

William R. Dichtel, Ph.D.
NORTHWESTERN UNIVERSITY
ROBERT L. LETSINGER PROFESSOR OF CHEMISTRY

EDUCATION AND TRAINING

Massachusetts Institute of Technology	Chemistry	B.S.	2000
University of California - Berkeley Advisor: Jean M. J. Fréchet	Chemistry	Ph.D	2005
UCLA and Caltech Advisors: J. Fraser Stoddart and James R. Heath	Chemistry	Postdoc	2005–2008

PROFESSIONAL APPOINTMENTS

Robert L. Letsinger Professor of Chemistry	Northwestern University	2016-Present
Associate Professor	Cornell University	2014-2016
Assistant Professor	Cornell University	2008-2014
Research Associate	UCLA & Caltech (jointly appointed)	2005-2008
Graduate Research Assistant	University of California, Berkeley	2000-2005

HONORS AND AWARDS

ACS/PMSE Global Outstanding Student & Mentor Awards in Polymer Science & Engineering (2021)
Fellow, American Association for the Advancement of Science (2021)
National Laureate, Blavatnik Award for Young Scientists in Chemistry (2020)
Finalist, Blavatnik Award for Young Scientists (2019)
Akron Local Section Award, American Chemical Society (2018)
Research Corporation Frontiers in Research Excellence and Discovery (FRED) Award (2018)
Guggenheim Fellowship (2018)
Crain's 40 under 40 in Chicago Business (2017)
Leo Hendrik Baekeland Award, North Jersey Section of the ACS (2017)
Finalist, Blavatnik Award for Young Scientists (2017)
Arthur K. Doolittle Award, ACS PMSE Division (2017)
Visiting Miller Professor, University of California, Berkeley (2016)
John D. and Catherine T. MacArthur Fellowship (2015)
Kavli Frontiers of Science Fellow (2015)
Kavli Emerging Leader in Chemistry Lecturer, 250th ACS National Meeting (2015)
Polymer International – IUPAC Award for Creativity in Applied Polymer Science (2014)
ACS National Fresenius Award (2013)
Camille Dreyfus Teacher Scholar Award (2013)
ACS Arthur C. Cope Scholar Award (2013)
Beckman Young Investigator Award (2012)
Sloan Research Fellowship (2012)
Research Corporation Cottrell Scholar Award (2012)
NSF CAREER Award (2011)
3M Nontenured Faculty Award (2010-2012)

PEER-REVIEWED PUBLICATIONS

177. Jiang, Z.; Dong R.; Evans, A.M.; Ebrahim, M.; Li, S.; Dichtel, W.R.; Dario, A.; and Livingston, A.G. "Aligned Macrocylyce Pores in Ultrathin Films for Accurate Molecular Sieving." *Nature*, **2022**. 609, 58-64. DOI: 0.1038/s41586-022-05032-1
176. Trang, B.; Li, Y.; Xue, X-S.; Ateia, M.; Houk, K.N.; and Dichtel, W.R.; Low-temperature Mineralization of Perfluorocarboxylic Acids. *Science*, **2022**. 377, 6608; 839-845. DOI: 10.1126/science.abm8868
175. Strauss, M.J.; Evans, A.M.; Roesner, E.K.; Monsky, R.J.; Bardot, M.I. and Dichtel, W.R. "Divergent Nanotube Synthesis through Reversible Macrocyclc Assembly" *Accts. of Mat. Res.* **2022**. DOI: 10.1021/accountsmr.2c00062
174. Turetsky, D.; Alzate-Sanchez, D.M.; Wasson, M. C.; Yang A.; Noh, H.; Atilgan, A.; Islamoglu, T.; Farha, O.K.; and Dichtel, W.R. "Hot Press Synthesis of MOF/Textile Composites for Nerve Agent Detoxification" *ACS Mat. Lett*, **2022**. 4, 8, 15-11-1515. DOI: 10.1021/acsmaterialslett.2c00258
173. Wang, R.; Lin, Z.W.; Klemes, M.J.; Ateia, M.; Trang, B.; Wang, J.; Ching, C.; Helbling, D.E., and Dichtel, W.R. "A Tunable Porous Beta-Cyclodextrin Polymer Platform to Understand and Improve Anionic Pfas Removal." *ACS Central Science*, **2022**. 8, 5; 663-669. DOI: 10.1021/acscentsci.2c00478
172. Rashid, R.B.; Evans, A.M.; Hall, L.A.; Dasari, R.R.; Roesner, E.K.; Marder, S.R.; D'Allesandro, D.M.; Dichtel, W.R., and Rivnay, J. A. "Semiconducting Two-Dimensional Polymer as an Organic Electrochemical Transistor Active Layer." *Advanced Materials*, **2022**. 34, 21. DOI: 10.1002/adma.202110703
171. Roy, I.; Evans, A.M.; Das, P.J.; Ateia, M.; Ryder, M.R.; Jones, L.O.; Kazem-Rostami, M.; Goswami, S.; Beldjoudi, Y.; Shen, D.K.; Schatz, G.C.; Hupp, J.T.; Dichtel, W.R., and Stoddart, J.F. "Cyclophane-Based Two-Dimensional Polymer Formed by an Interfacial Click Reaction." *Cell Reports Physical Science*, **2022**. 3, 4. DOI: 10.1016/j.xcrp.2022.100806
170. Haque, F.M.; Ishibashi, J.S.A.; Lidston, C.A.L.; Shao, H.L.; Bates, F.S.; Chang, A.B.; Coates, G.W.; Cramer, C.J.; Dauenhauer, P.J.; Dichtel, W.R.; Ellison, C.J.; Gormong, E.A.; Hamachi, L.S.; Hoye, T.R.; Jin, M.Y.; Kalow, J.A.; Kim, H.J.; Kumar, G.; LaSalle, C.J.; Liffland, S.; Lipinski, B.M.; Pang, Y.T.; Parveen, R.; Peng, X.Y.; Popowski, Y.; Prebihalo, E.A.; Reddi, Y.; Reineke, T.M.; Sheppard, D.T.; Swartz, J.L.; Tolman, W.B.; Vlaisavljevich, B.; Wissinger, J.; Xu, S., and Hillmyer, M.A. "Defining the Macromolecules of Tomorrow through Synergistic Sustainable Polymer Research." *Chemical Reviews*, **2022**. 122, 6; 6322-6373. DOI: 10.1021/acs.chemrev.1c00173
169. Evans, A.M.; Collins, K.A.; Xun, S.N.; Allen, T.G.; Jhulki, S.; Castano, I.; Smith, H.L.; Strauss, M.J.; Oanta, A.K.; Liu, L.J.; Sun, L.; Reid, O.G.; Sini, G.; Puggioni, D.; Rondinelli, J.M.; Rajh, T.; Gianneschi, N.C.; Kahn, A.; Freedman, D.E.; Li, H.; Barlow, S.; Rumbles, G.; Bredas, J.L.; Marder, S.R., and Dichtel, W.R. "Controlled N-Doping of Naphthalene-Diimide-Based 2d Polymers." *Advanced Materials*, **2022**. 34, 22. DOI: 10.1002/adma.202101932
168. Roesner, E.K.; Asheghali, D.; Kirillova, A.; Strauss, M.J.; Evans, A.M.; Becker, M.L., and Dichtel, W.R. "Arene-Perfluoroarene Interactions Confer Enhanced Mechanical Properties to Synthetic Nanotubes." *Chemical Science*, **2022**. 13, 8; 2475-2480. DOI: 10.1039/d1sc05932g

167. Ching, C.; Ling, Y.H.; Trang, B.; Klemes, M.; Xiao, L.L.; Yang, A.; Barin, G.; Dichtel, W.R., and Helbling, D.E. "Identifying the Physicochemical Properties of Beta-Cyclodextrin Polymers That Determine the Adsorption of Perfluoroalkyl Acids." *Water Research*, **2022**. 209. DOI: 10.1016/j.watres.2021.117938
165. Helweh, W.; Flanders, N.C.; Wang, S.W.; Phelan, B.T.; Kim, P.; Strauss, M.J.; Li, R.L.; Kelley, M.S.; Kirschner, M.S.; Edwards, D.O.; Spencer, A.P.; Schatz, G.C.; Schaller, R.D.; Dichtel, W.R., and Chen, L.X. "Layered Structures of Assembled Imine-Linked Macrocycles and Two-Dimensional Covalent Organic Frameworks Give Rise to Prolonged Exciton Lifetimes." *Journal of Materials Chemistry C*, **2022**. 10, 8; 3015-3026. DOI: 10.1039/d1tc05840a
164. Hanna, S.L.; Chheda, S.; Anderson, R.; Ray, D.; Malliakas, C.D.; Knapp, J.G.; Otake, K.; Li, P.; Li, P.H.; Wang, X.J.; Wasson, M.C.; Zosel, K.; Evans, A.M.; Robison, L.; Islamoglu, T.; Zhang, X.; Dichtel, W.R.; Stoddart, J.F.; Gomez-Gualdron, D.A.; Gagliardi, L., and Farha, O.K. "Discovery of Spontaneous De-Interpenetration through Charged Point-Point Repulsions." *Chem*, **2022**. 8, 1; 225-242. DOI: 10.1016/j.chempr.2021.10.027
163. Evans, A.M.; Strauss, M.J.; Corcos, A.R.; Hirani, Z.; Ji, W.; Hamachi, L.S.; Aguilar-Enriquez, X.; Chavez, A.D.; Smith, B.J., and Dichtel, W.R. "Two-Dimensional Polymers and Polymerizations." *Chemical Reviews*, **2022**. 122, 1; 442-564. DOI: 10.1021/acs.chemrev.0c01184
162. Swartz, J.L.; Sheppard, D.T.; Haugstad, G., and Dichtel, W.R. "Blending Polyurethane Thermosets Using Dynamic Urethane Exchange." *Macromolecules*, **2021**. 54, 23; 11126-11133. DOI: 10.1021/acs.macromol.1c01910
161. Ji, W.; Hamachi, L.S.; Natraj, A.; Flanders, N.C.; Li, R.L.; Chen, L.X., and Dichtel, W.R. "Solvothermal Depolymerization and Recrystallization of Imine-Linked Two-Dimensional Covalent Organic Frameworks;" *Chemical Science*, **2021**. 12, 48; 16014-16022. DOI: 10.1039/d1sc03963f
160. Strauss, M.J.; Hwang, I.; Evans, A.M.; Natraj, A.; Aguilar-Enriquez, X.; Castano, I.; Roesner, E.K.; Choi, J.W., and Dichtel, W.R. "Lithium-Conducting Self-Assembled Organic Nanotubes." *Journal of the American Chemical Society*, **2021**. 143, 42; 17655-17665. DOI: 10.1021/jacs.1c08058
159. Ateia, M., Skala, L.P., Yang, A. and Dichtel, W.R., 2021. "Product Analysis and Insight into the Mechanochemical Destruction of Anionic PFAS with Potassium Hydroxide." *Journal of Hazardous Materials Advances*, **2021**, 100014. DOI: 10.1016/j.hazadv.2021.100014
158. Hamachi, L.S., Rau, D.A., Arrington, C.B., Sheppard, D.T., Fortman, D.J., Long, T.E., Williams, C.B. and Dichtel, W.R. "Dissociative Carbamate Exchange Anneals 3D Printed Acrylates." *ACS Applied Materials & Interfaces*, **2021**, 13 32, pp.38680-38687. DOI: 10.1021/acsami.1c09373
157. Li, R.L., Yang, A., Flanders, N.C., Yeung, M.T., Sheppard, D.T. and Dichtel, W.R. "Two-Dimensional Covalent Organic Framework Solid Solutions." *J. Am. Chem. Soc.*, **2021**, 143, 18, pp.7081-7087. DOI: 10.1021/jacs.1c01683
156. Evans, A.M., Giri, A., Sangwan, V.K., Xun, S., Bartnof, M., Torres-Castanedo, C.G., Balch, H.B., Rahn, M.S., Bradshaw, N.P., Vitaku, E. and Burke, D.W. "Thermally conductive ultra-low-k dielectric layers

based on two-dimensional covalent organic frameworks." *Nature materials*, **2021**, pp.1-7, DOI: 10.1038/s41563-021-00934-3

155. Strauss, M.J., Jia, M., Evans, A.M., Castano, I., Li, R.L., Aguilar-Enriquez, X., Roesner, E.K., Swartz, J.L., Chavez, A.D., Enciso, A.E. and Stoddart, J.F. "Diverse Proton-Conducting Nanotubes via a Tandem Macrocyclization and Assembly Strategy." *J. Am. Chem. Soc.* **2021**, 143, 21, 8145–8153, DOI: 10.1021/jacs.1c02789

154. Li, H., Evans, A.M., Dichtel, W.R. and Bredas, J.L. "Quantitative Description of the Lateral Growth of Two-Dimensional Covalent Organic Frameworks Reveals Self-Templation Effects." *ACS Materials Lett.* **2021**, 3, 4, 398–405, DOI: 10.1021/acsmaterialslett.1c00002

153. Castano, I.; Evans, A. M.; dos Reis, R.; Dravid, V. P.; Gianneschi, N. C.; Dichtel, W. R. "Mapping Grains, Boundaries, and Defects in 2D Covalent Organic Framework Thin Films." *Chem. Mater.* **2021**, 33, 1341-1352. DOI: 10.1021/acs.chemmater.0c04382

152. Brumberg, A.; Kirschner, M. S.; Diroll, B. T.; Williams, K. R.; Flanders, N. C.; Harvey, S. M.; Leonard, A. A.; Watkins, N. E.; Kinigstein, E. D.; Yu, J.; Evans, A. M.; Liu, Y.; Cuthriell, S. A.; Panuganti, S.; Dichtel, W. R.; Kanatzidis, M. G.; Wasielewski, M. R.; Zhang, X.; Chen, L.; Schaller, R. D. "Anisotropic Transient Disorder of Colloidal, Two-Dimensional CdSe Nanoplatelets upon Optical Excitation" *Nano Lett.* **2021**, 21, 1288-1294. DOI: 10.1021/acs.nanolett.0c03958

151. Fenton, J. L.; Burke, D. W.; Qian, D.; de la Cruz, M. O.; Dichtel, W. R. "Polycrystalline Covalent Organic Framework Films Act as Adsorbents, Not Membranes" *J. Am. Chem. Soc.* **2021**, 143, 1466-1473.

150. Robison, K.; Gong, X.; Evans, A. M.; Son, F. A.; Wang, X.; Redfern, L. R.; Wasson, M. C.; Syed, Z. H.; Chen, Z.; Idrees, K. B.; Islamoglu, T.; Delferro, M.; Dichtel, W. R.; Coudert, F.-X.; Gianneschi, N. C.; Farha, O. K. "Transient Catenation in a Zirconium-Based Metal-Organic Framework and Its Effect on Mechanical Stability and Sorption Properties" *J. Am. Chem. Soc.* **2021**, 143, 1503-1512.

149. Li, K.; Wong, N. K.; Strauss, M. J.; Evans, A. M.; Matsumoto, M.; Dichtel, W. R.; Adronov, A. "Postsynthetic Modification of a Covalent Organic Framework Achieved via Strain-Promoted Cycloaddition" *J. Am. Chem. Soc.* **2021**, 143, 649-656. DOI: 10.1021/jacs.0c11811

148. Zhang, D.; Wang, G.; Chen, C.; Joshi, T.; Chen, X.-K.; Evans, A. M.; Matsumoto, M.; Dichtel, W. R.; Li, H.; Crommie, M. F.; Bredas, J.-L. "Mechanism of Formation of Benzotrithiophene-Based Covalent Organic Framework Monolayers on Coinage-Metal Surfaces: C-C Coupling Selectivity and Monomer-Metal Interactions" *Chem. Mater.* **2020**, 32, 10688-10696. DOI: 10.1021/acs.chemmater.0c03901

147. Balch, H. B.; Evans, A. M.; Dasari, R. R.; Li, H.; Li, R.; Thomas, S.; Wang, D.; Bisbey, R. P.; Slicker, K. Castano, I.; Xun, S. N.; Jiang, L. L.; Zhu, C. H.; Gianneschi, N. C.; Ralph, D. C.; Bredas, J.-L.; Marder, S. R.; Dichtel, W. R.; Wang, F. "Electronically Coupled 2D Polymer / MoS₂ Heterostructures" *J. Am. Chem. Soc.* **2020**, 142, 21131-21139. DOI: 10.1021/jacs.0c10151

146. Yu, C.-J.; von Kugelgen, S.; Krzyaniak, M. D.; Ji, W.; Dichtel, W. R.; Wasielewski, M. R.; Freedman, D. E. "Spin and Phonon Design in Modular Arrays of Molecular Qubits" *Chem. Mater.* **2020**, 32 10200-10206. DOI: 10.1021/acs.chemmater.0c03718

145. Wang, R.; Ching, C.; Dichtel, W.R.; Helbling, D.E. "Evaluating the Removal of Per- and Polyfluoroalkyl Substances from Contaminated Groundwater with Different Adsorbents Using a Suspect Screening Approach" *Env. Sci. & Tech. Lett.* **2020**, *7*, 954-960. DOI: 10.1021/acs.estlett.0c00736
144. Ateia, M.; Helbling, D.E.; Dichtel, W.R. "Best Practices for Evaluating New Materials as Adsorbents for Water Treatment" *ACS Mater. Lett.* **2020**, *2*, 1532-1544. DOI: 10.1021/acsmaterialslett.0c00414
143. Feriante, C.; Evans, A.M.; Jhulki, S.; Castano, I.; Strauss, M.J.; Barlow, S.; Dichtel, W.R.; Marder, S.R. "New Mechanistic Insights into the Formation of Imine-Linked Two-Dimensional Covalent Organic Frameworks" *J. Am. Chem. Soc.* **2020**, *142*, 18637-18644. DOI: doi.org/10.1021/jacs.0c08390
142. Ching, C.; Klemes, M.J.; Trang, B.; Dichtel, W.R.; Helbling, D.E. " β -cyclodextrin polymers with different crosslinkers and ion exchange resins exhibit variable adsorption of anionic, zwitterionic, and non-ionic PFASs" *Environ. Sci. Technol.* **2020**, *54*, 12693-12702. DOI: 10.1021/acs.est.0c04028
141. Harvey, S.M.; Houck, D.W.; Kirschner, M.S.; Flanders, N.C.; Brumberg, A.; Leonard, A.A.; Watkins, N.; Chen, L.X.; Dichtel, W.R.; Zhang, X.; Korgel, B.A.; Wasielewski, M.R.; Schaller, R.D. "Transient Lattice Response upon Photoexcitation in CuInSe₂ Nanocrystals with Organic or Inorganic Surface Passivation" *ACS Nano*, **2020**, *14*, 13548-13556. DOI: 10.1021/acsnano.0c05553
140. Elling, B.R.; Dichtel, W.R. "Reprocessable Cross-Linked Polymer Networks: Are Associative Exchange Mechanisms Desirable?" *ACS Cent. Sci.* **2020**, *6*, 1488-1496. DOI: 10.1021/acscentsci.0c00567
139. Evans, A.M.; Bradshaw, N.P.; Litchfield, B.; Strauss, M.J.; Seckman, B.; Ryder, M.R.; Castano, I.; Gilmore, C.; Gianneschi, N.C.; Mulzer, C.R.; Hersam, M.C.; Dichtel, W.R. "High-Sensitivity Acoustic Molecular Sensors Based on Large-Area, Spray-Coated 2D Covalent Organic Frameworks" *Adv. Mat.* **2020**, *32*, 42, 2004205. DOI: 10.1002/adma.202004205
138. Klemes, M.J.; Skala, L.P.; Ateia, M.; Trang, B.; Helbling, D.E.; Dichtel, W.R. "Polymerized Molecular Receptors as Adsorbents to Remove Micropollutants from Water" *Acc. Chem. Res.* **2020**, DOI: 10.1021/acs.accounts.0c00426
137. Swartz, J.L.; Li, R.L.; Dichtel, W.R. "Incorporating Functionalized Cellulose to Increase the Toughness of Covalent Adaptable Networks" *ACS App. Mat. & Inter.* **2020**, *12* (39), 44110-44116 DOI: 10.1021/acсами.0c09215
136. Yang, A.; Ching, C.; Easler, M.; Helbling, D.E.; Dichtel, W.R. "Cyclodextrin Polymers with Nitrogen-Containing Tripodal Crosslinkers for Efficient PFAS Adsorption" *ACS Mater. Lett.*, **2020**, DOI: 10.1021/acsmaterialslett.0c00240
135. Hoffman, J. M.; Strzalaka, J.; Flanders, N. C.; Hadar, I.; Cuthriel, S. A.; Zhang, Q.; Schaller, R. D.; Dichtel, W. R.; Chen, L. X.; Kanatzidis, M. G.; "In Situ Grazing-Incidence Wide-Angle Scattering Reveals Mechanisms for Phase Distribution and Disorientation in 2D Halide Perovskite Films" *Adv. Mat.* **2020**, *32*, 2002812. DOI: 10.1002/adma.2020028122
134. Flanders, N.C.; Kirschner, M.S.; Kim, P.; Fauvell, T.; Evans, A.; Helweh, W.; Spencer, A.P.; Schaller, R.D.; Dichtel, W.R.; Chen, L.X. "Large Exciton Diffusion Coefficients in Two Dimensional Covalent Organic Frameworks with Different Domain Sizes Revealed by Ultrafast Exciton Dynamics" *J. Am. Chem. Soc.* **2020**, *142*, 14957-14965. DOI: 10.1021/jacs.0c05404

133. Wu, C.; Klemes, M.J.; Trang, B.; Dichtel, W.R.; Helbling, D.E. "Exploring the factors that influence the adsorption of anionic PFAS on conventional and emerging adsorbents in aquatic matrices" *Water Res.*, **2020**, *182*, 115950. DOI: 10.1016/j.watres.2020.115950
132. Ling, Y.; Alzate-Sánchez, D.M.; Klemes, M.J.; Dichtel, W.R.; Helbling, D.E. "Evaluating the effects of water matrix constituents on micropollutant removal by activated carbon and β -cyclodextrin polymer adsorbents" *Water Res.* **2020**, *173*, 115551. DOI: 10.1016/j.watres.2020.115551
131. Sheppard, D.T.; Jin, K.; Hamachi, L.S.; Dean, W.; Fortman, D.J.; Ellison, C.J.; Dichtel, W.R. "Reprocessing Postconsumer Polyurethane Foam Using Carbamate Exchange Catalysis and Twin-Screw Extrusion" *ACS Cent. Sci.* **2020**, *6*, 6, 921-927, DOI: 10.1021/acscentsci.0c00083
130. Burke, D.W.; Sun, C.; Castano, I.; Flanders, N.C.; Evans, A.M.; Vitaku, E.; McLeod, D.C.; Lambeth, R.H.; Chen, L.X.; Gianneschi, N.C.; Dichtel, W.R. "Acid Exfoliation of Imine-linked Covalent Organic Frameworks Enables Solution Processing into Crystalline Thin Films" *Angew. Chem. Int. Ed.* **2020**, *59*, 2-9 DOI: 10.1002/anie.201913975
129. Rizzo, D.J.; Dai, Q.; Bronner, C.; Veber, G.; Smith, B.J.; Matsumoto, M.; Thomas, S.; Nguyen, G.D.; Forrester, P.R.; Zhao, W.; Jørgensen, J.H.; Dichtel, W.R.; Fischer, F.R.; Li, H.; Brédas, J.-L.; Crommie, M.F. "Revealing the Local Electronic Structure of a Single-Layer Covalent Organic Framework through Electronic Decoupling" *Nano Lett.* **2020**, *20*, 2, 963 - 970. DOI: 10.1021/acs.nanolett.9b03998
128. Jhulki, S.; Evans, A.M.; Hao, X.-L.; Cooper, M.W.; Feriante, C.H.; Leisen, J.; Li, H.; Lam, D.; Hersam, M.C.; Barlow, S.; Brédas, J.-L.; Dichtel, W.R.; Marder, S.R. "Humidity Sensing through Reversible Isomerization of a Covalent Organic Framework" *J. Am. Chem. Soc.* **2020**, *142*, 2, 783-791. DOI: 10.1021/jacs.9b08628
127. Evans, A.M.; Ryder, M.R.; Ji, W.; Strauss, M.J.; Corcos, A.; Vitaku, E.; Flanders, N.C.; Bisbey, R.P.; Dichtel, W.R. "Trends in the Thermal Stability of Two-Dimensional Covalent Organic Frameworks" *Faraday Discussions*, **2021**, *225*, 226-240. DOI: 10.1039/D0FD00054J
126. Feriante, C. H.; Jhulki, S.; Evans, A. M.; Dasari, R. R.; Slicker, K.; Dichtel, W. R.; Marder, S. R. "Rapid Synthesis of High Surface Area Imine-Linked Two-Dimensional Covalent Organic Frameworks by Avoiding Pore Collapse During Isolation" *Adv. Mater.* **2020**, *32*, 1905776.
125. Strauss, M.J.; Evans, A.M.; Castano, I.; Li, R.L.; Dichtel, W.R. "Supramolecular polymerization provides non-equilibrium product distributions of imine-linked macrocycles" *Chem. Sci.*, **2020**, *11*, 1957-1963. DOI: 10.1039/C9SC05422G
124. Li, H.; Evans, A. M.; Castano, I.; Strauss, M. J.; Dichtel, W. R.; Bredas, J.-L. "Nucleation-Elongation Dynamics of Two-Dimensional Covalent Organic Frameworks" *J. Am. Chem. Soc.* **2019**, *3*, 1367-1374. DOI: 10.1021/jacs.9b10869
123. Vitaku, E.; Gannett, C. N.; Carpenter, K. L.; Shen, L.; Abruna, H. D.; Dichtel, W. R. "Phenazine-Based Covalent Organic Framework Cathode Materials with High Energy and Power Densities" *J. Am. Chem. Soc.* **2019**, *142*, 16-20. DOI: 10.1021/jacs.9b08147
122. Ateia, M.; Alsaiee, A.; Karanfil, T.; Dichtel, W. R. "Efficient PFAS Removal by Amine-Functionalized Sorbents: Critical Review of the Current Literature." *Environ. Sci. Technol. Lett.* **2019**, *6*, 688-695.

121. Evans, A. M.; Castano, I.; Brumberg, A.; Parent, L. R.; Corcos, A. M.; Li, R. L.; Flanders, N. C.; Gosztola, D. J.; Gianneschi, N. C.; Schaller, R. D.; Dichtel, W. R. "Emissive single-crystalline boroxine-linked colloidal covalent organic frameworks." *J. Am. Chem. Soc.* **2019**, *141*, 19728-19735. DOI: 10.1021/jacs.9b08815
120. Castano, I.; Evans, A. M.; Li, H.; Vitaku, E.; Strauss, M. J.; Bredas, J.-L.; Gianneschi, N. C.; Dichtel, W. R. "Chemical Control Over Nucleation and Anisotropic Growth of Two-Dimensional Covalent Organic Frameworks." *ACS Cent. Sci.* **2019**, *5*, 1892-1899.
119. Strauss, M. J.; Asheghali, A.; Evans, A. M.; Li, R. L.; Chavez, A. D.; Sun, C.; Becker, M. L.; Dichtel, W. R. "Cooperative Self-Assembly of Pyridine-2,6-Diimine-Linked Macrocycles into Mechanically Robust Nanotubes." *Angew. Chem. Int. Ed.* **2019**, *58*, 14708-14714.
118. Corcos, A. R.; Levato, G. A.; Jiang, Z.; Evans, A. M.; Livingston, A. G.; Marinas, B. J.; Dichtel, W. R. "Reducing the Pore Size of Covalent Organic Frameworks in Thin-Film Composite Membranes Enhances Solute Rejection." *ACS Mater. Lett.* **2019**, *1*, 440-446. (Cover Article)
117. Fortman, D. J.; Sheppard, D. T.; Dichtel, W. R. "Reprocessing Cross-Linked Polyurethanes by Catalyzing Carbamate Exchange." *Macromolecules* **2019**, *52*, 6330-6335.
116. Skala, L. P.; Yang, A.; Klemes, M. J.; Xiao, L.; Dichtel, W. R. "Resorcinarene Cavitand Polymers for the Remediation of Halomethanes and 1,4-Dioxane." *J. Am. Chem. Soc.* **2019**, *141*, 13315-13319.
115. Wang, S.; Chavez, A. D.; Thomas, S.; Li, H.; Flanders, N. C.; Sun, C.; Strauss, M. J.; Chen, L. X. Markvoort, A. J.; Brédas, J.-L.; Dichtel, W. R. "Pathway Complexity in the Stacking of Imine-Linked Macrocycles Related to Two-Dimensional Covalent Organic Frameworks." *Chem Mater.* **2019**, *31*, 7104-7111. (Jean-Luc Brédas 65th Birthday Festschrift)
114. Klemes, M. J.; Ling, Y.; Ching, C.; Wu, V.; Helbling, D. E.; Dichtel, W. R. "Reduction of a Tetrafluoroterephthalonitrile- β -Cyclodextrin Polymer to Remove Anionic Micropollutants and Perfluorinated Alkyl Substances from Water." *Angew. Chem. Int. Ed.* **2019**, *58*, 12049-12053.
113. Xiao, L.; Ching, C.; Ling, Y.; Nasiri, M.; Klemes, M. J.; Reineke, T. M.; Helbling, D. E.; Dichtel, W. R. "Cross-linker Chemistry Determines the Uptake Potential of Perfluorinated Alkyl Substances by Beta-Cyclodextrin Polymers." *Macromolecules* **2019**, *52*, 3747-3752.
112. Evans, A. M.; Ryder, M. R.; Flanders, N. C.; Vitaku, E.; Chen, L. X.; Dichtel, W. R. "Buckling of Two-Dimensional Covalent Organic Frameworks Under Thermal Stress." *Ind. Eng. Chem. Res.* **2019**, *58*, 9883-9887.
111. Thomas, S.; Li, Hong; Desari, R. R.; Evans, A. M.; Castano, I.; Allen, T. G.; Reid, O. G.; Rumbles, G.; Dichtel, W. R.; Gianneschi, N. C.; Marder, S. R.; Coropcaenu, V.; Brédas, J.-L.; "Design and Synthesis of Two-Dimensional Covalent Organic Frameworks with Four-Arm Cores: Prediction of Remarkable Ambipolar Charge-Transport Properties." *Mater. Horiz.* **2019** *6*, 1868-1876
110. Thomas, S.; Li, Hong; Zhong, C.; Matsumoto, M.; Dichtel, W. R.; Brédas, J.-L.; "Electronic Structure of Two-Dimensional π -Conjugated Covalent Organic Frameworks." *Chem. Mater.* **2019**, *31*, 3051-3065.

109. Ling, Y.; Klemes, M. J.; Steinschneider, S.; Dichtel, W. R.; Helbling, D. E.; "QSARs to Predict Adsorption Affinity of Organic Micropollutants for Activated Carbon and Beta-Cyclodextrin Polymer Adsorbents." *Water Res.* **2019**, *154*, 217-226.
108. Zhukhovitskiy, A. V.; Kobylanski, I. J.; Thomas, A. A.; Evans, A. M.; Delaney, C. P.; Flanders, N. C.; Denmark, S. E.; Dichtel, W. R.; Toste, F. D.; "A Dinuclear Mechanism Implicated in Controlled Carbene Polymerization." *J. Am. Chem. Soc.* **2019**, *141*, 6473-6478.
107. Li, R. L.; Flanders, N. C.; Evans, A. M.; Ji, W.; Castano, I.; Chen, L. X.; Gianneschi, N. C.; Dichtel, W. R.; "Controlled Growth of Imine-Linked Two-Dimensional Covalent Organic Frameworks." *Chem. Sci.* **2019**, *10*, 3796-3801.
106. Daugherty, M. C.; Vitaku, E.; Li, R. L.; Evans, A. M.; Chavez, A. D.; Dichtel, W. R.; "Improved Synthesis of Beta-Ketoenamine-Linked Covalent Organic Frameworks via Monomer Exchange Reactions." *Chem. Commun.* **2019**, *55*, 2680-2683.
105. Alzate-Sanchez, D. M.; Ling, Y.; Li, C.; Frank, B. P.; Blehar, R.; Fairbrother, D. H.; Helbling, D. E.; Dichtel, W. R.; "Beta-Cyclodextrin Polymers on Microcrystalline Cellulose as a Granular Media for Organic Micropollutant Removal from Water." *ACS Appl. Mater. Interfaces*, **2019**, *11*, 8089-8096.
104. Brutman, J. P.; Fortman, D. J.; De Hoe, G. X.; Dichtel, W. R.; Hillmyer, M. A.; "Mechanistic Study of Stress-Relaxation in Urethane-Containing Polymer Networks." *J. Phys. Chem. B*, **2019**, *123*, 1432-1441.
103. Kirschner, M. S.; Diroll, B. T.; Guo, P.; Haryey, S. M.; Helweh, W.; Flanders, N. C.; Brunberg, A.; Watkins, N. E.; Leonard, A. A.; Evans, A. M.; Wasielewski, M. R.; Dichtel, W. R.; Zhang, X.; Chen, L. X.; Schaller, R. D. "Photoinduced, Reversible Phase Transitions in All-Inorganic Perovskite Nanocrystals." *Nature Commun.* **2019**, *10*, 504.
102. Klemes, M. J.; Ling, Y.; Chiapasco, M.; Alsbaiie, A.; Helbling, D. E.; Dichtel, W. R.; "Phenolation of Cyclodextrin Polymers Controls Their Lead and Organic Micropollutant Uptake." *Chem. Sci.* **2018**, *9*, 8883-8889.
101. Ji, W.; Xiao, L.; Ling, Y.; Ching, C.; Matsumoto, M.; Bisbey, R. P.; Helbling, D. E.; Dichtel, W. R. "Removal of GenX and Perfluorinated Alkyl Substances from Water by Amine-Functionalized Covalent Organic Frameworks." *J. Am. Chem. Soc.* **2018**, *140*, 12667-12681.
100. Fortman, D. J.; Snyder, R. L.; Sheppard, D. T.; Dichtel, W. R. "Rapidly Reprocessable Cross-Linked Polyhydroxyurethanes Based on Disulfide Exchange." *ACS Macro Lett.* **2018**, *7*, 1226-1231.
99. Fortman, D. J.; Brutman, J. P.; De Hoe, G. X.; Snyder, R. L.; Dichtel, W. R.; Hillmyer, M. A. "Approaches to Sustainable and Continually Recyclable Cross-Linked Polymers." *ACS Sustainable Chem. Eng.* **2018**, *6*, 11145-11159.
98. Sun, C.; Shen, M.; Chavez, A. D.; Evans, A. M.; Liu, X.; Harutyunyan, B.; Flanders, N. C.; Hersam, M. C.; Bedzyk, M. J.; de la Cruz, M. O.; Dichtel, W. R.; "High Aspect Ratio Nanotubes Assembled from Macrocyclic Iminium Salts." *Proc. Natl. Acad. U. S. A.* **2018**, *115*, 8883-8888.
97. Evans, A. M.; Parent, L. R.; Flanders, N. C.; Bisbey, R. P.; Vitaku, E.; Chen, L. X.; Gianneschi, N. C.; Dichtel, W. R.; "Seeded Growth of Single-Crystal Two-Dimensional Covalent Organic Frameworks." *Science*, **2018**, *361*, 52-57.

96. Li, C.; Klemes, M. J.; Dichtel, W. R.; Helbling, D. E. "Tetrafluoroterephthalonitrile-crosslinked β -cyclodextrin polymers for efficient extraction and recovery of organic micropollutants from water." *J. Chrom. A.* **2018**, *1541*, 52-56.
95. Chavez, A. D.; Evans, A. M.; Flanders, N. C.; Bisbey, R. P.; Vitaku, E.; Chen, L. X.; Dichtel, W. R.; "Equilibration of Imine-Linked Polymers to Hexagonal Macrocycles Driven by Self-Assembly." *Chem. Eur. J.*, **2018**, *24*, 3989-3993.
94. Matsumoto, M.; Valentino, L.; Stiehl, G. M.; Balch, H. B.; Corcos, A. R.; Wang, F.; Ralph, D. C.; Marinas, B. J.; Dichtel, W. R.; "Lewis-Acid-Catalyzed Interfacial Polymerization of Covalent Organic Framework Films." *Chem*, **2018**, *4*, 308-317.
93. Snyder, R. L.; Fortman, D. J.; De Hoe, G. X.; Hillmyer, M. A.; Dichtel, W. R.; "Reprocessable Acid-Degradable Polycarbonate Vitrimers." *Macromolecules*, **2018**, *51*, 389-397.
92. Miskin, M. C.; Sun, C.; Cohen, I.; Dichtel, W. R.; McEuen, P. L.; "Measuring and Manipulating the Adhesion of Graphene." *Nano Lett.* **2018**, *18*, 449-454.
91. Chen, C.; Joshi, T.; Li, H.; Chavez, A. D.; Pedramrazi, Z.; Liu, P.; Li, H.; Dichtel, W. R.; Bredas, J.; Crommie, M. F.; "Local Electronic Structure of a Single-Layer Porphyrin-Containing Covalent Organic Framework." *ACS Nano*, **2018**, *12*, 385-391.
90. Valentino, L.; Matsumoto, M.; Dichtel, W. R.; Marinas, B. J.; "Development and Performance Characterization of a Polyimine Covalent Organic Framework Thin-Film Composite Nanofiltration Membrane." *Environ. Sci. Technol.* **2017**, *51*, 14532-14539.
89. Li, H.; Chavez, A. D.; Li, H.; Li, H.; Dichtel, W. R.; Bredas, J.-L.; "Nucleation and Growth of Covalent Organic Frameworks from Solution: The Example of COF-5." *J. Am. Chem. Soc.* **2017**, *139*, 16310-16318.
88. Hein, S. J.; Lehnher, D.; Arslan, H.; Uribe-Romo, F. J.; Dichtel, W. R.; "Alkyne Benzannulation Reactions for the Synthesis of Novel Aromatic Architectures." *Acc. Chem. Res.* **2017**, *50*, 2776-2778.
87. Fortman, D.; Brutman, J. P.; Hillmyer, M. A.; Dichtel, W. R.; "Structural effects on the reprocessability and stress relaxation of crosslinked polyhydroxyurethanes." *J. Appl. Polym. Sci.* **2017**, *134*, 44984.
86. Vitaku, E.; Dichtel, W. R. "Synthesis of 2D Imine-Linked Covalent Organic Frameworks through Formal Transimination Reactions." *J. Am. Chem. Soc.* **2017**, *139*, 12911-12914.
85. Hein, S.; Lehnher, D.; Dichtel, W.R. "Rapid access to substituted 2-naphthyne intermediates via the benzannulation of halogenated silylalkynes." *Chem. Sci.* **2017**, *8*, 5676-5681.
84. Xiao, L.; Ling, Y.; Alsaiee, A.; Li, C.; Helbing, D. E.; Dichtel, W. R. " β -Cyclodextrin Polymer Network Sequesters Perfluorooctanoic Acid at Environmentally Relevant Concentrations." *J. Am. Chem. Soc.* **2017**, *139*, 7689-7692.
83. Ling, Y.; Klemes, M. J.; Xiao, L.; Alsaiee, A.; Dichtel, W. R.; Helbling, D. E. "Benchmarking Micropollutant Removal by Activated Carbon and Porous β -cyclodextrin Polymers Under Environmentally Relevant Scenarios." *Environ. Sci. Technol.* **2017**, *139*, 7590-7598.

82. Benia, G.; Fortman, D. J.; Heath, W. H.; Dichtel, W. R.; Torkelson, J. M. "Non-Isocyanate Polyurethane Thermoplastic Elastomer: Amide-Based Chain Extender Yields Enhanced Nanophase Separation and Properties in Polyhydroxyurethane." *Macromolecules*, **2017**, *50*, 4425-4434.
81. Bisbey, R. P.; Dichtel, W. R. "Covalent Organic Frameworks as a Platform for Multidimensional Polymerization." *ACS Cent. Sci.* **2017**, *3*, 533-543.
80. Csernica, P. M.; McKone, J. R.; Mulzer, C. R.; Dichtel, W. R.; Abruna, H. D.; and DiSalvo, F. J. "Electrochemical Hydrogen Evolution at Ordered Mo₇Ni₇." *ACS Catalysis*, **2017**, *7*, 3375-3383.
79. Matsumoto, M.; Dsari, R. R.; Ji, W.; Feriante, C. H.; Parker, T. C.; Marder, S. R.; and Dichtel, W. R. "Rapid, Low Temperature Formation of Imine-Linked Covalent Organic Frameworks Catalyzed by Metal Triflates." *J. Am. Chem. Soc.* **2017**, *139*, 4999-5002.
78. Fortman, D. J.; Brutman, J. P.; Hillmyer, M. A.; Dichtel, W. R. "Structural effects on the reprocessability and stress relaxation of cross-linked polyhydroxyurethanes." *J. Appl. Polym. Sci.* **2017**, 44984.
77. Sun, C.; Holowka, D. A.; Baird, B. A.; Dichtel, W. R. "Beyond Media Composition: Cell Plasma Membrane Disruptions by Graphene Oxide." *Chem* **2017**, *2*, 324-325.
76. Lehnher, D.; Alzola, J. M.; Mulzer, C. R.; Hein, S. J.; Dichtel, W. R. "Diazatetracenes Derived From the Benzannulation of Acetylenes: Electronic Tuning via Substituent Effects and External Stimuli." *J. Org. Chem.*, **2017**, *82*, 2004-2010.
75. Smith, B. J.; Parent, L. R.; Overholts, A. C.; Beaucage, P. A.; Bisbey, R. P.; Chavez, A. D.; Hwang, N.; Park, C.; Evans, A. M.; Gianneschi, N. C.; Dichtel, W. R. "Colloidal covalent organic frameworks." *ACS Cent. Sci.*, **2017**, *3*, 58-65.
74. Alzate-Sánchez, D. M.; Smith, B. J.; Alsbaiee, A.; Hinstroza, J. P.; Dichtel, W. R. "Cotton Fabric Functionalized with a β -Cyclodextrin Polymer Captures Organic Pollutants from Contaminated Air and Water." *Chem. Mater.* **2016**, *28*, 8340-8346.
73. Mulzer, C. R.; Shen, L.; Bisbey, R. P.; McKone, J. R.; Zhang, N.; Abruna, H. D.; Dichtel, W. R. "Superior Charge Storage and Power Density of Conducting Polymer Modified Covalent Organic Framework." *ACS Cent. Sci.* **2016**, *2*, 667-673.
72. Sun, C.; Wakefield, D. L.; Han, Y.; Muller, D. A.; Holowka, D. A.; Baird, B. A.; Dichtel, W. R. "Graphene Oxide Nanosheets Stimulate Ruffling and Shedding of Mammalian Cell Plasma Membranes." *Chem*, **2016**, *1*, 273-286.
71. Bisbey, R. P.; DeBlase, C. R.; Smith, B. J.; Dichtel, W. R. "Two-dimensional covalent organic framework thin films grown in flow." *J. Am. Chem. Soc.* **2016**, *138*, 11433-11436.
70. DeBlase, C. R.; Dichtel, W. R. "Hybrid Supercapacitors from Framework Materials." *Chem* **2016**, *1*, 16-31. [Highlight]
69. Lehnher, D.; Chen, C.; Pedramrazi, Z.; DeBlase, C. R.; Alzola, J. M.; Keresztes, I.; Lobkovsky, E. B.; Crommie, M. F.; Dichtel, W. R. "Sequence-defined oligo(*ortho*-arylene) foldamers derived from the benzannulation of *ortho*(arylene ethynylene)s." *Chem. Sci.* **2016**, *7*, 6357-6364.

68. Chavez, A. D.; Smith, B. J.; Smith, M. K.; Beaucage, P. A., Northrop, B. H.; Dichtel, W. R. "Discrete, Hexagonal Boronate Ester-Linked Macrocycles Related to Two-Dimensional Covalent Organic Frameworks." *Chem. Mater.* **2016**, *28*, 4884-4888.
67. DeBlase, C. R.; Dichtel, W. R. "Moving Beyond Boron: The Emergence of New Linkage Chemistries in Covalent Organic Frameworks." *Macromolecules*, **2016**, *49*, 5297–5305. (Invited Perspective)
66. Gao, J.; Uribe-Romo, F. J.; Saathoff, J. D.; Arslan, H.; Crick, C. R.; Hein, S. J.; Itin, B.; Clancy, P.; Dichtel, W. R.; Loo, Y.-L. "Ambipolar Transport in Solution-Synthesized Graphene Nanoribbons" *ACS Nano*, **2016**, *10*, 4847–4856.
65. Smith, B. J.; Overholts, A. C.; Hwang, G.; Dichtel, W. R. "Insight into the crystallization of amorphous imine-linked polymer networks to 2D covalent organic frameworks." *Chem. Comm.* **2016**, *52*, 3690–3693.
64. Alsbaiee, A.; Smith, B. J.; Xiao, L.; Ling, Y.; Helbling, D. E.; Dichtel, W. R. "Rapid removal of organic micropollutants from water by a porous β -cyclodextrin polymer." *Nature*, **2016**, *529*, 190–194. *This work was highlighted on the cover of the January 14, 2016 issue of Nature.*
63. Fortman, D. J.; Brutman, J. A.; Cramer, C. J.; Hillmyer, M. A.; Dichtel, W. R. "Catalyst-free Polyhydroxyurethane Vitrimers." *J. Am. Chem. Soc.* **2015**, *137*, 14019–14022.
62. Lehnher, D.; Alzola, J. M.; Lobkovsky, E. B.; Dichtel, W. R. "Regioselective Synthesis of Polyheterohalogenated Naphthalenes via the Benzannulation of Haloalkynes." *Chem. Eur. J.* **2015**, *21*, 18122–18127.
61. DeBlase, C. R.; Hernández-Burgos, K.; Rotter, J. M.; Fortman, D. J.; Timm, R. A.; dos S. Abreu, D.; Diógenes, I. C. N.; Kubota, L. T.; Abruña, H. D.; Dichtel, W. R. "Cation-dependent stabilization of electrogenerated naphthalene diimide dianions in porous polymer thin films." *Angew. Chem. Int. Ed.* **2015**, *54*, 13225–13229.
60. van Humbeck, J. F.; Aubrey, M. L.; Alsbaiee, A.; Ameloot, R.; Coates, G. W.; Dichtel, W. R.; Long, J. R. "Tetraarylborate polymer networks as single-ion conducting solid electrolytes." *Chem. Sci.* **2015**, *6*, 5499–5505.
59. Bradforth, S. E.; Miller, E. R.; Dichtel, W. R.; Leibovich, A. K.; Feig, A. L.; Martin, J. D.; Bjorkman, K. S.; Schultz, Z. D.; Smith, T. L. "Improve undergraduate science education." *Nature*, **2015**, *523*, 283–284.
58. Sun, C.; Wakefield, D.; Dichtel, W. R. "Retaining the activity of enzymes and fluorophores attached to graphene oxide." *Chem. Mater.* **2015**, *27*, 4499–4504.
57. Gopalakrishnan, D.; Dichtel, W. R. "Real-time detection of RDX vapors using thin films of a conjugated polymer network." *Chem. Mater.* **2015**, *27*, 3813–3816.
56. Smith, B. J.; Hwang, N.; Chavez, A.; Novotney, J. L.; Dichtel, W. R. "Growth rates and water stability of 2D boronate ester covalent organic frameworks." *Chem. Commun.* **2015**, *51*, 7532–7535.
55. DeBlase, C. R.; Hernández-Burgos, K.; Silberstein, K. E.; Rodríguez-Calero, G. G.; Bisbey, R. P.; Abruña, H. D.; Dichtel, W. R. "Rapid and efficient redox processes within 2D covalent organic framework thin films." *ACS Nano* **2015**, *9*, 3178–3183.

54. Arslan, H.; Walker, K. L.; Dichtel, W. R. "Regioselective Asao–Yamamoto benzannulations of diarylacetylenes." *Org. Lett.* **2014**, *16*, 5926–5929.
53. Colson, J. W.; Mann, J. A.; DeBlase, C. R.; Dichtel, W. R. "Patterned Growth of Oriented 2D Covalent Organic Framework Thin Films on Single-Layer Graphene." *J. Poly. Sci. A: Polym. Chem.* **2015**, *53*, 378–384. (*Special issue dedicated to Jean M. J. Fréchet for his 70th birthday*)
52. Hein, S. J.; Arslan, H.; Keresztes, I.; Dichtel, W. R. "Rapid synthesis of crowded aromatic architectures from silyl acetylenes." *Org. Lett.* **2014**, *16*, 4416–4419.
51. Smith, B. J.; Dichtel, W. R. "Mechanistic studies of two-dimensional covalent organic frameworks rapidly polymerized from initially homogenous conditions." *J. Am. Chem. Soc.* **2014**, *136*, 8783–8789.
50. Jung, B.; Satish, P.; Bunck, D. N.; Dichtel, W. R.; Ober, C. K.; Thompson, M. O. "Reaction pathways for ester cleavage of an acrylic polymer at high temperatures during laser-induced sub-millisecond heating." *ACS Nano*, **2014**, *8*, 5746–5756.
49. DeBlase, C. R.; Silberstein, K. E.; Truong, T.; Abruña, H. D.; Dichtel, W. R. "β-Ketoenamine-linked covalent organic frameworks capable of pseudocapacitive energy storage." *J. Am. Chem. Soc.* **2013**, *135*, 16821–16824.
48. Bunck, D. N.; Dichtel, W. R. "Bulk synthesis of exfoliated 2D polymers using hydrazone-linked covalent organic frameworks." *J. Am. Chem. Soc.* **2013**, *135*, 14952–14955.
47. Brucks, S. D.; Bunck, D. N.; Dichtel, W. R. "Functionalization of 3D covalent organic frameworks using monofunctional boronic acids." *Polymer* **2014**, *55*, 330–334. (*Special issue on porous polymers*)
46. Mann, J. A.; Dichtel, W. R. "Noncovalent functionalization of graphene by molecular and polymeric adsorbates" *J. Phys. Chem. Lett.* **2013**, *4*, 2649–2657.
45. Mann, J. A.; Dichtel, W. R. "Improving the binding characteristics of tripodal compounds on single layer graphene." *ACS Nano*, **2013**, *7*, 7193–7199.
44. Arslan, H.; Uribe-Romo, F. J.; Smith, B. J.; Dichtel, W. R. "Accessing extended and partially fused hexabenzocoronenes using a benzannulation / cyclodehydrogenation approach." *Chem. Sci.* **2013**, *4*, 3973–3978.
43. Colson, J. W.; Dichtel, W. R. "Rationally synthesized two-dimensional polymers." *Nature Chem.* **2013**, *5*, 453–465.
42. Gopalakrishnan, D.; Dichtel, W. R. "Direct detection of RDX vapor using a conjugated polymer network." *J. Am. Chem. Soc.* **2013**, *135*, 8357–8362. *This paper was highlighted in a video documentary produced by the American Chemical Society "Breakthrough Science" series.*
41. Novotney, J. L.; Dichtel, W. R. "Conjugated porous polymers for TNT vapor detection." *ACS Macro Lett.* **2013**, *2*, 423–426.
40. Bunck, D. N.; Dichtel, W. R. "Postsynthetic functionalization of 3D covalent organic frameworks." *Chem. Comm.* **2013**, *49*, 2457–2459.

39. Alava, T.; Mann, J. A.; Théodore, C.; Benitez, J. J.; Dichtel, W. R.; Parpia, J. M.; Craighead, H. G. "Control of the graphene-protein interface is required to preserve absorbed protein function." *Anal. Chem.* **2013**, *85*, 2754–2759.
38. Mann, J. A.; Alava, T.; Craighead, H.; Dichtel, W. R. "Preservation of antibody selectivity on graphene by conjugation to a tripod monolayer." *Angew. Chem. Int. Ed.* **2013**, *52*, 3177–3180.
37. Bunck, D. N.; Dichtel, W. R. "Mixed linker strategies for organic framework functionalization." *Chem. Eur. J.* **2013**, *19*, 818–827. (Invited Review)
36. Arslan, H.; Saathoff, J. Bunck, D. N.; Clancy, P.; Dichtel, W. R. "Highly efficient benzannulation of poly(phenylene ethynylene)s." *Angew. Chem. Int. Ed.* **2012**, *51*, 12051–12054.
35. Koo, B. T.; Dichtel, W. R.; Clancy, P. "A classification scheme for the stacking of two-dimensional covalent organic frameworks." *Chem. Mater.* **2012**, *22*, 17460–17469. (Highlighted on Journal Cover)
34. Uribe-Romo, F. J.; Dichtel, W. R. "Two-dimensional materials: Polymers stripped down." *Nature Chem.* **2012**, *4*, 244–245.
33. Rodríguez-López, J.; Ritzert, N. L.; Mann, J. A.; Tan, C.; Dichtel, W. R.; Abruña, H. D.; "Quantification of the surface diffusion of tripodal binding motifs on graphene using scanning electrochemical microscopy." *J. Am. Chem. Soc.* **2012**, *134*, 6224–6236.
32. Bunck, D. N.; Dichtel, W. R. "Internal functionalization of 3D covalent organic frameworks." *Angew. Chem. Int. Ed.*, **2012**, *51*, 1855–1859.
31. Spitler, E. L.; Colson, J. W.; Woll, A. R.; Giovino, M. R.; Saldivar, A.; Dichtel, W. R. "Pore expansion of highly oriented zinc phthalocyanine covalent organic framework films." *Angew. Chem. Int. Ed.*, **2012**, *51*, 2623–2627.
30. Spitler, E. L.; Koo, B.; Novotney, J. L.; Colson, J. W.; Uribe-Romo, F. J.; Gutierrez, G. D.; Clancy, P.; Dichtel, W. R. "Covalent organic frameworks with 4.7 pores and insight into their interlayer stacking." *J. Am. Chem. Soc.* **2011**, *133*, 19416–19421.
29. Mann, J. A.; Rodriguez-Lopez, J.; Abruña, H. D.; Dichtel, W. R. "Multivalent binding motifs for the noncovalent functionalization of graphene" *J. Am. Chem. Soc.*, **2011**, *133*, 17614–17617.
28. Spitler, E. L.; Giovino, M. R.; White, S.; Dichtel, W. R.; "Lewis acid-catalyzed formation of boronate ester-linked covalent organic frameworks." *Chem. Sci.*, **2011**, *2*, 1588–1593.
27. Colson, J. W.; Woll, A. R.; Mukherjee, A.; Levendorf, M. A.; Spitler, E. L.; Shields, V. S.; Spencer, M. A.; Park, J.; Dichtel, W. R.; "Oriented 2D covalent organic framework thin films on single layer graphene." *Science*, **2011**, *332*, 228–231.
26. Spitler, E. L.; Dichtel W. R.; "Lewis acid-catalysed formation of two-dimensional phthalocyanine covalent organic frameworks." *Nature Chem.* **2010**, *2*, 672–677. This paper was recognized as a "Highly Cited Paper" by ISI Web of Science in December 2014, which places it among the top 1% of papers in the field of chemistry for its publication year.

25 Publications as a graduate student and postdoctoral researcher available upon request

SELECTED PATENTS

1. Dichtel, W. R.; Alsbaiie, A.; Smith, B. J. Hinestroza, J.; Alzate-Sanchez, D.; Xiao, L.; Ling, Y.; Helbling, D. E. "Porous Cyclodextrin Polymeric Materials and Methods of Making and Using Same." US Patent Numbers 10086360 (10/2/2018), 9855545 (1/2/2018), 9624314 (4/18/17)
This patent family protects compositions of matter related to porous cyclodextrin polymers as novel adsorbents for sequestering organic pollutants from various fluids. Licensed to CycloPure, Inc.
2. Dichtel, W. R.; DeBlase, C. R.; Bisbey, R. P.; Shen, L.; Abruna, H. D. "Conducting-polymer modified Covalent Organic Frameworks and Methods of Making Same." PCT/US2016/047046 (8/15/2015)
This US and international patent application protects a combination of redox-active COF films and conducting polymers for use in electrical energy storage devices.
3. Dichtel, W. R.; Gopalakrishnan, D. "Cross-linked polymer networks and methods of making and using same." Publication Number 20160002421 (1/7/2016)
This US and International patent application protects a cross-linked polymer network capable of detecting trace amounts of nitramine-based explosives from the air.
4. Dichtel, W. R.; Arslan, H.; Uribe-Romo, F. J. "Graphene nanoribbons derived from poly(phenylene ethynylene) polymer, methods of making same, and uses thereof." US Patent Number 9556085 (1/27/17), International patents pending
This patent protects a method based on benzannulation chemistry to transform conjugated polymers into graphene nanoribbons.
5. Dichtel, W. R.; Colson, J. W.; Spitler, E. L.; Mukherjee, A.; Levendorf, A.; Woll, A. R.; Park, J. "Covalent Organic Framework Films, and Methods of Making and Uses of Same" PCT/US11/051350 filed September 15, 2011.
This pending US and international patent applications protect methods to grow covalent organic frameworks as thin films on graphene.

RESEARCH SUPPORT

- Co-PI NSF Grant No. [CHE-0847926]: CCI-I: Center for Molecular Interfacing, Total Award: \$1,500,00, Individual Award: \$165,000 2008-2011
- PI NSF CAREER Grant No. [CHE-1056657]: Synthesis of Covalent Organic Frameworks with Novel Optoelectronic Properties, \$650,000, 2011-2016
- PI NSF Grant No. [CHE-1124754]: Nanoelectronics in 2020 and Beyond Program Ultimate Electronic Device Scaling Using Structurally Precise Graphene Nanoribbons, \$1,400,000, 2011-2016
- PI ACS PRF Doctoral New Investigator Program Grant No. [52019-DNI7]: Synthesis of Structurally Precise Graphene Nanoribbons, \$100,00, 2012-2013
- PI Alfred P. Sloan Foundation: Sloan Research Fellowship, \$50,000, 2012-2014
- PI Research Corporation: Cottrell Scholar Award, \$75,000, 2012-2014
- PI Schlumberger Foundation: Faculty for the Future Fellowship, \$150,000, 2012-2015
- PI The Arnold and Mabel Beckman Foundation: Beckman Young Investigator Award, \$750,000 2012-2016
- PI Cornell Center for Materials Research SEED: Nanometer-scale patterning from templates of covalent organic frameworks, \$380,000, 2012-2014
- PI American Chemical Society: ACS Cope Scholar Award, \$40,000, 2013
- PI Camille and Henry Dreyfus Foundation: Camille-Dreyfus Teacher-Scholar Program, \$75,000 2013-2018

- Co-PI NSF Grant No. [CHE-1413862]: CCI Phase II: The Center for Sustainable Polymers, Total Award: \$20,000,000, Individual Award: \$1,307,105, 2014-2019
- PI Army Research Office MURI Grant No. [W911NF-15-1-0447]: Center for Advanced 2D Organic Networks, Total Award: \$6,749,996, Individual Award: \$1,334,505, 2015-2020
- PI Atkinson Center for a Sustainable Future: Academic Venture Fund, \$140,000, 2015-2016
- PI John D. and Catherine T. MacArthur Foundation Fellowship, \$625,000, 2015-2020 (to W.R.D.)
- Co-PI NSF MRI Grant No. [CHE-1531632]: Cryoprobe for Enhanced NMR Sensitivity at Cornell University, \$349,300, 2015-2017
- PI NSF EAGER: Grant No. [CHE-1541820]: Biomass-derived Porous Polymers to Remove Organic Pollutants, \$250,000, 2015-2017
- PI Camille and Henry Dreyfus Foundation, [EP-16-087]: Superior removal of organic pollutants from water by cyclodextrin polymers, \$120,000, 2018-2020
- PI Honeywell [DE-NA0002839]: Reprocessable Polyhydroxyurethane Vitrimers, \$130,0234, 2017-2019
- Co-PI CBET-EP SRC [CBET-1706219]: A Game-Changing Approach for Tunable Membrane Development: Novel Covalent Organic Framework Active Layers Supported by Solvent Resistant Materials, \$224,997, 2018-2020
- Co-PI DoD SERDP [W912HQ18C052]: Rational design and implementation of novel polymer adsorbents for selective uptake of per- and polyfluoroalkyl substances from groundwater, \$294,497, 2018-2021
- PI John Simon Guggenheim Memorial Foundation, Fellowship: \$50,000, 2018-2019 (to W.R.D.)
- PI SuperSEED addition to NSF MRSEC [DMR1720139]: Center for Multifunctional Materials, Total Award: \$15,842,003, Individual Award: \$41,000, 2017-2018
- Co-PI DOE [DE-SC0019356]: Creating and Interfacing Designer Chemical Qubits, Total Award: \$3,600,004, Individual Award: \$200,000, 2018-2021
- PI Research Corporation FRED Award, Robust Methods for Controlling Polymerization in Two Dimension, \$249,000, 2018-2021
- Co-PI NSF [CHE-1901635]: Center for Sustainable Polymers, Total Award, \$10,000,000, Individual Award: \$1,075,000 (estimated), 2019-2024
- Co-PI DOE/BIRD Foundation: Israel-US Collaborative Water-Energy Research Center (Israel-US CoWERC), Total Award, \$21,422,000, Individual Award TBD, 07/2020-06/2025 (estimated)
- PI DOE/REMADE Institute, Polyurethane Upcycling, Total Award \$900,000 (estimated), 2021-2023

SCIENTIFIC LEADERSHIP

Co-founder and Chief Science Officer (2016-2021), CycloPure, Inc.

Founding Associate Editor, *ACS Materials Letters* (2019-present)

Defense Science Study Group (2021-2022)

Executive Leadership Committee, NSF Center for Sustainable Polymers (2019-present)

Editorial Advisory Board, *ACS Central Science* (ACS)

Editorial Advisory Board, *Polymer International and ChemPlusChem* (Wiley)

Editorial Advisory Board, *Chemistry of Materials* (ACS)

Editorial Advisory Board, *Macromolecules* and *ACS Macro Letters* (ACS) (2013-2016)

Editorial Advisory Board, *iScience*, *Chem* (2015-2018)

Member-at-Large of the Executive Committee of the ACS PMSE Division (2013–2015)

Co-organizer of five porous polymer symposia at various National ACS meetings, most recently Fall 2020 in San Francisco.

Co-organizer of a national workshop (2015) on evaluating teaching and learning in research universities, jointly supported by Research Corporation for Science Advancement and the Association of American Universities.

Our working group produced the following reports:

“Searching for Better Approaches: Effective Evaluation of Teaching and Learning in STEM” (2015) AAU and Research Corporation.

“Improve undergraduate science education” *Nature*, **2015**, *583*, 282–284.

“Aligning Practice to Policies: Changing the Culture to Recognize and Reward Teaching at Research Universities” (2017) AAU and Research Corporation

EXTERNAL LECTURES AND CONFERENCE TALKS

185. ACS Spring National Meeting San Diego, CA (Invited Speaker)	03/2022
185. Harvard – MIT Inorganic Seminar Series Cambridge, MA	03/2022
184. Current: Chicago Water Week Chicago, IL (Keynote Speaker)	10/2021
183. ACS Fall National Meeting: Henkel Award Symposium Atlanta, GA (Symposium in honor of Austin M. Evans)	08/2021
182. ACS Fall National Meeting: CME and PMSE Global Mentor in Polymer Science Award Atlanta, GA (Symposium in honor of Austin M. Evans and WRD)	08/2021
181. POSTECH Pohang, South Korea (Lecture given virtually)	08/2021
180. UMass-Lowell Lowell, MA (Lecture given virtually)	03/2021
179. New York Academy of Sciences New York, NY (Webinar Speaker)	03/2021
178. University of Maryland College Park, MD (Lecture given virtually)	03/2021
177. Arizona State University Tempe, AZ (Lecture given virtually)	01/2021
176. MacArthur Fellows Virtual Gathering Virtual Conference (Invited Speaker)	11/2020
175. General Motors Sustainability Day	10/2020

- Virtual Conference (Invited Speaker and Panelist)
174. Faraday Discussion on Dynamic Processes in Framework Materials
Virtual Conference (Invited Speaker and Panelist) 10/2020
173. King Abdullah University of Science and Technology (KAUST)
Jeddah, Saudi Arabia (Lecture given virtually) 10/2020
172. 2020 Polyurethanes Technical Conferences
Virtual Conference (Invited Speaker and Panelist) 09/2020
171. ACS National Meeting (Colloid Division)
Virtual Conference (Invited) 03/2020
170. Emerging Contaminants Summit
Denver, CO (Lecturer and Panelist) 03/2020
169. ETH-Zurich
Zurich, Switzerland (Invited) 03/2020
168. Washington University
St. Louis, MO (Invited) 02/2020
167. University of Tennessee at Knoxville
Knoxville, TN (invited) 01/2020
166. ARO Advanced Membranes Workshop
Philadelphia, PA (Keynote) 12/2019
165. University of Pittsburgh
Pittsburgh, PA (Invited) 11/2019
164. University at Buffalo, The State University of New York
Buffalo, NY (Invited) 11/2019
163. University of Washington
Seattle, WA (Invited) 10/2019
162. University of Virginia (Berger Lecture)
Charlottesville, VA 10/2019
161. Porous Organic Polymers 2019
Heidelberg, Germany (Invited) 09/2019
160. Chem2DMat Conference
Dresden, Germany (Keynote) 09/2019
159. ACS National Meeting: Materials Making a Splash – Emerging Trends in Nanoscience,
Nanoscience, Materials Science, and Photonics 08/2019
San Diego, CA (Invited)
158. ACS National Meeting: Polymers for Defense Applications 08/2019
San Diego, CA (Invited)
157. University of Minnesota (Dept. of Environmental Engineering) 06/2019

- Minneapolis, MN (Invited)
156. International Symposium of Molecular Design for Optoelectronic Materials
Beijing, China (Keynote) 05/2019
 155. Miami University
Oxford, OH (Invited) 04/2019
 154. ACS National Meeting (Opening Session Keynote Address)
Orlando, FL 03/2019
 153. Columbia University (Grandpierre Lecture)
New York, NY 02/2019
 152. University of Chicago Supramolecular Symposium (Burns Day)
Chicago, IL (Invited) 01/2019
 151. Singapore International Chemistry Conference-10 (SICC-10)
Singapore (Keynote) 12/2018
 150. University of Arizona
Tucson, AZ (Invited) 12/2018
 149. MRS National Meeting
Boston, MA (Invited) 11/2018
 148. UC-Irvine
Irvine, CA (Invited) 11/2018
 147. California Institute of Technology
Pasadena, CA (Invited) 11/2018
 146. Akron Award Symposium
Akron, OH (Award Address) 11/2018
 145. University of Kentucky
Lexington, KY (Invited) 10/2018
 144. Marquette University, Raj Rathore Memorial Symposium
Milwaukee, WI (Invited) 08/2018
 143. ACS National Meeting: Porous Polymer Symposium
Boston, MA (Invited and Co-organizer) 08/2018
 142. ACS National Meeting: Henkel Award Symposium in Honor of Alex Zhukovitsky
Boston, MA (Invited) 08/2018
 141. Oak Ridge National Laboratory CNMS User Meeting
Oak Ridge, TN (Keynote) 08/2018
 140. 43rd International Conference on Coordination Chemistry (ICCC 2018)
Sendai, Japan (Keynote) 07/2018
 139. Lanzhou University, State Key Laboratory for Organic Chemistry
Lanzhou, China (Invited) 07/2018

138. Zhejiang University
Hangzhou, China (Invited) 07/2018
137. Fudan University
Shanghai, China (Invited) 07/2018
136. 2018 POLYMAT Spotlight Conference
San Sebastian, Spain (Keynote) 06/2018
135. Universidad Autónoma de Madrid
Madrid, Spain (Invited) 06/2018
134. The 3M Corporation
Saint Paul, MN (Invited) 06/2018
133. Functional Polymeric Materials Fusion Conference
Nassau, Bahamas (Invited) 06/2018
132. Princeton University (Semmelhack Lecture)
Princeton, NJ 05/2018
131. University of Chicago
Chicago, IL (Invited) 04/2018
130. Marquette University
Milwaukee, WI (Invited) 04/2018
129. American Physical Society National Meeting
Los Angeles, CA (Invited) 03/2018
128. Yale Chemical Engineering
New Haven, CT (Invited) 02/2018
127. Exxon
Houston, TX (Invited) 02/2018
126. UC-Davis
Davis, CA (Invited) 01/2018
125. Simon Fraser University
Vancouver, BC (Invited) 01/2018
124. University of British Columbia
Vancouver, BC (Invited) 01/2018
123. ACS POLY Workshop on Polymers and Nanotechnology
San Diego, CA (Invited) 12/2017
122. Leo Hendrik Baekeland Award Symposium
Newark, NJ (Award Lecture) 12/2017
121. Arkema Chemical Company
King of Prussia, PA (Invited) 12/2017
120. Dow Chemical Company (Electronic Materials Division) 10/2017

- Marlborough, MA (Invited)
119. Chicago Organic Symposium 09/2017
Chicago, IL (Invited)
118. UT-San Antonio Department of Chemistry 09/2017
San Antonio, TX (Invited)
117. Texas A&M Department of Chemistry 09/2017
College Station, TX (Student Invited Seminar)
116. ACS National Meeting – PMSE Division (Mark Award to Garrett Miyake) 08/2017
Washington, DC (Invited)
115. ACS National Meeting – PMSE Division (Stimuli Responsive Polymers Symposium) 08/2017
Washington, DC (Invited)
114. ACS National Meeting – PMSE Division (JPS Award to Luis Campos) 08/2017
Washington, DC (Invited)
113. ACS National Meeting – PMSE Division (Henkel Award to John Colson) 08/2017
Washington, DC (Invited)
112. Blavatnik National Award Symposium 07/2017
New York, NY (Invited)
111. International Symposium on Novel Aromatic Systems (ISNA) 07/2017
Stony Brook, NY (Keynote Presentation)
110. Functional Pi Systems 13 (F-Pi-13) 06/2017
Hong Kong (Keynote Presentation)
109. Supramolecular Gordon Conference 05/2017
Les Diablerets, Switzerland (invited)
108. Eastman Chemical Company 05/2017
Kingsport, TN (invited)
107. Johns Hopkins University 02/2017
Baltimore, MD (invited)
106. 8th International Conference on Advanced Materials and Nanotechnology (AMN8) 02/2017
Queenstown, New Zealand (Keynote Presentation)
105. Purdue University 02/2017
West Lafayette, IN (Invited)
104. University of Calgary 01/2017
Calgary, AB (Invited)
103. University of Alberta 01/2017
Edmonton, AB (Invited)
102. University of Florida 01/2017
Gainesville, FL (Invited)

101. Linus Pauling Medal Symposium in honor of Timothy M. Swager
Tacoma, WA (Invited) 11/2016
100. Southeastern Regional ACS Meeting (SERMACS) – Cope Award Symposium
Columbia, SC (Invited) 10/2016
99. Southeastern Regional ACS Meeting (SERMACS) – MOF Symposium
Columbia, SC (Invited) 10/2016
98. Virginia Tech
Blacksburg, VA (Invited) 10/2016
97. Metal Organic Frameworks 2016
Long Beach, CA (Keynote) 9/2016
96. ACS National Meeting – PMSE Division (Henkel Award to Maxwell Robb)
Philadelphia, PA (Invited) 8/2016
95. ACS National Meeting – ENFL Division
Philadelphia, PA (Invited) 8/2016
94. ACS National Meeting – PMSE Division
Philadelphia, PA (Invited) 8/2016
93. 2nd International Symposium on Two-Dimensional Polymers
Nara, Japan (Invited) 6/2016
92. 2015 MacArthur Fellows Conference
Racine, WI (Invited) 5/2016
91. Dartmouth College
Hanover, NH (Invited) 4/2016
90. Southern Illinois University – Distinguished Arnold Lecturer
Carbondale, IL (Invited) 4/2016
89. California Environmental Protection Agency, Environmental Chemistry Laboratory
Berkeley, CA (Invited) 3/2016
88. Stanford University
Stanford, CA (Invited) 3/2016
87. University of California, Berkeley
Berkeley, CA (Invited) 3/2016
86. Lawrence Berkeley National Laboratory Distinguished Lecturer Series
Berkeley, CA (Invited) 3/2016
85. Miller Institute for Basic Science
Berkeley, CA (Invited) 2/2016
84. University of Colorado at Boulder
Boulder, CO (Invited) 9/2015
83. University of Pennsylvania 9/2015

- Philadelphia, PA (Invited)
82. Northwestern University
Evanston, IL (Invited) 8/2015
 81. ACS National Meeting – Analytical Chemistry Division
Boston, MA (Invited) 8/2015
 80. ACS National Meeting – Energy and Fuels Division
Boston, MA (Invited) 8/2015
 79. ACS National Meeting – Kavli Emerging Leader in Chemistry Lecture
Boston, MA (Keynote Speaker) 8/2015
 78. Physical Organic Chemistry Gordon Research Conference
Holderness, NH (Invited) 6/2015
 77. Polymers Gordon Research Conference
South Hadley, MA (Invited) 6/2015
 76. 2015 American Chemical Society Northeast Regional Meeting
Ithaca, NY (Keynote Speaker) 6/2015
 75. Cornell Center for Materials Research Symposium
Ithaca, NY (Co-organizer and Speaker) 5/2015
 74. ACS National Meeting: Design Principles of Functional Macromolecular Materials (PMSE)
Denver, CO (Invited) 3/2015
 73. ACS National Meeting – Graphene and Carbon Nanotubes (PMSE)
Denver, CO (Invited) 3/2015
 72. ACS National Meeting – Geoff Coates Applied Polymer Science Award (PMSE)
Denver, CO (Invited) 3/2015
 71. Smart Coatings 2015
Orlando, FL (Invited) 2/2015
 70. Ohio State University
Columbus, OH (Invited) 2/2015
 69. University of Tokyo – Inaugural BASF Innovation Lecturer
Tokyo, Japan (Invited) 12/2014
 68. Institute for Molecular Science
Okazaki, Japan (Invited) 12/2014
 67. 10th SPSJ International Polymer Conference (IPC2014)
Tsukuba, Japan (Invited) 12/2014
 66. Massachusetts Institute of Technology – Program in Polymer Science Lecture
Cambridge, MA (Invited) 10/2014
 65. ACS National Meeting – Porous Polymers (PMSE Division)
San Francisco, CA (Invited) 8/2014

64. ACS National Meeting – National Fresenius Award Symposium and Lecture
San Francisco, CA (Award Lecture) 8/2014
63. 2014 IUPAC World Polymer Congress (MACRO 2014)
Polymer International – IUPAC Polymer Award Symposium, Chiang Mai, Thailand (Award Lecture) 7/2014
62. Telluride Meeting: Metal-Organic Frameworks
Telluride, CO (Invited) 7/2014
61. The 35th Reaction Mechanisms Conference (ACS Organic Division)
Davis, CA (Invited) 6/2014
60. International Symposium on Synthetic Two-Dimensional Polymers
Zurich, Switzerland (Invited) 6/2014
59. University of Texas at Dallas
Dallas, TX (Invited) 3/2014
58. University of North Carolina at Chapel Hill
Chapel Hill, NC (Invited) 2/2014
57. University of Iowa
Iowa City, IA (Invited) 12/2013
56. University of California, Berkeley
Berkeley, CA (Invited) 11/2013
55. University of Rochester
Rochester, NY (Invited) 11/2013
54. University of Southern California
Los Angeles, CA (Invited) 10/2013
53. UCLA
Los Angeles, CA (Invited) 10/2013
52. California Institute of Technology
Pasadena, CA (Invited) 10/2013
51. University of Nevada, Reno
Reno, NV (Invited) 10/2013
50. ACS National Meeting – Porous Materials for Energy Conversion and Storage
Indianapolis, IN (Invited) 08/2013
49. ACS National Meeting – Cope Scholar Award Symposium
Indianapolis, IN (Award Address) 08/2013
48. Canadian Society for Chemistry Annual Meeting
Quebec City, Quebec (Invited) 05/2013
47. PPG Industries, Inc.
Pittsburgh, PA (Invited) 04/2013
46. University of Minnesota – Center For Sustainable Polymers Symposium 04/2013

- St. Paul, MN (Invited)
45. ACS National Meeting - Carbon Nanotube and Graphene Symposium
New Orleans, LA (Invited) 04/2013
 44. ACS National Meeting – Porous Polymer Symposium
New Orleans, LA (Invited) 04/2013
 43. ACS National Meeting – Award Symposium for Craig Hawker
New Orleans, LA (Invited) 04/2013
 42. University of Houston
Houston, TX (Invited) 04/2013
 41. SUNY-Potsdam
Potsdam, NY (Invited) 03/2013
 40. Massachusetts Institute of Technology
Cambridge, MA (Invited) 02/2013
 39. Penn State University
State College, PA (Invited) 02/2013
 38. Tulane University
New Orleans, LA (Invited) 01/2013
 37. University of Texas
Austin, TX (Invited) 01/2013
 36. Princeton University
Princeton, NJ (Invited) 12/2012
 35. US-Japan Seminar on Polymer Synthesis
Santa Barbara, CA (Invited) 12/2012
 34. Zing Polymer Conference: From Biomedical Applications to Energy
Cancun, Mexico (Invited) 11/2012
 33. University of Michigan
Ann Arbor, MI (Invited) 11/2012
 32. Pennsylvania State University
State College, PA (Invited) 10/2012
 31. Humboldt-Universität zu Berlin
Berlin, Germany (Invited) 10/2012
 30. Technische Universität Berlin
Berlin, Germany (Invited) 10/2012
 29. BASF
Ludwigshafen, Germany (Invited) 10/2012
 28. Ludwig Maximilians University Munich
Munich, Germany (Invited) 10/2012

27. University of South Florida
Tampa, FL (Invited) 10/2012
26. ACS National Meeting: Organic and Metal-Organic Frameworks
Philadelphia, PA (Symposium organizer and speaker) 09/2012
25. Challenges in Inorganic and Materials Chemistry (ISACS8)
Toronto, Ontario, Canada (Invited) 07/2012
24. IUPAC World Polymer Congress
Blacksburg, VA (Invited) 06/2012
23. University of Notre Dame
South Bend, IN (Invited) 05/2012
22. Northwestern University
Evanston, IL (Invited) 05/2012
21. Materials Research Society National Meeting: Section Z
San Francisco, CA (Invited) 04/2012
20. New York University
New York, NY (Invited) 02/2012
19. Columbia University
New York, NY (Invited) 02/2012
18. Bryn Mawr College
Bryn Mawr, PA (Invited) 02/2012
17. Wesleyan College
Middletown, CT (Invited) 02/2012
16. Exxon-Mobil
Annandale, NJ (Invited) 02/2012
15. Materials Research Society National Meeting: Section U
Boston, MA (Invited) 12/2011
14. University of Chicago
Chicago, IL (Invited) 11/2011
13. McGill University
Montreal, Canada (Invited) 09/2011
12. Universite de Montreal
Montreal, Canada (Invited) 09/2011
11. IUPAC International Chemistry Congress
San Juan, PR (Invited) 08/2011
10. International Symposium on Novel Aromatic Compounds (ISNA)
Eugene, OR (Contributed) 07/2011
9. UMass Amherst, Department of Polymer Science and Engineering 05/2011

- Amherst, MA (Invited)
8. The 3M Corporation 11/2010
St. Paul, MN (Invited)
 7. Xerox Research Centre 09/2010
Mississauga, Ontario, Canada (Invited)
 6. ACS National Meeting, Organic Division 08/2010
Boston, MA (Contributed)
 5. Gordon Conference, Electronic Processes in Organic Materials 07/2010
Mount Holyoke College, South Hadley, MA (Invited)
 4. University of California, Santa Barbara 05/2010
Santa Barbara, CA (Invited)
 3. Cornell University, Department of Materials Science and Engineering 04/2010
Ithaca, NY (Invited)
 2. University of South Carolina 04/2010
Columbia, SC (Invited)
 1. University of Scranton 03/2009
Scranton, PA (Invited)