based Low-*k* Thin Films, *ACS Appl. Mater. Interfaces*, **2018**, 10(1), 900-908.
  43. Su, C.-Y.; Yang, A.-C.; Jiang, J.-S.; Yang, Z.-H.; Huang, Y.-S.; **Kang, D.-Y.\***; Hua, C.-C.\*, "Properties of Single-Walled Aluminosilicate Nanotube/Poly(vinyl alcohol) Aqueous Dispersions", *J. Phys. Chem. B*, **2018**, 122(1), 380-391.
  42. Huang, P.-S.; Su, C.-Y.; Lam, C. H.; Lee, W.-Y.; Wang, D.-M.; Hua, C.-C.\*; **Kang, D.-Y.\***, Direct Wet Deposition of Zeolite FAU Thin Films Using Stabilized Colloidal Suspensions, *Microporous Mesoporous Mater.*, **2018**, 272, 268-295.
  41. Lam, C. H.‡; Chi, H.-Y.‡; Hsu, S.-M.; Li, Y.-S.; Lee, W.-Y.; Cheng, I.-C.; **Kang, D.-Y.\***, Surfactant-Mediated Self-Assembly of Nanocrystals to Form Hierarchically Structured Zeolite Thin Films with Controlled Crystal Orientation, *RSC Adv.*, **2017**, 7, 49048-49055.
  40. Ting, H.‡; Chi, H.-Y.‡; Lam, C. H.; Chan, K.-Y.; **Kang, D.-Y.\***, High-Permeance Metal-Organic Framework-Based Membrane Adsorber for Removal of Dye Molecules in Aqueous Phase, *Environ. Sci. Nano*, **2017**, 4, 2205-2214.
  39. Li, Y.-L.; Chi, H.-Y.; Kan, M.-Y.; Pao, S.-Y.; Kang, Y.-H.; Chen, J.-J.\*; **Kang, D.-Y.\***, Surface Engineering Layered Metal-Organic Framework to Enhance Processability and Stability in Water, *ChemNanoMat*, **2017**, 3, 902-908.
  38. Chen, Y.-R.; Tsuru, T.; **Kang, D.-Y.\***, Simulation and Design of Catalytic Membrane Reactor for Hydrogen Production via Methylcyclohexane Dehydrogenation, *Int. J. Hydrogen Energy*, **2017**, 42(42), 26296-26307.
  37. Chang, C.-W.; Guan, Z.-Y.; Kan, M.-Y.; Lee, L.-W.; Chen, H.-Y.\*; **Kang, D.-Y.\***, Vapor-Phase Synthesis of Poly(p-Xylylene) Membranes for Gas Separations, *J. Membr. Sci.*, **2017**, 539, 101-107.
  36. Liu, C.-H.; **Kang, D.-Y.\***, Influence of Interwall Interaction in Double-Walled Aluminogermanate Nanotubes on Mechanical Properties, *Comput. Mater. Sci.*, **2017**, 135, 54-63.

35. Liou, K.-H.; **Kang, D.-Y.\***; Lin, L.-C.\*, Investigating the Potential of Single-walled Aluminosilicate Nanotubes in Water Desalination, *ChemPhysChem*, **2017**, 18(2), 179-183.
34. Chiang, C.-C.; Wu, D.-Y.; **Kang, D.-Y.\***, Detailed Simulation of Fluid Dynamics and Heat Transfer in Coffee Bean Roaster, *J. Food Process. Eng.*, **2017**, 40, e12398.
33. Lam, C. H.; Yang, A.-C.; Chi, H.-Y.; Chan, K.-Y.; Hsieh, C.-C.; **Kang, D.-Y.\***, Microwave-Assisted Synthesis of Highly Monodispersed Single-Walled Aluminosilicate Nanotubes, *ChemistrySelect*, **2016**, 1(19), 6212-6216.
32. Yang, A.-C.; Li, Y.-S.; Lam, C. H.; Chi, H.-Y.; Cheng, I.-C.\*; **Kang, D.-Y.\***, Solution-Processed Ultra-Low-k Thin Films Comprising Single-Walled Aluminosilicate Nanotubes, *Nanoscale*, **2016**, 8, 17427-17432.
31. Lo, Y.; Lam, C. H.; Chang, C.-W.; Yang, A.-C; **Kang, D.-Y.\***, Polymorphism/Pseudopolymorphism of Metal-Organic Frameworks Composed of Zinc(II) and 2-Methylimidazole: Synthesis, Stability, and Application in Gas Storage, *RSC Adv.*, **2016**, 6, 89148-89156.
30. Chen, M.-J.; Yang, A.-C.; Wang, N.-H.; Chiu, H.-C.; Li, Y.-L.; **Kang, D.-Y.\***; Lo, S.-L.\*, Influence of Crystal Topology and Interior Surface Functionality of Metal-Organic Frameworks on PFOA Sorption Performance, *Microporous Mesoporous Mater.*, **2016**, 236, 202-210.
29. Wang, T.-p; **Kang, D.-Y.\***, cif2tube - Algorithm for Constructing Nanotube and Nanoscroll Models from Crystallographic Information Files, *J. Taiwan Inst. Chem. Eng.*, **2016**, 68, 415-422.
28. Chiang, C.-C.; Su, C.-Y.; Yang, A.-C.; Wang, T.-Y.; Lee, W.-Y.; Hua, C.-C.\*; **Kang, D.-Y.\***, Relationships between the Solution and Solid-State Properties of Solution-Cast Low-k Silica Thin Films, *Phys. Chem. Chem. Phys.*, **2016**, 18, 20371-20380.
27. Lo, Y; **Kang, D.-Y.\***, Pseudopolymorphic Seeding for the Rational Synthesis of Hybrid Membranes with a Zeolitic Imidazolate Framework for Enhanced Molecular Separation Performance, *J. Mater. Chem. A*, **2016**, 4, 4172-4179.
26. Liou, K.-H.; **Kang, D.-Y.\***, Defective Single-Walled Aluminosilicate Nanotubes: Structural Stability and Mechanical Properties, *ChemNanoMat*, **2016**, 2 (3), 189-195 (Outside Front Cover).
25. Yang, A.-C.; Wang, T.-Y; Dai, C.-A.; **Kang, D.-Y.\***, Incorporation of Single-Walled Aluminosilicate Nanotubes for the Control of Crystal Size and Porosity of Zeolitic Imidazolate Framework-L, *CrystEngComm*, **2016**, 18, 881-887 (Outside Front Cover).
24. Wang, T.-p; **Kang, D.-Y.\***, Highly selective mixed-matrix membranes with layered fillers for molecular separation, *J. Membr. Sci.*, **2016**, 497, 394-401.
23. Yang, A.-C.; Liu, C.-H; **Kang, D.-Y.\***, Estimations of Effective Diffusivity of Hollow Fiber Mixed Matrix Membranes, *J. Membr. Sci.*, **2015**, 495, 269-275.
22. Lee, W.-C.; Chien, H.-T; Lo, Y; Chiu, H.-C.; Wang, T.-p.; **Kang, D.-Y.\***, Synthesis of Zeolitic Imidazolate Framework Core-Shell Nanosheets Using Zinc-Imidazole Pseudopolymorphs, *ACS Appl. Mater. Interfaces*, **2015**, 7 (33), 18353-18361.
21. Chien, H.-T; Chen, M.-C.; Huang, P.-S; Lai, J.-Y; Hsu, C.-C.\*; **Kang, D.-Y.\***, Reactive Atmospheric Pressure Plasma for Highly Efficient Removal of Structure-Directing Agents from Zeolite Thin Films, *Chem. Commun.*, **2015**, 51, 13910-13913.
20. **Kang, D.-Y.\***; Liou, K.-H.; Chang, W.-L, Investigating Friction as a Main Source of Entropy Generation in the Expansion of Confined Gas in a Piston-and-Cylinder Device, *J. Chem. Educ.*,

2015, 92 (10), 1667-1671.

19. Liou, K.-H.; Tsou, N.-T.; **Kang, D.-Y.\***, Relationships among the Structural Topology, Bond Strength, and Mechanical Properties of Single-Walled Aluminosilicate Nanotubes, *Nanoscale*, **2015**, 7 (49), 16222-16229 (Outside Back Cover).
18. Mukundam, V.; Dhanunjayarao, K.; Chuang, C.-N.; **Kang, D.-Y.**; Leung, M.-k.; Hsieh, K.-H.; Venkatasubbaiah, K.\*, Design, Synthesis, Photophysical and Electrochemical Properties of 2-(4,5-diphenyl-1-p-aryl-1H-imidazol-2-yl)phenol-based Boron Complexes, *Dalton Trans.*, **2015**, 44, 10228-10236.
17. **Kang, D.-Y.\***; Lydon, M.E.; Yucelen, G.I.; Jones, C.W.; Nair, S.\*, Solution-Processed Ultrathin Aluminosilicate Nanotube-Poly(vinyl alcohol) Composite Membranes with Partial Alignment of Nanotubes, *ChemNanoMat*, **2015**, 1(2), 102-108 (Inside Front Cover).
16. Wang, T.-p.; **Kang, D.-Y.\***, Predictions of Effective Diffusivity of Mixed Matrix Membranes with Tubular Fillers, *J. Membr. Sci.*, **2015**, 485, 123-131.
15. He, X.; Cai, D.; **Kang, D.-Y.**; Haske, W.; Zhang, Y.; Zuniga, C.A.; Wunsch, B.H.; Barlow, S.; Leisen, J.; Bucknall, D.; Kippelen, B\*; Marder, S.R.\*, Phosphorescent Light-Emitting Diodes Using Triscarbazole/Bis(oxadiazole) Hosts: Comparison of Homopolymer Blends and Random and Block Copolymers, *J. Mater. Chem. C*, **2014**, 2, 6743.
14. **Kang, D.-Y.**; Brunelli, N.A.; Yucelen, G.I.; Venkatasubramanian, A.; Zang, J.; Leisen, J.; Hesketh, P.J.; Jones, C.W.\*; Nair, S.\*, Direct Synthesis of Single-Walled Aminoaluminosilicate Nanotubes with Enhanced Molecular Adsorption Selectivity, *Nat. Commun.*, **2014**, 5, 3342.
13. Huang, C.-D.; **Kang, D.-Y.**; Hsieh, C.-C\*, Simulations of DNA Stretching by Flow Field in Microchannels with Complex Geometry, *Biomicrofluidics*, **2014**, 8 (1), 014106.
12. Singh, T; **Kang, D.-Y.**; Nair, S.\*, Rigorous Calculations of Permeation in Mixed-Matrix Membranes: Evaluation of Interfacial Equilibrium Effects and Permeability-based Models, *J. Membr. Sci.*, **2013**, 448, 160-169.
11. Wunsch, B.H.; Rumi M.; Tummala, N.R.; Risko Chad; **Kang, D.-Y.**; Steirer, X; Gantz, J; Said, M.; Armstrong, N; Bredas, J.-L; Bucknall, D.G.; Marder S. R.\*, Structure– Processing–Property Correlations in Solution-Processed Small-Molecule Organic Solar Cells, *J. Mater. Chem. C*, **2013**, 34 (1), 5250-5260
10. Yucelen, G. I.; **Kang, D.-Y.**; Schmidt-Krey, I.; Beckham, H. W.; Nair, S.\*, A Generalized Kinetic Model for the Formation and Growth of Single-Walled Metal Oxide Nanotubes, *Chem. Eng. Sci.*, **2013**, 90 (7), 200-212.
9. Kuwahara, Y.; **Kang, D.-Y.**; Copeland, J.; Bollini, P.; Sievers, C.; Kamegawa, T.; Yamashita, H.; Jones, C. W.\*, Enhanced CO<sub>2</sub> Adsorption over Polymeric Amines Supported on Heteroatom-incorporated SBA-15 Silica: Impact of Heteroatom Type and Loading, *Chem. Eur. J.*, **2012**, 18 (52), 16649-16664.
8. Zhang, J.; **Kang, D.-Y.**; Barlow S.; Marder, S. R.\*, Transition Metal-Catalyzed C-H Activation as a Route to Structurally Diverse Di(arylthiophenyl)-Diketopyrrolopyrroles, *J. Mater. Chem.*, **2012**, 22 (40), 21392-21394.
7. Kuwahara Y.; **Kang, D.-Y.**; Copeland, J.; Brunelli, N. A.; Didas S. A.; Bollini, P.; Sievers, C.; Kamegawa, T.; Yamashita H.; Jones, C. W.\*, Dramatic Enhancement of CO<sub>2</sub> Uptake by Poly(ethyleneimine) Using Zirconosilicate Supports, *J. Am. Chem. Soc.*, **2012**, 134 (26), 10757-



10760 .

6. Yucelen, G. I.; **Kang, D.-Y.**; Guerrero, R. C.; Wright, E. R.; Beckham, H. W.; Nair, S.\*, Shaping Nanotubes at the Molecular Scale from Precursors of Controlled Curvature, *Nano Lett.*, **2012**, 12 (2), 827-832.
5. **Kang, D.-Y.**; Tong, H. M.; Zang, J.; Sholl, D.S.; Jones, C. W.\*; Nair, S.\*, Single-Walled Aluminosilicate Nanotube / Poly (vinyl alcohol) Nanocomposite Membranes, *ACS Appl. Mater. Interfaces*, **2012**, 4 (2), 965-972.
4. **Kang, D.-Y.**; Jones, C. W.\*; Nair, S.\*, Modeling Mass Transport in Composite Membranes with Tubular Fillers, *J. Membr. Sci.*, **2011**, 381 (1), 50-63.
3. **Kang, D.-Y.**; Zang, J.; Jones, C. W.\*; Nair, S.\*, Single-Walled Aluminosilicate Nanotubes with Organic-Modified Interiors. *J. Phys. Chem. C*, **2011**, 115 (15), 7676-7685.
2. **Kang, D.-Y.**; Zang, J.; Wright, E. R.; McCanna, A. L.; Jones, C. W.\*; Nair, S.\*, Dehydration, Dehydroxylation, and Rehydroxylation of Single-Walled Aluminosilicate Nanotubes. *ACS Nano*, **2010**, 4 (8), 4897-4907.
1. **Kang, D.-Y.\***; Wu, E; Wang, D.-M., Modeling White Light-Emitting Diodes with Phosphor Layers. *Appl. Phys. Lett.*, **2006**, 89 (23), 231102.

---

## Patents

4. Nair, S; **Kang, D.-Y.**; Brunelli, B.A.; Jones, C.W., Functionalized Single-Walled Nanotubes and Methods Thereof, US Patent # 9290381 B2
3. Nair, S; **Kang, D.-Y.**; Jones, C.W., Single-Walled Metal Oxide and Metal Sulphide Nanotubes/Polymer Composites, US Patent #9174842 B2
2. **Kang, D.-Y.**; Nair, S; Jones, C.W., Single-Walled Metal Oxide Nanotubes, US Patent #8637693 B2
1. Wu, E., **Kang, D.-Y.**, Wang, D.-M. Light Emitting Diode Die with at Least One Phosphor Layer and Method for Forming the Same, US Patent #8242517

---

## Invited Lectures

26. Seminar, Department of Chemical and Materials Engineering at National Central University, Taiwan Apr. 2020
25. Seminar, Department of Materials Science and Engineering at National Taiwan University of Science and Technology, Taiwan Dec. 2019
24. Seminar, Department of Chemistry at National Tsing Hua University, Taiwan Dec. 2019
23. Seminar, Department of Chemical and Biomolecular Engineering at KAIST, Korea Oct. 2019
22. Seminar, Entirgis, Hsinchu, Taiwan Jun. 2019
21. Seminar, Department of Chemical Engineering at National Tsing Hua University, Taiwan May 2019
20. Seminar, Department of Chemical Engineering at National Cheng Kung University, Taiwan Dec. 2018
19. Seminar, Department of Chemical Engineering at Inha University, Korea Aug. 2018
18. Seminar, LCY Chemical Group, Taiwan Jun. 2018
17. Seminar, Department of Chemical Engineering at National Taiwan University of Science and Technology, Taiwan May 2017

16. Seminar, Department of Mechanical Engineering at National Taiwan University of Science and Technology, Taiwan May 2017
15. Seminar, The Department of Chemical Engineering at Hiroshima University, Japan Apr. 2017
14. Seminar, The Affiliated Senior High School of National Taiwan Normal University, Taiwan Dec. 2016
13. Seminar, Taipei Municipal Song Shan Senior High School, Taiwan Nov. 2016
12. Seminar, Taipei Wego Private Bilingual High School, Taiwan Oct. 2016
11. Seminar, Department of Chemical Engineering at National Chung Cheng University, Taiwan Jun. 2016
10. Seminar, Department of Chemical Engineering at National Cheng Kung University, Taiwan Dec. 2015
9. Seminar, Institute of Polymer Science and Engineering at National Taiwan University, Taiwan Jun. 2015
8. Seminar, Department of Materials Science and Engineering at National Chiao Tung University, Taiwan Jun. 2015
7. Seminar, Department of Chemical Engineering at National Chung Hsing University, Taiwan May 2015
6. Seminar, Institute of Applied Mechanics at National Taiwan University, Taiwan Mar. 2015
5. Seminar, Department of Chemical and Materials Engineering at National Central University, Taiwan Jun. 2014
4. Seminar, Linkou Senior High School, Taiwan Jun. 2014
3. Seminar, Department of Chemical Engineering at National Chung Cheng University, Taiwan Jan. 2014
2. Seminar, R&D Center for Membrane Technology at Chung Yuan Christian University, Taiwan Aug. 2013
1. Nano@Tech Seminar, Institute for Electronics and Nanotechnology at Georgia Institute of Technology, USA Apr. 2013

---

## Conferences

45. **Kang, D.-Y.\* (Invited Speaker)**, Rational engineering of metal-organic framework membranes for gas separation - a combination of computational and experimental approach, *Pacificchem*, online Dec. 2021
44. **Kang, D.-Y.\* (Invited Speaker)**, Mass Transfer in MOFs and Their Applications on Membrane Gas Separations, *MACRO 2020+*, online May 2021
43. **Kang, D.-Y.\* (Award Lecture)**, Advancing Metal-Organic Framework Membranes for Highly-Efficient Molecular Separations, *Annual Meeting of Society of Chemical Engineers, Japan*, online Mar. 2021
42. **Kang, D.-Y.\* (Keynote Speaker)**, CO<sub>2</sub> Selective MOF Membrane with Favorable Charge Effect, *30<sup>th</sup> Anniversary of Membrane Society of Korea*, online Oct. 2020
41. **Kang, D.-Y.\* (Invited Speaker)**, Emerging Applications of Zeolite/Ceramic Nanotube Thin Films and MOF Membranes for Gas Separations, *International Symposium on Porous Materials*, Tokyo, Japan Nov. 2019

40. **Kang, D.-Y.\* (Invited Speaker)**, Zeolite/MOF membranes for antifogging coating and molecular separations, *KIChE Annual Meeting*, Daejeon, Korea Oct. 2019
39. **Kang, D.-Y.\* (Invited Speaker)**, Effects of Framework Flexibility and Aperture Size of Metal-Organic Frameworks on Molecular Transport in Membranes, *12<sup>th</sup> Conference of the Aseanian Membrane Society*, Jeju, Korea Jul. 2019
38. **Kang, D.-Y.\* (Invited Speaker)**, Influence of Structural Flexibility of MOF Membranes on Molecular Transport Properties, *International Membrane Conference in Taiwan (IMCT)*, Taipei, Taiwan Jun. 2019
37. **Kang, D.-Y.\* (Invited Speaker)**, MOF and Zeolite Membranes: Fabrication and Applications, *Annual Meeting of Taiwan Filtration and Separations Society*, Taipei, Taiwan May 2019
36. **Kang, D.-Y.\* (Invited Speaker)**, *Advanced Hybrid Materials and Membrane Separation Symposium*, Chung Yuan Christian University, Taoyuan City, Taiwan May 2019
35. **Kang, D.-Y.\* (Invited Speaker)**, Deposition and Applications of Zeolite/MOF Membranes, *2<sup>nd</sup> SGU-NTU ChemE Symposium*, Sogang University, Seoul, Korea Apr. 2019
34. **Kang, D.-Y.\* (Invited Speaker)**, Metal-organic framework membranes for liquid-phase and gas-phase separations, *Symposium on Advanced Drying Techniques*, ITRI, Hsinchu, Taiwan Oct. 2018
33. **Kang, D.-Y.\* (Invited Speaker)**, Metal-organic framework membranes for liquid-phase and gas-phase separations, *Summer Workshop of KIChE*, Cheonan, Korea Aug. 2018
32. **Kang, D.-Y.\* (Invited Speaker)**, Wet Deposition of Nanoporous Thin Films, *7th Summer Course and Workshop on Emergent Functional Matter Science*, Hsinchu, Taiwan Jun. 2018
31. **Kang, D.-Y.\* (Keynote Speaker)**, High-Value Products Produced from Waste or Reusable Resources, *International Symposium on the Circular Economy, Chemical Industry, and Tax Policy*, Taipei, Taiwan Apr. 2018
30. **Kang, D.-Y.\***, Membranes Comprising Metal-Organic Frameworks for Water Treatment, *ICAMR*, Fukuoka, Japan Jan. 2018
29. **Kang, D.-Y.\* (Invited Speaker)**, Composite Membranes Comprising Two Microporous Materials for Gas Separation, *Fall Meeting of Catalysis Society of Taiwan*, Taipei, Taiwan Dec. 2017
28. **Kang, D.-Y.\***, Metal-Organic Frameworks as Membrane Adsorber for Water Treatment, *IUMRS-ICA*, Taipei, Taiwan Nov. 2017
27. **Kang, D.-Y.\* (Invited Speaker)**, Wet Deposition of Inorganic Nanoporous Thin Films, *KIChE Annual Meeting*, Daejeon, Korea Oct. 2017
26. **Kang, D.-Y.\***, Wet Deposition of Low-k Thin Films Composed of Ceramic Nanotubes, *ICMSET*, Seoul, Korea Oct. 2017
25. **Kang, D.-Y.\* (Invited Speaker)**, Microwave-Assisted Synthesis of Inorganic Nanomaterials, *CEM Workshop*, Taipei, Taiwan May 2017
24. **Kang, D.-Y.\* (Invited Speaker)**, Wet Deposition of Inorganic Nanoporous Thin Films, *Japan-Taiwan International Engineering Forum*, Tokyo, Japan Mar. 2017

23. **Kang, D.-Y.\* (Invited Speaker)**, Simulations of Transport Phenomena Using COMSOL Multiphysics – Class Projects, *COMSOL Multiphysics Conference*, Taipei, Taiwan Nov. 2016
22. **Kang, D.-Y.\***, Direct Deposition of Inorganic Nanoporous Thin Films for Applications in Electronics, *7<sup>th</sup> International Zeolite Membrane Meeting*, Dalian, China Aug. 2016
21. **Kang, D.-Y.\***, Hybrid Zeolite Imidazolate Framework Thin Films for Gas Separations, *Advances in Functional Materials*, Jeju, Korea Aug. 2016
20. **Kang, D.-Y.\* (Invited Speaker)**, Emerging methods for fabrication of MOF, zeolite, and nanotube membranes, *7<sup>th</sup> International Symposium on Inorganic Membranes*, Tokyo, Japan Jul. 2016
19. **Kang, D.-Y.\* (Invited Speaker)**; Lo, Y., Hybrid ZIF Membranes with Enhanced Hydrogen Separation Performance, *International Membrane Conference in Taiwan*, Chungli, Taiwan May 2016
18. **Kang, D.-Y.\* (Invited Speaker)**; Lo, Y., ZIF-ZIF Hybrid Membranes for Hydrogen Purification, *12<sup>th</sup> World Filtration Congress*, Taipei, Taiwan Apr. 2016
17. **Kang, D.-Y.\* (Invited Speaker)**, Estimations of Effective Diffusivity of Various Types of Mixed Matrix Membranes, *TwIChE Annual Meeting 2015*, Kaohsiung, Taiwan Nov. 2015
16. **Kang, D.-Y.\* (Keynote Speaker)**, Mechanical Properties of Single-Walled Aluminosilicate Nanotubes, *1<sup>st</sup> Computational Mechanics Conference in Taiwan*, Taipei, Taiwan Oct. 2015
15. **Kang, D.-Y.\* (Invited Speaker)**, Ultra Nanotube Composite Membranes for Molecular Separations, *NTU-NIMS Workshop*, Nantou, Taiwan Sep. 2015
14. **Kang, D.-Y.\***, Facile Removal of Structure Directing Agent from Zeolite Membranes Using Atmospheric Pressure Plasma Jet, *Sol-Gel 2015*, Kyoto, Japan Sep. 2015
13. **Kang, D.-Y.\***, Ultra Thin Nanotube Composite Membranes for Molecular Separations, *9<sup>th</sup> Conference of Asian Membrane Society*, Taipei, Taiwan Jul. 2015
12. **Kang, D.-Y.\* (Invited Speaker)**; Liou, K.-H., Rational Engineering Metal Oxide Nanotubes, *International Conference on Nanospace Materials*, Taipei, Taiwan Jun. 2015
11. **Kang, D.-Y.\* (Invited Speaker)**, Inorganic Nanotube-Polymer Composite Membranes for Separation Technology, *Emerging Information and Technology Association (EITA)-New Materials*, Tainan, Taiwan Nov. 2014
10. **Kang, D.-Y.\* (Invited Speaker)**, Estimation of Effective Thermal Conductivity and Diffusivity of Nanocomposites using COMSOL, *COMSOL Multiphysics Conference*, Taipei, Taiwan Nov. 2014
9. **Kang, D.-Y.\***, Novel Inorganic Nanotubular Materials for CO<sub>2</sub> Capture, *IUMRS-ICA*, Fukuoka, Japan Aug. 2014
8. **Kang, D.-Y.\***, Polymer-Inorganic Nanotube Nanocomposite Membranes for Alcohol Dehydration, *IUMRS-ICA*, Fukuoka, Japan Aug. 2014
7. **Kang, D.-Y.\***, Inorganic Nanotube-Polymer Composites for Novel Separation Platforms, *International Conference on Mechanical, Automotive, and Materials* May 2014

Engineering, Singapore

6. **Kang, D.-Y. (Invited Speaker)\***; Jones, C.W.; Nair, S., Poly(vinyl alcohol)/ Single-Walled Aluminosilicate Nanotube Mixed-Matrix-Membrane for Ethanol-Water Mixture Dehydration, *International Membrane Conference in Taiwan*, Chungli, Taiwan Aug. 2013
5. **Kang, D.-Y.**; Jones, C.W.\*; Nair, S.\*, An Inorganic Nanotube/Polymer Composite Membrane Platform for Molecular Separations, *AIChE Annual Meeting*, Pittsburgh, USA Oct. 2012
4. **Kang, D.-Y.**; Zang, J.; Sholl, D.S.; Jones, C.W.\*; Nair, S.\*, Single-Walled Aluminosilicate Nanotubes with Organic-Modified Interiors, *AIChE Annual Meeting*, Minneapolis, USA Oct. 2012
3. **Kang, D.-Y.**; Jones, C.W.\*; Nair, S.\*, Modeling Molecular Transport In Composite Membranes with Tubular Fillers, *AIChE Annual Meeting*, Minneapolis, USA Oct. 2012
2. **Kang, D.-Y.**; Zang, J.; Sholl, D.S.; Jones, C.W.\*; Nair, S.\*, Single-Walled Aluminosilicate Nanotubes: Emerging Materials for Separations and Renewable Energy Technology, *Pacificchem*, Hawaii, USA Dec. 2010
1. **Kang, D.-Y.**; Zang, J.; Jones, C.W.\*; Nair S.\*, Dehydration, Dehydroxylation, and Rehydroxylation of Single-Walled Aluminosilicate Nanotubes, *ACS Fall Meeting*, Boston, USA Aug. 2010

<b>Teaching</b>			
	• ChemE 3004	Chemical Engineering Thermodynamics	Fa 2014, Fa 2015, Fa 2016, Fa 2017, Fa 2018, Fa 2019, Su 2020, Fa 2021
	• ChemE 3007	Transport Phenomena and Unit Operation (I)	Fa 2013, Fa 2014
	• ChemE 4006	Chemical Engineering Laboratory	Fa 2015, Fa 2016, Sp 2017, Fa 2020, Sp 2021, Fa 2021
	• ChemE 5030	Thin-Film Technology and Surface Analysis	Sp 2015, Sp 2016, Sp 2017
	• ChemE 5036	Computer-Aided Computation for Chemical Engineers	Sp 2016, Sp 2017, Sp 2018, Sp 2019, Fa 2019
	• ChemE 5053	Introduction to Composite Materials	Fa 2013, Fa 2014
	• ChemE 7003	Advanced Chemical Engineering Thermodynamics	Sp 2014, Sp 2015, Sp 2016, Sp 2018, Sp 2019, Sp 2020, Sp 2021

<b>Honors of Advised Students</b>			
	• Chung-Kai Chang (PhD student)	wins 1 <sup>st</sup> place in poster presentation at the annual meeting of Taiwan Filtration and Separation Society	2021
	• Da-Shiuan Chiou (PhD student)	wins outstanding oral presentation award at the annual meeting of TwiChE	2020
	• Chung-Kai Chang (PhD student)	wins excellent oral presentation award at the annual meeting of TwiChE	2020
	• Yi-Chen Huang	wins MOST undergraduate research fellowship.	2018
	• Ming-Yang Kan (MS student)	wins outstanding poster award at the annual meeting of	2017

TwIChE 2017 in Taiwan.

- Yu-Hsuan Lin (undergraduate student) wins outstanding poster award at the annual meeting of TwIChE 2017 in Taiwan. 2017
- Yu-Hsuan Lin wins MOST undergraduate research fellowship. 2017
- Chao-Wen Chang (undergraduate student) wins the outstanding English oral presentation Award in the TwIChE Annual Meeting. 2016
- Heng-Yu Chi (research assistant) wins the Excellent Poster Award in the TwIChE Annual Meeting. 2016
- Chon Hei Lam (master student) wins Excellent Poster Award at annual meeting of Taiwan Association for Coating and Thin Film 2016 in Taiwan. 2016
- An-Chih Yang (research assistant) and Heng-Yu Chi (research assistant) win awards on top and outstanding oral performance respectively at Interface Science Conference 2016 in Taiwan. 2016
- Chih-Han Liu wins (master student) Poster Award in 2016 Conference on Functional Materials in Taiwan. 2016
- Yan-Shu Huang wins MOST undergraduate research fellowship. 2016
- Tung-ping Wang wins (master student) Poster Award in 2015 Conference on Computational Fluid Dynamics in Taiwan. 2015
- Tung-ping Wang wins (master student) Microscopy Society of Taiwan Microscopic Imaging Award. 2015
- An-Chih Yang (undergraduate student) wins AIP student poster award in 2015 ICNM 2015
- Ming-Yang Gan (undergraduate student) wins MOST undergraduate research fellowship. 2015
- Ming-Yang Gan (undergraduate student) wins the NTU Presidential Award for outstanding academic performance (Top 5%). 2015
- An-Chih Yang (undergraduate student) wins the NTU Presidential Award for outstanding academic performance (Top 5%). 2015
- Tun-ping Wang (master student) wins the Excellent English Oral Presentation Award in the TwIChE Annual Meeting. 2014
- Kai-Hsin Liou (master student) wins the Excellent English Oral Presentation Award in the TwIChE Annual Meeting. 2014

---

**Contact**

**Address** Department of Chemical Engineering

National Taiwan University

No. 1, Sec. 4, Roosevelt Road

Taipei 10617, Taiwan

**Tel** +886-2-33661767

**Email** [dunyen@ntu.edu.tw](mailto:dunyen@ntu.edu.tw)

**Website** <http://mmlab-ntu.tw>

**ORCID** 0000-0002-2349-4432

**ResearcherID** AAC-7898-2021