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PROFESSIONAL INTERESTS

Inorganic, organic, solid-state, reticular synthesis, and materials chemistry; nanoporous materials; molecular weaving; synthesis of metal-organic frameworks and covalent organic frameworks; carbon dioxide capture and conversion to fuels; hydrogen and methane storage; water harvesting from air; gas separations and adsorption; heterogeneous catalysis; sequence-dependent chemical structures.

EDUCATION AND ACADEMIC POSITIONS

1983-1985 B.S., Chemistry, *Cum Laude*; State University of New York-Albany, New York
1986-1990 Ph.D., Chemistry, Best Thesis Award, University of Illinois-Urbana, Illinois
1990-1992 NSF Postdoctoral Fellow, Harvard University
1992-1998 Assistant Professor, Department of Chemistry, Arizona State University
1999-2006 Robert W. Parry Professor, Department of Chemistry, University of Michigan
2006-2011 Irving and Jean Stone Chair in Physical Sciences, Christopher S. Foote Professor of Chemistry, University of California-Los Angeles
2012- James and Neeltje Tretter Chair Professor of Chemistry, University of California-Berkeley
2012- Senior Faculty Scientist/Affiliate, Lawrence Berkeley National Laboratory
2012-2013 Director of the Molecular Foundry, Lawrence Berkeley National Laboratory
2013- Co-Director of the Kavli Energy Nanosciences Institute, UC Berkeley
2014- Co-Director of the California Research Alliance by BASF, UC Berkeley
2014- Founding Director of Berkeley Global Science Institute, UC Berkeley

GLOBAL SCIENCE INITIATIVES

2009-2016 Head, Center for Reticular Materials, NIMs, Tsukuba, Japan
2009-2013 World Class Professor Program, KAIST, South Korea
2011-2017 Founder and Advisor, Center for Global Mentoring, UCLA
2011- Director of the Carbon Capture and Conversion Group at KFUPM, Saudi Arabia
2011-2016 Co-Executive Director, MANAR Research Center, Vietnam National University
2013- Director of UC Berkeley- Saudi KACST Collaborative Center
2016- Co-Founder of Foundry for Reticular Materials for Sustainability, University Putra Malaysia
2018-2019 Advisor to UC Berkeley-Wuhan University Innovative Research Center
2018-2019 Advisor to Shanghai Tech University, Physical Sciences

HONORS AND AWARDS

2020 German Chemical Society, August-Wilhelm-von-Hofmann Medal, Germany
2019 Elected member of the National Academy of Sciences, United States
2019 Nano Research Award, China
2019 Mohammed bin Rashid Medal of Science, United Arab Emirates
2019 Royal Swedish Academy of Sciences Gregori Aminoff Prize, Sweden
2018 Eni Award for Energy, Italy
2018 Prince Sultan bin Abdulaziz International Prize for Water, Saudi Arabia
2018 Wolf Prize in Chemistry, Israel
2018 BBVA Frontiers of Knowledge Award in Basic Sciences, Spain
2017 Kuwait Prize in Basic Sciences, Kuwait
2017 Albert Einstein World Award of Science, World Cultural Council
2017 Star of Science Award, Jordan
2017 Honorary Doctorate, University Putra Malaysia, Malaysia
2017 Japan Society of Coordination Chemistry International Award, Japan
2017 King Abdullah II Order of Distinction of the First Class, Jordan
2017 Royal Society of Chemistry Spiers Memorial Award, United Kingdom
2017 Bailar Medal, University of Illinois at Urbana-Champaign, United States
2016 TÜBA Academy Prize in Basic and Engineering Sciences, Turkey
2016 Mack Award, Ohio State University, United States
2015 Mustafa Prize in Nanoscience and Nanotechnology, Iran
2015 UNICAM Award, University of Camerino, Italy
2015 King Faisal International Prize in Science, Saudi Arabia
2015 Honorary Professor, Wuhan University, China
2013 China Nano Award, China
2013 Honorary Professor, Jilin University, China
2012 World Class Professorship, Beijing Institute of Technology, China
2012 James and Neeltje Tretter Chair Professor of Chemistry, UC Berkeley
2011 Honorary Professor, Fudan University, China
2011 ARAMCO Chair, KFUPM, Saudi Arabia
2011 Distinguished Professor, Vietnam National University, Vietnam
2010 Thomson Reuters ISI Web of Science Citation Laureate in Chemistry
2010 Royal Society of Chemistry Centenary Prize, United Kingdom
2009 World Class Professor, KAIST, South Korea
2009 Izatt-Christensen International Award in Macrocyclic Chemistry, United States
2009 American Chemical Society Award in the Chemistry of Materials, United States
2009 Miller Visiting Professorship at University of California-Berkeley, United States
2009 Irving and Jean Stone Chair Professorship in Physical Sciences, UCLA, United States
2008 AAAS Newcomb Cleveland Prize, United States
2007 Materials Research Society Medal, United States
2007 Deans Recognition Award, UCLA, United States
2007 DOE Hydrogen Program R&D Award for Outstanding Achievements, United States
2006 H. N. McCoy Award for the greatest discovery in chem. Sci., UCLA, United States
2006 *Popular Science* magazine's *Brilliant 10* scientists and engineers, United States
2006 Christopher S. Foote Professorship, UCLA, United States
2004 Robert W. Parry Collegiate Professorship, University of Michigan, United States
2004 Sacconi Medal, Italian Chemical Society, Division of Inorganic Chemistry, Italy
2002 Chem. Chair's Excellence in Research Award, University of Michigan, United States

2002	3M Faculty Award, United States
2001	Visiting Professor, Université Louis Pasteur, Strasbourg, France
1999	Graduate College Mentor Award, Arizona State University, United States
1998	Exxon Award, ACS-Solid State Chemistry Division, United States
1997	NSF Faculty Early Career Development Award, United States
1995	Exxon Education Foundation Award, United States
1991	Elected to Sigma Xi Honor Society, University of Illinois-Urbana, United States
1990	National Science Foundation Postdoctoral Fellowship Award, United States

MENTORING, PUBLICATIONS, PATENTS, CITATIONS AND PLENARY AND NAMED PRESENTATIONS

- **Mentoring.** Research mentor to 70 Ph.D. students, 76 postdoctoral fellows, and 50 visiting scholars.
- **Publications.** Authored 298 articles in peer-reviewed journals, 29 published in *Science* and *Nature*. A textbook titled: Reticular Chemistry.
- **Citations.** Over 158,000 total citations with an average of 500 citations per published article. H-index of 156 (Google Scholar Data, May 2020).
- **Patents.** 45 U.S. patents awarded and 48 published U.S. patent applications.
- **Plenary and Named Lectureships.** Over 400 invited presentations worldwide including more than 120 plenary and keynote speeches and 31 named lectureships.

ADVISORY AND EDITORIAL POSITIONS

2019-	Member of Editorial Board, <i>Nanoletters</i>
2019-	Member of Editorial Board, <i>Molecular Frontiers Journal</i>
2019-	Member of Advisory Board of Basque Center on Materials
2018-	Member of Advisory Board of Instituto de Ciencia de Materiales de Madrid, CSIC
2018-	ACS Award Selection Committee Chair
2018-	Member of the Scientific Advisory Board, <i>ACS Central Science</i>
2017-	International Advisory Board, Wuhan Synchrotron, China
2016-	ACS Award Selection Committee Member
2015	Member of Academic Review Committee, Peking University, Chemistry
2014-	Associate Editor, <i>Journal of the American Chemical Society</i>
2014-2017	Member of Science Advisory Board, Shanghai Tech University
2014-	Member of the Board of Trustees, University of Sharjah, U.A.E.
2014-2018	Member, UC Berkeley Baker Fellows Program Academic Advisory Committee
2014-2019	Selection and Evaluation Committee, Institute for Basic Science, South Korea
2013-2018	Member, CHESS Club for cyber security, American Council of Science
2011-2013	Editorial Advisory Board, <i>Journal of the American Chemical Society</i>
2010-2019	Member of the Advisory Board of <i>Chemical Science</i>
2010	Member of the Advisory Board of Royal Society of Chemistry
2010	Panel Reviewer for Advance Research Projects Agency-Energy

- 2009-2015 Member of the international advisory board of Zeolites and Microporous Crystals
 2008 Member of scientific committee of MOF08, Germany
 2008 Member of the External Advisory Board, UCLA-DOE Institute for Genomics
 2007 Reviewer of the Natural Sciences and Engineering Research Council of Canada
 2006 Member of Editorial Board of *Chemistry Central Journal*
 2005-2007 Member of Editorial Board of *Accounts of Chemical Research*
 2005-2006 Guest Editor for *Journal of Solid State Chemistry*
 2003 Founder and Organizer of the First NSF Reticular Chemistry Workshop
 2002 Member of Editorial Board of *Nanoporous Materials*
 2001-2004 Member of Editorial Board of *Inorganic Chemistry*
 2001-2004 Co-organizer of the NSF Materials Workshop
 2001-2002 Member of Editorial Board of *Chemistry of Materials*
 2000-2001 Guest Editor for *Journal of Solid State Chemistry*
 2000 Member of Editorial Board of *Solid State Sciences*

PUBLICATIONS

- 298 MOF Water Harvesters, N. Hanikel, M. S. Prévot, O. M. Yaghi,
Nat. Nanotechnol., **2020**, DOI: 10.1038/s41565-020-0673-x.
- 297 Reticulating 1D Ribbons into 2D Covalent Organic Frameworks by Imine and Imide Linkages, H. L. Nguyen, C. Gropp, O. M. Yaghi,
J. Am. Chem. Soc., **2020**, DOI: 10.1021/jacs.9b13971.
- 296 A Porous Covalent Organic Framework with Voided Square Grid Topology for Atmospheric Water Harvesting, H. L. Nguyen, N. Hanikel, S. J. Lyle, C. Zhu, D. M. Proserpio, O. M. Yaghi,
J. Am. Chem. Soc., **2020**, *142*, 2218-2221.
- 295 Precise Control of Molecular Self-Diffusion in Isoreticular and Multivariate Metal-Organic Frameworks, T. M. O. Popp, A. Z. Plantz, O. M. Yaghi, J. A. Reimer,
ChemPhysChem, **2020**, *21*, 32-35.
- 294 Architectural Stabilization of a Gold(III) Catalyst in Metal-Organic Frameworks, J. S. Lee, E. A. Kapustin, X. Pei, S. Llopis, O. M. Yaghi, F. D. Toste,
Chem, **2020**, *6*, 141-152.
- 293 **Textbook:**
 Introduction to Reticular Chemistry: Metal-Organic Frameworks and Covalent Organic Frameworks, O. M. Yaghi, M. J. Kalmutzki, C. S. Diercks, Wiley-VCH, Weinheim, **2019**, 509 pp.
- 292 Amidation, Esterification, and Thioesterification of a Carboxyl-Functionalized Covalent Organic Framework, L. Guo, S. Jia, C. S. Diercks, X. Yang, S. A. Alshimmri, O. Yaghi,
Angew. Chem. Int. Ed., **2019**, DOI: 10.1002/anie.201912579.

- 291 Coordinative Alignment in the Pores of MOFs for the Structural Determination of N-, S-, and P-Containing Organic Compounds Including Complex Chiral Molecules, X. Pei, H.-B. Bürgi, E. A. Kapustin, Y. Liu, O. M. Yaghi, *J. Am. Chem. Soc.*, **2019**, DOI: 10.1021/jacs.9b10501.
- 290 A Metal-Organic Framework of Organic Vertices and Polyoxometalate Linkers as a Solid-State Electrolyte, W. Xu, X. Pei, C. S. Diercks, H. Lyu, Z. Ji, O. M. Yaghi, *J. Am. Chem. Soc.*, **2019**, *141*, 17522-17526.
- 289 Three-Dimensional Phthalocyanine Metal-Catecholates for High Electrochemical Carbon Dioxide Reduction, R. Matheu, E. Gutierrez-Puebla, M. Á. Monge, C. S. Diercks, J. Kang, M. S. Prévot, X. Pei, N. Hanikel, B. Zhang, P. Yang, O. M. Yaghi, *J. Am. Chem. Soc.*, **2019**, *141*, 17081-17085.
- 288 Parallel Worlds Meet at Designed Interfaces with a Vast Number of Potential Frameworks, Z. Ji, O. M. Yaghi, *Biochemistry*, **2019**, *58*, 3823-3824.
- 287 Rapid Cycling and Exceptional Yield in a Metal-Organic Framework Water Harvester, N. Hanikel, M. S. Prévot, F. Fathieh, E. A. Kapustin, H. Lyu, H. Wang, N. J. Diercks, T. G. Glover, O. M. Yaghi, *ACS Cent. Sci.*, **2019**, *5*, 1699-1706.
- 286 Reticular Chemistry in All Dimensions, O. M. Yaghi, *ACS Cent. Sci.*, **2019**, *5*, 1295-1300.
- 285 Reticular Synthesis of Multinary Covalent Organic Frameworks, B. Zhang, H. Mao, R. Matheu, J. A. Reimer, S. A. Alshimiri, S. Alshihri, O. M. Yaghi, *J. Am. Chem. Soc.*, **2019**, *141*, 11420-11424.
- 284 Multi-Step Solid-State Organic Synthesis of Carbamate-Linked Covalent Organic Frameworks, S. J. Lyle, T. M. O. Popp, P. J. Waller, X. Pei, J. A. Reimer, O. M. Yaghi, *J. Am. Chem. Soc.*, **2019**, *141*, 11253-11258.
- 283 Isotherms of Individual Pores by Gas Adsorption Crystallography, H. S. Cho, J. Yang, X. Gong, Y.-B. Zhang, K. Momma, B. M. Weckhuysen, H. Deng, J. K. Kang, O. M. Yaghi, O. Terasaki, *Nat. Chem.*, **2019**, *11*, 562-570.
- 282 Carbon capture and conversion using metal-organic frameworks and MOF-based materials, M. Ding, R. W. Flaig, H. Jiang, O. M. Yaghi, *Chem. Soc. Rev.*, **2019**, *48*, 2783-2828.
- 281 Porous Crystalline Olefin-Linked Covalent Organic Frameworks, H. Lyu, C. S. Diercks, C. Zhu, O. M. Yaghi, *J. Am. Chem. Soc.*, **2019**, *141*, 6848-6852.
- 280 Reticular Chemistry: Molecular Precision in Infinite 2D and 3D, O. M. Yaghi, *Mol. Front. J.*, **2019**, *3*, 1-18.

- 279 Covalent Organic Frameworks: Organic Chemistry Extended into Two and Three Dimensions, S. J. Lyle, P. J. Waller, O. M. Yaghi, *Trends Chem.*, **2019**, *1*, 172-184.
- 278 Highly Active and Stable Single-Atom Cu Catalysts Supported by a Metal–Organic Framework, A. M. Abdel-Mageed, B. Rungtaweivoranit, M. Parlinska-Wojtan, X. Pei, O. M. Yaghi, R. J. Behm, *J. Am. Chem. Soc.*, **2019**, *141*, 5201-5210.
- 277 3D Covalent Organic Frameworks of Interlocking 1D Square Ribbons, Y. Liu, C. S. Diercks, Y. Ma, H. Lyu, C. Zhu, S. A. Alshimri, S. Alshihri, O. M. Yaghi, *J. Am. Chem. Soc.*, **2019**, *141*, 677-683.
- 276 Local Electronic Structure of Molecular Heterojunctions in a Single-Layer 2D Covalent Organic Framework, T. Joshi, C. Chen, H. Li, C. S. Diercks, G. Wang, P. J. Waller, H. Li, J. Bredas, O. M. Yaghi, M. F. Crommie, *Adv. Mater.*, **2019**, *31*, 1805941.
- 275 Identification of the Strong Brønsted Acid Site in a Metal–Organic Framework Solid Acid Catalyst, C. A. Trickett, T. M. Osborn Popp, J. Su, C. Yan, J. Weisberg, A. Huq, P. Urban, J. Jiang, M. J. Kalmutzki, Q. Liu, J. Baek, M. P. Head-Gordon, G. A. Somorjai, J. A. Reimer, O. M. Yaghi, *Nature Chem.*, **2019**, *11*, 170-176.
- 274 Building a Global Culture of Science —The Vietnam Experience, K. E. Cordova, O. M. Yaghi, *Angew. Chem. Int. Ed.*, **2019**, *58*, 1552-1560.
- 273 Urea-Linked Covalent Organic Frameworks, C. Zhao, C. S. Diercks, C. Zhu, N. Hanikel, X. Pei, O. M. Yaghi, *J. Am. Chem. Soc.*, **2018**, *140*, 16438-16441.
- 272 Bioinspired Metal–Organic Framework Catalysts for Selective Methane Oxidation to Methanol, J. Baek, B. Rungtaweivoranit, X. Pei, M. Park, S. C. Fakra, Y. Liu, R. Matheu, S. A. Alshimri, S. Alshehri, C. A. Trickett, G. A. Somorjai, O. M. Yaghi, *J. Am. Chem. Soc.*, **2018**, *140*, 18208-18216.
- 271 Conceptual Advances from Werner Complexes to Metal–Organic Frameworks, C. S. Diercks, M. J. Kalmutzki, N. J. Diercks, O. M. Yaghi, *ACS Cent. Sci.*, **2018**, *4*, 1457-1464.
- 270 Linking Molybdenum-Sulfur Clusters for Electrocatalytic Hydrogen Evolution, Z. Ji, C. A. Trickett, X. Pei, O. M. Yaghi, *J. Am. Chem. Soc.*, **2018**, *140*, 13618-13622.
- 269 Secondary Building Units as the Turning Point in the Development of the Reticular Chemistry of MOFs, M. J. Kalmutzki, N. Hanikel, O. M. Yaghi, *Sci. Adv.*, **2018**, *4*, eaat9180.

- 268 Molecular Weaving of Covalent Organic Frameworks for Adaptive Guest Inclusion, Y. Liu, Y. Ma, J. Yang, C. S. Diercks, N. Tamura, F. Jin, O. M. Yaghi, *J. Am. Chem. Soc.*, **2018**, *140*, 16015-16019.
- 267 Cytoprotective Metal-organic Frameworks for Anaerobic Bacteria, Z. Ji, H. Zhang, H. Liu, O. M. Yaghi, P. Yang, *Proc. Natl. Acad. Sci. U.S.A.*, **2018**, *115*, 10582-10587.
- 266 Crystalline Dioxin-Linked Covalent Organic Frameworks from Irreversible Reactions, B. Zhang, M. Wei, H. Mao, X. Pei, S. A. Alshimri, J. A. Reimer, O. M. Yaghi, *J. Am. Chem. Soc.*, **2018**, *140*, 12715-12719.
- 265 Metal Coordination as a Template Strategy to Make Resilient Woven Materials, Y. Liu, O. M. Yaghi, *Bull. Jpn. Soc. Coord. Chem.*, **2018**, *71*, 12-17.
- 264 Global Engagement in Science: The University's Fourth Mission? L. Öhrström, P. Weiderud, M. Abu Youssef, O. M. Yaghi, *Science & Diplomacy*, 2018, *42*, 2.
- 263 Facilitating Laboratory Research Experience Using Reticular Chemistry, S. J. Lyle, R. W. Flaig, K. E. Cordova, O. M. Yaghi, *J. Chem. Educ.*, **2018**, *95*, 1512-1519.
- 262 Conversion of Imine to Oxazole and Thiazole Linkages in Covalent Organic Frameworks, P. J. Waller, Y. S. AlFaraj, C. S. Diercks, N. N. Jarenwattananon, O. M. Yaghi, *J. Am. Chem. Soc.*, **2018**, *140*, 9099–9103.
- 261 Single-crystal X-ray Diffraction Structures of Covalent Organic Frameworks, T. Ma, E. A. Kapustin, S. X. Yin, L. Liang, Z. Zhou, J. Niu, L. Li, Y. Wang, J. Su, J. Li, X. Wang, W. D. Wang, W. Wang, J. Sun, O. M. Yaghi, *Science*, **2018**, *361*, 48-52.
- 260 Impact of Disordered Guest-Framework Interactions on the Crystallography of Metal-Organic Frameworks, S. Lee, H. Büergi, S. A. Alshimri, O. M. Yaghi, *J. Am. Chem. Soc.*, **2018**, *140*, 8958–8964.
- 259 Practical Water Production from Desert Air, F. Fathieh, M. J. Kalmutzki, E. A. Kapustin, P. J. Waller, J. Yang, O. M. Yaghi, *Sci. Adv.*, **2018**, *4*, eaat9180.
- 258 The Geometry of Periodic Knots, Polycatenanes and Weaving from a Chemical Perspective: A Library for Reticular Chemistry, Y. Liu, M. O'Keeffe, M. M. J. Treacy, O. M. Yaghi, *Chem. Soc. Rev.*, **2018**, *47*, 4642-4664.
- 257 Chemical Diversity in a Metal–Organic Framework Revealed by Fluorescence Lifetime Imaging, W. Schrimpf, J. Jiang, Z. Ji, P. Hirschle, D. C. Lamb, O. M. Yaghi, S. Wuttke,

- Nat. Commun.*, **2018**, 9, 1647.
- 256 Metal–Organic Frameworks for Water Harvesting from Air, M. J. Kalmutzki, C. S. Diercks, O. M. Yaghi,
Adv. Mater., **2018**, 1704304.
- 255 Adsorption-based Atmospheric Water Harvesting Device for Arid Climates
H. Kim, S. R. Rao, E. A. Kapustin, L. Zhao, S. Yang, O. M. Yaghi, E. N. Wang,
Nat. Commun., **2018**, 9, 1191.
- 254 The Role of Reticular Chemistry in the Design of CO₂ Reduction Catalysts, C. S. Diercks,
Y. Liu, K. E. Cordova, O. M. Yaghi,
Nature Materials, **2018**, 17, 301–307.
- 253 Reticular Electronic Tuning of Porphyrin Active Sites in Covalent Organic Frameworks for
Electrocatalytic Carbon Dioxide Reduction, C. S. Diercks, S. Lin, N. Kornienko, E. A.
Kapustin, E. M. Nichols, C. Zhu, Y. Zhao, C. J. Chang, O. M. Yaghi,
J. Am. Chem. Soc., **2018**, 140, 1116–1122.
- 252 A Synthetic Route for Crystals of Woven Structures, Uniform Nanocrystals, and Thin
Films of Imine Covalent Organic Frameworks, Y. Zhao, L. Guo, F. Gándara, Y. Ma, Z.
Liu, C. Zhu, H. Lyu, C. A. Trickett, E. A. Kapustin, O. Terasaki, O. M. Yaghi,
J. Am. Chem. Soc., **2017**, 139, 13166–13172.
- 251 Hydroisomerization of n-Hexane using Acidified Metal-Organic Framework and Platinum
Nanoparticles, K. Sabyrov, J. Jiang, O. M. Yaghi, G. A. Somorjai,
J. Am. Chem. Soc., **2017**, 139, 12382–12385.
- 250 Spiers Memorial Lecture: Progress and prospects of reticular chemistry, B.
Rungtaweewanit, C. S. Diercks, M. J. Kalmutzki, O. M. Yaghi,
Faraday Discuss., **2017**, 201, 9-45.
- 249 The Chemistry of CO₂ Capture in an Amine-Functionalized Metal-Organic Framework
under Dry and Humid Conditions, R. W. Flaig, T. M. Osborn Popp, A. M. Fracaroli, E. A.
Kapustin, M. J. Kalmutzki, R. M. Altamimi, F. Fathieh, J. A. Reimer, O. M. Yaghi,
J. Am. Chem. Soc., **2017**, 139, 12125-12128.
- 248 The Chemistry of Metal–Organic Frameworks for CO₂ Capture, Regeneration and
Conversion, C. A. Trickett, A. Helal, B. A. Al-Maythaly, Z. H. Yamani, K. E. Cordova,
O. M. Yaghi,
Nature Rev. Mater., **2017**, 2, 17045.
- 247 Molecular Retrofitting Adapts a Metal–Organic Framework to Extreme Pressure, E. A.
Kapustin, S. Lee, A. S. Alshammari, O. M. Yaghi,
ACS Cent. Sci., **2017**, 3, 662-667.
- 246 Calcium L-Lactate Frameworks as Naturally Degradable Carriers for Pesticides, J. Yang,
C. A. Trickett, S. B. Alahmadi, A. Alshammari, O. M. Yaghi,
J. Am. Chem. Soc., **2017**, 139, 8118-8121.

- 245 The ‘Folklore’ and Reality of Reticular Chemistry, K. E. Cordova, O. M. Yaghi, *Mater. Chem. Front.*, **2017**, 1, 1304-1309.
- 244 Multivariate Metal-Organic Frameworks, A. Helal, Z. H. Yamani, K. E. Cordova, O. M. Yaghi, *Nat. Sci. Rev.*, **2017**, 4, 296-298.
- 243 Water harvesting from air with metal-organic frameworks powered by natural sunlight , H. Kim, S. Yang, S. R. Rao, S. Narayanan, E. A. Kapustin, H. Furukawa, A. S. Umans, O. M. Yaghi, E. N. Wang, *Science*, **2017**, 356, 430-434.
- 242 Principles of Designing Extra-Large Pore Openings and Cages in Zeolitic Imidazolate Frameworks, J. Yang, Y. Zhang, Q. Liu, C. A. Trickett, E. Gutierrez-Puebla, M. Á. Monge, H. Cong, A. Aldossary, H. Deng, O. M. Yaghi, *J. Am. Chem. Soc.*, **2017**, 139, 6448–6455.
- 241 Sequence-Dependent Materials, T. M. Osborn Popp, O. M. Yaghi, *Acc. Chem. Res.*, **2017**, 50, 532-534.
- 240 The atom, the molecule, and the covalent organic framework, C. S. Diercks, O. M. Yaghi, *Science*, **2017**, 355, 923.
- 239 Tuning the Interplay between Selectivity and Permeability of ZIF-7 Mixed Matrix Membranes, B. A. Al-Maythaly, A. M. Alloush, M. Faizan, H. Dafallah, M. A. A. Elgzoly, A. A. A. Seliman, A. Al-Ahmed, Z. H. Yamani, M. A. M. Habib, K. E. Cordova, O. M. Yaghi, *ACS Appl. Mater. Interfaces*, **2017**, 33401-33407.
- 238 Plasmon-Enhanced Photocatalytic CO₂ Conversion within Metal-Organic Frameworks Under Visible Light, K. M. Choi, D. Kim, B. Rungtaweeworanit, C. A. Trickett, J. T. D. Barmanbek, A. Alshammari, P. Yang, O. M. Yaghi, *J. Am. Chem. Soc.*, **2017**, 139, 356-362.
- 238 Reticular Chemistry - Construction, Properties, and Precision Reactions of Frameworks, O. M. Yaghi, *J. Am. Chem. Soc.*, **2016**, 138, 15507–15509.
- 237 Plasmon-Enhanced Photocatalytic CO₂ Conversion within Metal-Organic Frameworks Under Visible Light, K. M. Choi, D. Kim, B. Rungtaweeworanit, C. A. Trickett, J. T. D. Barmanbek, A. Alshammari, P. Yang, O. M. Yaghi, *J. Am. Chem. Soc.*, **2016**, 356-362.
- 236 Chemical Conversion of Linkages in Covalent Organic Frameworks, P. J. Waller, S. Lyle, T. Osborn Popp, C. S. Diercks, J. A. Reimer, O. M. Yaghi, *J. Am. Chem. Soc.*, **2016**, 138, 15519–15522.

- 235 Copper Nanocrystals Encapsulated in Zr-based Metal-Organic Frameworks for Highly Selective CO₂ Hydrogenation to Methanol, B. Rungtaweevoranit, J. Baek, J. R. Araujo, B. S. Archanjo, K. M. Choi, O. M. Yaghi, G. A. Somorjai, *Nano Lett.*, **2016**, 7645-7649.
- 234 Structures of Metal–Organic Frameworks with Rod Secondary Building Units, A. Schoedel, M. Li, D. Li, M. O’Keeffe, O. M. Yaghi, *Chem. Rev.*, **2016**, 116, 12466–12535.
- 233 Coordinative Alignment of Molecules in Chiral Metal-Organic Frameworks, S. Lee, E. Kapustin, O. M. Yaghi, *Science*, **2016**, 353, 808-811.
- 232 Nanoporous Transparent MOF Glasses with Accessible Internal Surface Y. Zhao, S. Lee, N. Becknell, O. M. Yaghi, C. A. Angell, *J. Am. Chem. Soc.*, **2016**, 138, 10818–10821.
- 231 Two Principles of Reticular Chemistry Uncovered in a Metal-Organic Framework of Heterotritopic Linkers and Infinite Secondary Building Units, N. Catarineu, A. Schoedel, P. Urban, M. Morla, C. Trickett, O. M. Yaghi, *J. Am. Chem. Soc.*, **2016**, 138, 10826–10829.
- 230 High Methane Storage Working Capacity in Metal-Organic Frameworks with Acrylate Links, J. Jiang, H. Furukawa, Y.-B. Zhang, O. M. Yaghi, *J. Am. Chem. Soc.*, **2016**, 138, 10244–10251.
- 229 Seven Post-Synthetic Covalent Reactions in Tandem Leading to Enzyme-Like Complexity within Metal-Organic Framework Crystals, A. Fracaroli, P. Siman, D. Nagib, M. Suzuki, H. Furukawa, F. D. Toste, O. M. Yaghi, *J. Am. Chem. Soc.*, **2016**, 138, 8352–8355.
- 228 The Role of Metal–Organic Frameworks in a Carbon-Neutral Energy Cycle, A. Schoedel, Z. Ji, O. M. Yaghi, *Nature Energy*, **2016**, 1, 16034-42.
- 227 A Titanium-Organic Framework as an Exemplar of Combining the Chemistry of Metal- and Covalent-Organic Frameworks, H. L. Nguyen, F. Gándara, H. Furukawa, T. L. H. Doan, K. E. Cordova, O. M. Yaghi, *J. Am. Chem. Soc.*, **2016**, 138, 4330–4333.
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- 5 Shape-selective binding of nitriles to the inorganic cavitand, $V_{12}O_{32}^{4-}$, W. G. Klemperer, T. A. Marquart and O. M. Yaghi, *Mat. Chem. Phys.*, **1991**, *29*, 97-104.
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- 2 A new structure type in polyoxoanion chemistry: synthesis and structure of the $V_5O_{14}^{3-}$ anion, V. W. Day, W. G. Klemperer, O. M. Yaghi, *J. Am. Chem. Soc.*, **1989**, *111*, 4518-4519.
- 1 Synthesis and characterization of a soluble oxide inclusion complex, $[CH_3CN \subset (V_{12}O_{32})^{4-}]$, V. W. Day, W. G. Klemperer, O. M. Yaghi, *J. Am. Chem. Soc.*, **1989**, *111*, 5959-5961.

US PATENTS ISSUED

- | | |
|-------------------|--|
| 10,287,304 | Acid, solvent, and thermal resistant metal-organic frameworks |
| 10,087,205 | Metal organic frameworks comprising a plurality of sbus with different metal ions and/or a plurality of organic linking ligands with different functional groups |
| 9,978,474 | Conductive open frameworks |
| 9,669,098 | Metal-organic frameworks with exceptionally large pore apertures |
| 9,512,145 | Porous reactive framework |
| 9,269,473 | Conductive open frameworks |
| 9,102,609 | Functionalization of organic molecules using metal-organic frameworks (MOFs) as catalysts |
| 9,078,922 | Metal-organic frameworks with exceptionally large pore apertures |
| 9,045,387 | Oxidative homo-coupling reactions of aryl boronic acids using a porous copper metal-organic framework as a highly efficient heterogeneous catalyst |
| 8,946,454 | Chemical framework compositions and methods of use |
| 8,916,722 | Complex mixed ligand open framework materials |
| 8,876,953 | Carbon dioxide capture and storage using open frameworks |

8,852,320	Preparation of metal-triazolate frameworks
8,841,471	Open metal organic frameworks with exceptional surface area and high gas storage capacity
8,809,546	Preparation of functionalized zeolitic frameworks
8,742,152	Preparation of metal-catecholate frameworks
8,735,161	Gas sensor incorporating a porous framework
8,709,134	Reversible ethylene oxide capture in porous frameworks
8,691,748	Edible and biocompatible metal-organic frameworks
8,674,128	Conductive organometallic framework
8,540,802	Adsorptive gas separation of multi-component gases
8,480,955	Gas sensor incorporating a porous framework
8,480,792	Preparation of functionalized zeolitic frameworks
8,314,245	Preparation of functionalized zeolitic frameworks
7,931,960	Shaped bodies containing metal-organic frameworks
7,799,120	Metal-organic frameworks with exceptionally high capacity for storage of carbon dioxide at room-temperature
7,662,746	High gas adsorption metal-organic framework
7,652,132	Implementation of a strategy for achieving extraordinary levels of surface area and porosity in crystals.
7,582,798	Covalently linked organic frameworks and polyhedra
7,524,444	Shaped bodies containing metal-organic frameworks
7,411,081	Process for preparing and organometallic framework material
7,343,747	Metal-organic framework materials for gaseous hydrocarbon storage
7,309,380	Gas storage system
7,279,517	Process for the alkoxylation of organic compounds in the presence of novel framework materials
7,202,385	Process for the alkoxylation of monools in the presence of metallo-organic framework materials
7,196,210	Isorecticular metal-organic frameworks, process for forming the same, and systematic design of pore size and functionality therein, with application for gas storage
7,179,765	Process for preparing hydrogen peroxide from the elements
7,008,607	Process for preparing hydrogen peroxide from the elements
6,930,193	Isorecticular metal-organic frameworks, process for forming the same, and systematic design of pore size and functionality therein, with application for gas storage
6,929,679	Method of storing, uptaking, releasing of gases by novel framework materials
6,893,564	Shaped bodies containing metal-organic frameworks
6,624,318	Process for the epoxidation of an organic compound with oxygen or an oxygen-delivering compounds using catalysts containing metal-organic framework materials
6,617,467	Process for producing polyalkylene carbonates
5,648,508	Crystalline metal-organic microporous materials
092129604	Process for producing polyalkylene carbonates
092114793	Shaped bodies containing metal-organic frameworks
091124078	Process for the alkoxylation of organic compounds in the presence of novel framework materials
091114521	Process for preparing hydrogen peroxide from the elements (Taiwan)

PUBLISHED U.S. PATENT APPLICATIONS

- 20180326397** Zeolitic imidazolate frameworks
- 20180319821** Covalent organic frameworks with a woven structure
- 20170101429** Metal organic frameworks comprising a plurality of sbus with different metal ions and/or a plurality of organic linking ligands with different functional groups
- 20170081345** Metal-organic frameworks characterized by having a large number of adsorption sites per unit volume
- 20170081346** Mesoscopic materials comprised of ordered superlattices of microporous metal-organic frameworks
- 20170008915** Acid, solvent, and thermal resistant metal-organic frameworks
- 20160008472** Metal-organic frameworks with exceptionally large pore aperatures
- 20160247593** Conductive open frameworks
- 20140205846** Multi-dimensional networks
- 20140081014** Conductive open frameworks
- 20140012039** Functionalization of organic molecules using metal-organic frameworks (MOFs) as catalysts
- 20130295680** Gas sensor incorporating a porous framework
- 20130131344** Organo-metallic frameworks derived from carbenophilic metals and methods of making same
- 20130096210** Metal-organic frameworks with exceptionally large pore aperatures
- 20130023402** Preparation of functionalized zeolitic frameworks
- 20120259135** Complex mixed ligand open framework materials
- 20120259117** Organo-metallic frameworks and methods of making same
- 20120215015** Preparation of metal-catecholate frameworks
- 20120186449** Preparation of metal-triazolate frameworks
- 20120172612** Open metal organic frameworks with exceptional surface area and high gas storage capacity
- 20120133939** Carbon dioxide capture and storage using open frameworks
- 20120130113** Oxidative homo-coupling reactions of aryl boronic acids using a porous copper metal-organic framework as a highly efficient heterogeneous catalyst
- 20120031268** Reversible ethylene oxide capture in porous frameworks
- 20120028846** Gas sensor incorporating a porous framework
- 20120017668** Conductive organometallic framework
- 20110319630** Porous reactive framework
- 20110277767** Metal organic frameworks (MOFs) for air purification
- 20110137025** Chemical framework compositions and methods of use
- 20100286022** Edible and biocompatible metal-organic frameworks
- 20100186588** Preparation of functionalized zeolitic frameworks
- 20100143693** Crystalline 3D- and 2D covalent organic frameworks
- 20100132549** Adsorptive gas separation of multi-component gases
- 20090155588** Shaped bodies containing metal-organic frameworks
- 20070202038** Preparation of functionalized zeolitic frameworks
- 20070068389** Metal-organic frameworks with exceptionally high capacity for storage of carbon dioxide at room-temperature
- 20060252641** High gas adsorption in a microporous metal-organic framework with open-metal sites
- 20060185388** Metal-organic framework materials for gaseous hydrocarbon storage

20060154807	Covalently linked organic frameworks and polyhedra
20060135824	Process for the alkoxylation of monools in the presence of metallo-organic framework materials
20060057057	Process for preparing hydrogen peroxide from the elements
20050192175	Isoreticular metal-organic frameworks, process for forming the same, and systematic design of pore size and functionality therein, with application for gas storage
20050154222	Process for preparing an organometallic framework material
20050124819	Metal-organic polyhedra
20050004404	Process for the alkoxylation of monools in the presence of metallo-organic framework materials
20040265670	Gas storage system
20040249189	Process for the alkoxylation of organic compounds in the presence of novel framework materials
20040225134	Implementation of a strategy for achieving extraordinary levels of surface area and porosity in crystals
20040081611	Process for preparing hydrogen peroxide from the elements
20030222023	Shaped bodies containing metal-organic frameworks
20030148165	Method of storing, uptaking, releasing of gases by novel framework materials
20030078311	Process for the alkoxylation of organic compounds in the presence of novel framework materials
20030004364	Isoreticular metal-organic frameworks, process for forming the same, and systematic design of pore size and functionality therein, with application for gas storage

INVITED, PLENARY (*) AND NAMED () LECTURES**

2020

Technical University of Berlin, Berlin, Germany (January 2020)

2019

- (*) TSRI Frontiers in Chemistry Symposium, La Jolla, CA (February 2019)
- (*) Colloquium lecturer, University of Texas, Austin, TX (February 2019)
- (*) Saudi Water Forum, Riyadh, Saudi Arabia (March 2019)
- (*) School on Reticular Chemistry (2 talks), Stockholm University (March 2019)
- (*) Aminoff Prize Symposium, Royal Swedish Academy of Sciences, Stockholm (April 2019)
- (*) CHEMtogether Young Scientist Conference, Lund University, Sweden (April 2019)
- (**) Renown Celebrity Lecture, 110th Anniversary of Lanzhou University, China (May 2019)
- (**) Forum of Great Minds, University of Science and Technology China, China (May 2019)
- (*) Ret2019, Reticular Chemistry Symp., Shanghai Jiao Tong University, China (May 2019)
- (*) Planet Earth Symposium, Molecular Frontiers Foundation and Royal Swedish Academy of Sciences, Stockholm (May 2019)
- (*) Porous Organic Polymers-2019 Symposium, Heidelberg, Germany (September 2019)
- (*) Future Science Symposium, UNAM, Mexico City, Mexico (October 2019)
- (**) Franklin Award Lectureship, Stony Brook, New York (October 2019)
- (**) 3M University Lectureship, University of Western Ontario, Canada (October 2019)
- (*) Hassel Lectureship, University of Oslo, Oslo, Norway (November 2019)
- (*) Tsinghua University, University-Wide Lectureship (November 2019)

- (*) Beijing Institute of Technology, University-Wide Lectureship, China (November 2019)
- (*) Future Prize of China, Shanghai, China (November 2019)
- (**) Dongwu Forum University-Wide Lectureship, Soochow University, China (November 2019)

2018

- (*) World Government Summit, Dubai, UAE (February 2018)
- (**) Musselman Lectureship, Gettysburg College, Gettysburg, PA (March 2018)
- (**) Howard Flack Crystallographic Lectureship and Tour, Swiss Society for Crystallography, Switzerland (April 2018)
- (**) Howard Flack Lectureship, Paul Scherrer Institute, Switzerland (April 2018)
- (**) Howard Flack Lectureship, ETH Zurich, Switzerland (April 2018)
- (**) Howard Flack Lectureship, University of Zurich, Switzerland (April 2018)
- (**) Howard Flack Lectureship, University of Bern, Switzerland (April 2018)
- (**) Howard Flack Lectureship, EPFL@Scion, Switzerland (April 2018)
- (**) Howard Flack Lectureship, University of Geneva, Switzerland (April 2018)
- (**) Howard Flack Lectureship, University of Fribourg, Switzerland (April 2018)
- (*) The 1st International Forum on Energy and Environmental Materials, Three Gorges University, China (May 2018)
- (*) Center for Electron Microscopy International Symposium, ShanghaiTech, China (May 2018)
- (*) The 5th Fudan-UC Berkeley Materials Beyond, Fudan University, China (May 2018)
- (*) Bürgenstock Conference, Switzerland (May 2018)
- (*) Wolf Prize Symposium, Technion, Israel (May 2018)
- (*) Grand Challenges in the Chemical Sciences, Israel (June 2018)
- (**) Manuel Cardona Lectureship, Catalan Institute of Nanoscience-ICN2, Spain (June 2018)
- (*) Materials Science Institute of Madrid, CSIC, Spain (June 2018)
- (*) POLYMAT Spotlight 2018, Spain (June 2018)
- (*) 7th EuCheMS Chemistry Congress, United Kingdom (August 2018)
- (*) IIN Symposium, Northwestern University, Evanston (September 2018)
- (*) IUPAC 2nd Symposium on Organic and Inorganic Chemistry, Botswana (October 2018)
- (*) ENI Award Lecture, Polytechnic University of Turin (October 2018)
- (*) ENI Award Lecture, University of Bologna, Italy (October 2018)
- (**) Xuetao Lectureship, Tsinghua University, Beijing, China (November 2018)
- (*) 6th International Conference on Metal-Organic Frameworks, New Zealand (December 2018)

2017

- (*) University of Ankara, Turkey (January 2017)
- (**) Bailer lectureship, University of Illinois, Urbana-Champaign (March 2017)
- (*) ACS meetings 2 lectures, San Francisco, CA (April 2017)
- (**) SJTU Masters Distinguished lectureship, Shanghai, China (April 2017)
- (*) Wuhan Geoscience Named lectureship, Wuhan, China (April 2017)
- (*) Wuhan University, China (April 2017)
- University of Houston, Houston, TX (May 2017)
- Royal Scientific Society - European Commotion joint meeting, Amman, Jordan (May 2017)
- (**) Spiers Memorial Lectureship, Royal Society of Chemistry, Edinburgh, UK (June 2017)
- (*) STAR Symposium, Shanghai Tech, China (June 2017)
- (*) 4th European School of Crystallography ECS4, Poland (June 2017)
- (*) Chemistry Beyond the Mechanical Bond, Cambridge, UK (July 2017)
- (*) Advances in Functional Materials (AFM), Los Angeles (August 2017)
- (*) Japan Society of Coordination Chemistry Annual Meeting, Sapporo, Japan (September 2017)

- (*) Chemistry Progress for Sustainable Development, Bibliotheca Alexandria, Egypt (September 2017)
- (*) Swedish Academy Symposium on Scientific, Social, & Cultural Sustainability, Egypt (September 2017)
- (*) University Putra Malaysia, Malaysia (November 2017)
- (*) Leiden University, Netherlands (November 2017)
- (*) Kuwait Foundation for the Advancement of Sciences, Kuwait (November 2017)
- (*) University of Kuwait, Kuwait (November 2017)

2016

- (*) Nanoscience Development Forum, University Putra Malaysia (December 2016)
- (**) Joshua Jortner Distinguished Lectureship, Tel Aviv University, Israel (December 2016)
- (*) 10th International Conference on Chemistry in Industry, Bahrain (November 2016)
- (*) 4th Saudi International Nano Conference, Dhahran, Saudi Arabia (November 2016)
- (*) 6th Saudi Chemical Society, Riyadh, Saudi Arabia (November 2016)
- (*) North Africa and Middle East Science Centers Network Conference, Jordan (October 2016)
- (*) 70th Anniversary of Korean Chemical Society, Busan, S. Korea (October 2016)
- (*) China Solid-State Inorganic Society, Tianjin, China (October 2016)
- (*) 51st Mexican Congress of Chemistry & 35th National Congress of Chemistry Education, Mexico (September 2016)
- (*) BIT Inorganic and Solid-State Chemistry Conference, China (September 2016)
- (*) MOF-2016, Long Beach, CA (September 2016)
- (*) Swiss Nano Conference, Basel, Switzerland (July 2016)
- (*) Materials Beyond III (May 2016)
- (**) Mack Memorial Lectureship, Ohio State University (March 2016)

2015

- ARAMCO, Chemical R&D, Saudi Arabia (November 2015)
- (**) Research Dean Lectureship, King Fahd University of Petroleum and Minerals, Saudi Arabia (November 2015)
- (*) Saudi Chemical Society, ACS Section (November 2015)
- Harvard/MIT Inorganic Chemistry Colloquium (October 2015)
- (*) XLIII National Congress, Italian Chemical Society, Camerino, Italy (September 2015)
- 250th ACS Symposium in Boston, Boston, MA (August 2015)
- (**) Luojia Lectureship, Wuhan University, China (June 2015)
- Nanjing University, Wuhan, China (June 2015)
- (*) 98th Canadian Chemistry Conference and Exhibition, Ottawa, Canada (June 2015)
- Materials Beyond Conference, Maui, Hawaii (May 2015)
- (*) 38th Annual Meeting of the Brazilian Chemical Society, Sao Paulo State, Brazil (May 2015)
- (*) 2015 CB Defense Science and Technology Conference, St. Louis, Missouri (May 2015)
- (*) University of Sharjah Research Forum, Sharjah, UAE (May 2015)
- (*) Materials Beyond 2 Conferences, Fudan University, Shanghai, China (April 2015)
- Shanghai Tech University, Shanghai, China (April 2015)
- City University of Hong Kong, Hong Kong, (April 2015)
- (*) International Symposium on Cutting Edge... Imaging Applications, Hong Kong (April 2015)
- (*) 2015 William H. Nichols Medal Symposium, New York, New York (April 2015)
- (**) UNR CGSA Distinguished Speaker Series, University of Nevada, Reno (March 2015)
- (**) Spitzer Lecture, University of Southern California, Los Angeles, CA (March 2015)
- (*) BASF Symposium, Frankfurt, Germany (March 2015)

(*) King Abdulaziz City for Science and Technology (KACST), Saudi Arabia (March 2015)

2014

The 3rd Saudi International Nanotechnology Conference, Saudi Arabia (December 2014)

(*) “150 Years of Beautiful Structures and Defects” Symposium, Vietnam (November 2014)

(**) Axalta Distinguished Lecture, Univ. of Pennsylvania, Philadelphia, PA (October 2014)

(*) MOF2014 Conference, Kobe, Japan (September 2014)

248th American Chemical Society National Meeting, San Francisco, CA-2 talks (August 2014)

Multivariate Materials Conference, Puerto Rico (June 2014)

King Fahd University of Petroleum and Minerals, Dammam, Saudi Arabia (May 2014)

(*) University of Pittsburgh, Pittsburgh, PA (May 2014)

(*) Fink Lectureship Georgia Tech University, Atlanta, GA (April 2014)

Fudan University, Shanghai, China (March 2014)

247th ACS National Meeting, Dallas, Texas (March 2014)

MANA International Symposium 2014, Tsukuba, Japan (March 2014)

2013-2014 Texas A&M Student Invited Speaker, College Station, TX (February 2014)

2013

Intl. Symp. On MOF and Related Open Framework Materials, Macao, China (December 2013)

(*) 4th Asian Conference on Coordination Chemistry, Jeju, Korea (November 2013)

(*) ChinaNANO 2013, Beijing, China (September 2013)

(*) 2013 NIMS Conference, Tsukuba, Japan (July 2013)

Reticular Chemistry Conference, Oahu, Hawaii (May 2013)

(*) 2013 Discovery Lecture, Oak Ridge National Laboratory, Oak Ridge, TN (May 2013)

(**) Closs Lecture, University of Chicago, Chicago, IL (May 2013)

Qatar Biomedical Research Institute, Doha, Qatar (May 2013)

Soongsil University, Korea (April 2013)

(**) Haines Lecture, University of South Dakota (April 2013)

ExxonMobil Chemical Research Meeting, (April 2013)

(*) 78th Annual Meeting of the Israel Chemical Society (ICS), Tel Aviv, Israel (February 2013)

University of Calgary, Calgary, Canada (January 2013)

2012

Samsung Tech Fair, Seoul, Korea (November 2012)

2nd Saudi International Nanotechnology Conference (2SINC) 2012, KACST, Riyadh, Saudi Arabia (November 2012)

University of North Texas, Denton, TX (November 2012)

40th International Conference on Coordination Chemistry (ICCC-40), Valencia, Spain (September 2012)

Bruker-AXS/MIT Symposium, Massachusetts Institute of Technology (February 2012)

Stockholm University, Sweden (January 2012)

2011

Korea Academy of Science and Technology, KAIST, South Korea (October 2011)

Baekeland Symposium, Camden, NJ (October 2011)

Fudan University, China (September 2011)

Beijing Institute of Technology, China (September 2011)

242nd ACS National Meeting & Exposition, Denver, CO (August 2011)

(*) International Union of Crystallography XXII Congress and General Assembly,

Spain (August 2011)

Gordon Research Conferences: 2011 Nanoporous Materials, Holderness, NH (August 2011)

(*) 10th International Conference on Materials Chemistry, United Kingdom (July 2011)

(*) New Horizons in Molecular Science: Design and Application of Porous Frameworks, University of South Florida (June 2011)

(*) Saudi Int'l Petrochemicals Technologies Conf.2011, KACST, Saudi Arabia (June 2011)

King Saud University, Chemistry Department, Saudi Arabia (May 2011)

8th U.S.-Korea Forum on Nanotechnology, Pasadena, CA (April 2011)

(**) Eyring Lectures in Chemistry & Biochemistry, Arizona State University (April 2011)

241st ACS National Meeting & Exposition, Anaheim, CA (March 2011)

(*) VNUHCM-UCLA Symposium: Chemistry of MOFs and Related Materials, Vietnam (March 2011)

Sun Yat-Sen University, School of Chemistry & Chemical Engineering, China (March 2011)

(*) 1st United Arab Emirates Conference on Pure and Applied Chemistry, UAE (March 2011)

2010

Qatar Foundation Annual Research Forum 2010, Qatar (December, 2010)

(*) ACS Supramolecular Chemistry Symposium, New Orleans (November 2010)

Doha Carbon & energy Forum 2010, Qatar (November 2010)

(*) UCLA Dept. of Molecular and Medical Pharmacology, Huntington Beach (October 2010)

(*) Welch Conference on Green Chemistry and Sustainable Energy, Houston, TX (October 2010)

(*) International EEWS Workshop, KAIST, Korea (September 2010)

BASF, Ludwigshafen, Germany (August 2010)

(*) International Symposium on Advancing the Chemical Science, Hong Kong (July 2010)

(*) National Research foundation Symposium, Korea (June 2010)

(*) 5th Intl. Symposium on Macrocyclic & Supramolecular Chemistry, Japan (June 2010)

(*) 5th International Zeolite Membrane Meeting, Greece (May 2010)

University of Milan, Italy (May 2010)

Department of Energy, Separations & Analysis meeting, Baltimore, MD (April 2010)

Organic Chemistry Seminar, University of California, Berkeley, CA (March 2010)

(*) 239th ACS National Meeting & Exposition, San Francisco, CA (March 2010)

University of Illinois at Urbana-Champaign, IL (March 2010)

(*) International Symposium on MOFs, Yokohama, Japan (January 2010)

2009

(*) Malta IV, Frontiers of Chemical Sciences, Amman, Jordan (November 2009)

(*) Eleventh International Conference on Organic Chem., Kyoto, Japan (November 2009)

(*) ACS Southeastern Meeting, Puerto Rico (October 2009)

(*) National Institute of Materials, Tsukuba, Japan (September 2009)

(*) Second International EEWS Workshop, KAIST, Korea (September 2009)

(*) National Institute of Standards and Technology, Gaithersburg, MD (September 2009)

(*) Workshop on Nanomaterials and Functional Materials, Campinas, Brazil (August 2009)

(*) Symposium on Macrocyclic & Supramolecular Chemistry, Netherlands (June 2009)

(**) Musher Lectureship, Hebrew University, Jerusalem, Israel (May 2009)

(*) International Conference on Neutron Scattering, Knoxville, TN (May 2009)

The Gooch-Stephens Lectures, Waco, TX (April 2009)

(*) 237th ACS National Meeting, Inorganic Chem., Salt Lake City, UT (March 2009)

(*) University of Pittsburgh, Green Chemistry Program, Pittsburgh, PA (March 2009)

2008

- (*) Chemical & Biological Defense-DTRA, New Orleans, LA (November 2008)
- (*) North Africa Science Conference, Fez, Morocco (October 2008)
- (*) US National Science Foundation Distinguished Lecturer (October 2008)
- (*) Symp. on Nanoscience and Nanotechnology at MESA+, Netherlands (September 2008)
- (*) Swiss Chemical Society, Zurich (September 2008)
- (**) Guggenheim Lectureship, Reading University, UK (May 2008)

- (**) G. Schmidt Lectureship, Weizmann Institute, Rehovot, Israel, (May, 2008)
- (*) 235th ACS National Meeting, Presidential Session, New Orleans, LA (April, 2008)
- (*) US–Africa Workshop on Nanostructured Materials, Tunisia (March, 2008)
- (*) MANA International Symposium, Tsukuba, Japan (January, 2008)

2007

- 3rd Symposium on Chemistry of Coordination Space, Awaji, Japan (December, 2007)
- (*) Materials Research Society, Boston, MA (November, 2007)
- Max Planck Institute, Stuttgart, Germany (November, 2007)
- (*) Chemical Nanotechnology Talks VIII, Frankfurt, Germany (November, 2007)
- Symposium on Materials Issues in a Hydrogen Economy, Richmond, VA (November, 2007)
- Protective Equipment 2007 Conference, Melbourne, Australia (November, 2007)
- Pollution Prevention through Nanotechnology, Arlington, VA (September 2007)
- HK IAS-US ICMR Workshop, Kowloon, Hong Kong (September 2007)
- Nano-Structured Porous Materials Workshop, Arlington, VA (September 2007)
- 234th ACS National Meeting, Boston, MA (August 2007)
- 2007 NIMS Conference, Tsukuba, Japan (July 2007)
- (*) Japan-USA Symp. on Chemistry of Coordination Space, Evanston, Illinois (June 2007)
- (*) Giants of Chemistry, Edinburgh, Scotland (June 2007)
- DOE Hydrogen Program Review, Arlington, VA (May 2007)
- NSF Workshop on Complexity, Arlington, VA (May 2007)
- Shell Global Solutions, Amsterdam, Netherlands (May 2007)
- Rühr-Universität Bochum, Bochum, Germany (May 2007)
- Council of Scientific Society Presidents, Washington, DC (May 2007)
- University of California at San Diego, San Diego, CA (April 2007)
- Texas A & M University, College Station, TX (Apr. 2007)
- (*) 4th Annual Conference on Foundations of Nanoscience, Snowbird, UT (Apr. 2007)
- (*) Fudan University, Shanghai, China, (Apr. 2007)
- (*) 3rd Annual CNSI Frontiers in Nanosystems Conference, Kauai, Hawaii, (Mar. 2007)
- Protection Science Review, Falls Church, Virginia, (Feb. 2007)
- Nanotechnology for Chemical and Biological Defense 2030, Sante Fe, NM (Jan. 2007)
- Gordon Research Conference on Renewable Energy, Ventura, California (Jan. 2007)

2006

- Hydrogen Production and Storage Conference, Vancouver, BC, Canada (September 2006)
- (*) 232nd ACS National Meeting, San Francisco (September 2006)
- (*) Symp. on Materials Issues in Hydrogen Production and Storage, UCSB (August 2006)
- Los Alamos National Laboratories, New Mexico (July 2006)
- (*) Symposium on Macrocyclic & Supramolec. Chemistry, Victoria, BC, Canada (June 2006)
- (*) Saudi Aramco Symposium on Carbon Management, Dhahran, Saudi Arabia (May 2006)
- DOE Hydrogen Program (FreedomCAR) review, Washington DC (May 2006)

DOE Hydrogen Separations and Storage (BES) review, Washington DC (May 2006)
(* Carbon Capture & Sequestration 5th Annual Conference, Alexandria, VI (March 2006)
(* Electric Power Conference, Atlanta, Georgia (Feb. 2006)
(* Dow Chemical Company, Midland, Michigan (Feb. 2006)
(* Toyota Motor Co., Ann Arbor, Michigan (Feb. 2006)
(* NSF Workshop on Recent Developments in Inorg. Materials, Trieste, Italy (Jan. 2006)

2005

PacifiChem, Chemistry and Applications of MOFs symposium, Hawaii (Dec. 2005)
PacifiChem, Design of Nanomaterials and Nanodevices symposium, Hawaii (Dec. 2005)
PacifiChem, Metal-hydrides and Hydrogen Storage symposium, Hawaii (Dec. 2005)
(* ITESM Campus, Monterrey Institute of Technology, Mexico, (Nov. 2005)
BASF, Ludwigshafen, Germany (Nov. 2005)
Northwestern University, International Materials Institute, Evanston, IL (Nov. 2005)
(* The 10th International Chemical Conference, Taipei, Taiwan (Oct. 2005)
(* ExxonMobil Think Tank Meeting, Chicago, IL (Oct. 2005)
(* H-Workshop, Bonn, Germany (Oct. 2005)
Materials for the hydrogen Economy Symposium, Pittsburgh, PA (Sept. 2005)
DOE, Carbon Dioxide Program, Pittsburgh, PA (Sept. 2005)
(* Functional Materials for the 21st Century, Edinburgh (July 2005)
XX Congress of the International Union of Crystallography, Florence, Italy (July 2005)
(* XII International Symposium on Catalysis, Florence, Italy (July 2005)
International Conference on Organic Solid State, UCLA (July 2005)
University of Basel, Switzerland (June 2005)
GRC Solid State Chemistry, Il Ciocco, Italy (June 2005)
(* CNSI lecture, University of California, Los Angeles (May 2005)
UOP, Naperville, IL (April 2005)
University of Illinois-Urbana, IL (Mar. 2005)
Air Products Inc., Global Research (Mar. 2005)
(* CSIRO, Hierarchical Materials: New Porous Materials, Melbourne, Australia (Mar. 2005)
(* BASF Ludwigshafen, Germany (Feb. 2005)
Conference on MOFs as New Materials, Germany (Feb. 2005)
(* ExxonMobil, Global Research, Annandale, NJ (Feb. 2005)
New York University, NY (February 2005)
(* Nano 05 3rd Annual Meeting, Aarhus, Denmark (Jan. 2005)
Gordon Research Conference on Hydrocarbon Resources, Ventura, CA (Jan. 2005)

2004

Materials Research Society Meeting, Boston, MA (Dec. 2004)
Michigan Chapter Electrochemical Society, Warren, MI (Oct. 2004)
(* Italian Chemical Society, Inorganic Division, Rome, Italy (Sept. 2004)
(* University of Florence, Italy, (Sept. 2004)
(* International Meeting on Metal-Hydrogen Systems, Krakow, Poland (Sept. 2004)
T/J Technologies, Ann Arbor, MI (Sept. 2004)
Michigan Chapter of the Vacuum Society, Detroit (Sept. 2004)
228th American Chemical Society Meeting, Inorganic Div., Philadelphia (Aug. 2004)
228th American Chemical Society Meeting, Colloids Div., Philadelphia (Aug. 2004)
228th American Chemical Society Meeting, Fuel Div., Philadelphia (Aug. 2004)
(* American Crystallographic Association, Chicago (July 2004)

Argonne National Laboratory, Nanomaterials Symposium (May 2004)
American Physical Society Meeting, Montréal, Canada (March 2004)
(*) 5th International Chemistry Congress, Monterrey, Mexico (March 2004)
Ohio State University, Columbus, OH (March 2004)
Harvard-MIT Colloquium, Cambridge, MA (Feb. 2004)
(*) Dupont R&D, Experimental Station, Delaware (Feb. 2004)
University of N. Texas, Denton, TX (Feb. 2004)
(*) Wayne State University, Detroit, MI (Feb. 2004)
(*) New Horizons in Chemistry, University of S. Florida, Tampa, FL (Feb. 2004)
(*) University of Oklahoma, Norman OK (Feb. 2004)
University of California-Los Angeles, CA (Feb. 2004)
University of California-Berkeley, CA (Feb. 2004)
Carlton College, MN (Jan. 2004)
Oakland University, MI (Jan. 2004)
(*) Conf. on Sci. and Tech. for the Hydrogen Economy, Chesapeake, MD (Oct. 2003)
Swarthmore College, PA (Sept. 2003)

2003

NSF Materials Workshop, Tempe, AZ (Sept. 2003)
(*) BASF Research and Development, Ludwigshafen, Germany (Sept. 2003)
GM Research and Development, Warren, MI (August 2003)
IUPAC Meeting, Materials Design and Devices Symposium, Ottawa, CA (Aug. 2003)
IUPAC Meeting, Inorganic Symposium, Ottawa, CA (Aug. 2003)
UOP, Naperville, Illinois, (July 2003)
(*) ACS Midwest Section for Morley Medal, Cleveland, OH (June 2003)
High Temperature and Solid State Conference, East Lansing, MI (June 2003)
DOE-Catalysis Panel Study (May 2003)
University of Detroit Mercy (March 2003)
BP, Naperville, Illinois (March 2003)
(*) Nanoarchitectonics Workshop 2003, Tsukuba, Japan (March 2003)
Argonne National Lab., Illinois (February 2003)
(*) Science and Technology Meet Vision, Nanotechnology Forum of BASF (Oct. 2002)

2002

(*) UCLA NanoSystems Seminar Series, UCLA, CA (Oct. 2002)
(*) VIIIth International Conf. on Molecule-Based Magnets, Valencia, Spain (Oct. 2002)
NSF-Materials Workshop, Newark, Delaware (Oct. 2002)
Gordon Research Conference on Organic Structure and Properties (July 2002)
(*) Innovation in Crystal Engineering Discussion, RSC Bristol, England (June 2002)
(*) Nanoporous Materials III, Ottawa, Canada (June 2002)
Great Lakes ACS Midwest Section Meeting, Minneapolis (June 2002)
Canadian Chemical Society 2002 National Meeting, Vancouver, CA (June 2002)
Nanoscale DOE Panel Meeting, Washington (May 2002)
American Crystallography Association 2002, San Antonio, TX (May 2002)
(*) University of California, Santa Barbara, CA Nanotechnology Symposium (April 2002)
223rd ACS Meeting, Orlando, Florida (April 2002)
University of Missouri-Columbia, Missouri (Feb. 2002)
223rd ACS Meeting, Orlando, Florida (April 2002)
Italian-United States NSF Nano-Technology Workshop (March 2002)

University of Missouri-Columbia, Missouri (Feb. 2002)
University of California, Santa Cruz (Feb. 2002)

2001

Northwestern University, Evanston, Illinois (Nov. 2001)
University of Chicago, Chicago, Illinois (Nov. 2001)
(* Institute Lavoisier, Université de Versailles, Versailles, France (Nov. 2001)
Structure Forming Processes in Supramolecular Chemistry, Paris, France (Nov. 2001)
American Institute of Chemical Engineers, Reno, Nevada (Nov. 2001)
NSF-Materials Workshop, Madison, Wisconsin (Oct. 2001)
Annual Conference of Royal Society Chemistry, Birmingham, UK (Aug. 2001)
Gas Storage Workshop, Kingston, ON, Canada (July 2001)
(* 3 lectures, Université Louis Pasteur, Strasbourg, France (May 2001)
BASF Research and Development, Ludwigshafen, Germany (April 2001)
DOE Contractor's Meeting, San Diego, CA (April 2001)
221st ACS Meeting, Catalysis, San Diego, CA (April 2001)
221st ACS Meeting, Colloids, San Diego, CA (April 2001)
221st ACS Meeting, Inorganic, San Diego, CA (April 2001)
Department of Chemistry, University of Puerto Rico, San Juan, PR (Feb. 2001)

2000

Brandeis University, Waltham, MA (Dec. 2000)
Materials Research Society, Inorganic SS Materials II, Boston, MA (Dec. 2000)
Brigham Young University, Provo, Utah (Nov. 2000)
University of Utah, Salt Lake City, Utah (Nov. 2000)
NSF-Materials Workshop, Portland, Oregon (Oct. 2000)
(**) St. Paul Museum, St. Paul, Minnesota (Oct. 2000)
Max-Planck-Institut Für Kohlenforshchung, Mülheim an der Ruhr, Germany (Oct. 2000)
(* Micro- and Meso-porous Materials, Sendai, Japan (Aug. 2000)
(* Symposium on Zeolite and Microporous Crystals, Sendai, Japan (Aug. 2000)
Gordon Research Conference, Catalysis, Colby-Sawyer, New London, NH (June 2000)
Gordon Research Conference, Organic Structure and Properties: Extended Systems, Connecticut College, New London, Connecticut (June 2000)
University of Jordan, Department of Chemistry, Amman-Jordan (June 2000)
(* Nanoporous Materials II, Banff, Canada (May 2000)
83th meeting of the Canadian Society for Chemistry, Calgary, Canada (May 2000)
BASF Research and Development, Ludwigshafen, Germany (May 2000)
Spring 2000 American Chemical Society-Division of Inorganic Chemistry (April 2000)
University of Toledo, Toledo, OH (April 2000)
Northern Arizona University, AZ (March 2000)
(* 12 Deutsche Zeolith-Tagung (German Zeolite Conf.), Munich, Germany (March 2000)
University of Chicago, Chicago, IL (Feb. 2000)
University of Houston, Houston, TX (Feb. 2000)
Texas A&M University, College Station, TX (Feb. 2000)
Michigan State University, East Lansing, MI (Jan. 2000)

1999

Catalysis Research Symposium, Sapporo, Japan (Dec. 1999).
Int. Symp. on Molecular Design of Assembled Metal Complexes, Kyoto, Japan (Nov. 1999)

British Oxygen Company, NJ (Nov. 1999)
Yale University, New Haven, CT (Nov. 1999)
Gordon Research Conference, Solid-State Chemistry, Oxford, UK, (Sept. 1999)
217th meeting of the American Chemical Society Anaheim, CA (March 1999)
University of California, Berkeley, CA (Feb. 1999)
University of Arizona, Tuscon, AZ (Feb. 1999)
University of Colorado, Boulder, CO (Jan. 1999)

1998

Fall meeting of the Materials Research Society, Boston (Dec. 1998)
California State University, Los Angeles, CA (Nov. 1998)
South Eastern Regional Meeting of the ACS, Research Triangle Park, NC, (Nov. 1998)
6th NSF Materials Workshop, Morristown, NJ (Oct. 1998)
University of New York at Stony Brook, NY (Oct. 1998)
Northern Arizona University, Flagstaff, AZ (Sept. 1998)
University of Michigan, Ann Arbor, MI (Sept. 1998)
216th meeting of the American Chemical Society, Boston, MA (Aug. 1998)
Gordon Research Conference, Inorganic Chemistry, Newport, RI (July 1998)
Gordon Research Conference, Solid-State Chemistry, New London, NH (July 1998)
Defense Sciences Research Council Workshop, Washington D.C. (June 1998)
The 215th meeting of the American Chemical Society, Dallas, TX (March-April 1998)
University of California, Davis, CA (March 1998)
1998 Florida Advanced Materials Chemistry Conference, Palm Coast, FL (Mar. 1998)
NSF Solid-State and Materials Workshop, Washington D.C. (Jan. 1998)

1997

1997 Fall meeting of the Materials Research Society, Boston (Dec. 1997)
University of Southern California, Los Angeles, CA (Nov. 1997)
5th Chemical Congress of America, Functional Solids by Design, Cancun, Mexico (Nov. 1997)
Gordon Research Conference, Solid-State Chemistry, Oxford, UK, (Sept. 1997)
214th meeting of the American Chemical Society, Las Vegas, NV (Sept. 1997)
1997 NSF Inorganometallic Workshop, Santa Fe, NM (June 1997)
Gordon Research Conference, Zeolitic and Layered Materials, Plymouth, NH, (June 1997)
University of Minnesota, Minneapolis, MN (April 1997)
213th meeting of the American Chemical Society, San Francisco, CA, (April 1997)
University of Wisconsin, Madison, WI (Feb. 1997)
Indiana University, Bloomington, IN (Feb. 1997)
University of Illinois, Urbana, IL (Feb. 1997)

1996

Fall meeting of the Materials Research Society, Boston (Dec. 1996)
4th NSF- Materials Chemistry Workshop, Philadelphia, PA (Oct. 1996)
Nalco Chemical Company, Naperville, IL (Sept. 1996)
9th International Symposium on Molecular Inclusion, Lyon, France (Sept. 1996)
212th meeting of the American Chemical Society, Orlando, FL, (Aug. 1996)
Mobil Technology Company, Paulsboro, NJ (Aug. 1996)
Rohm and Hass Company, Spring House, PA (July 1996)
DOE Panel Study on Tailored Porous Materials, Lake Tahoe, CA (June 1996)
1996 Spring meeting of the Materials Research Society, San Francisco (April 1996)

211th meeting of the American Chemical Society, New Orleans (March 1996)
University of Arizona, Tucson, AZ (Feb. 1996)
Iowa State University, Ames, IA (Feb. 1996)
Purdue University, W. Lafayette, IN (Jan. 1996)

1995

University of California, Irvine, CA (Nov. 1995)
Gordon Research Conference, Solid State Chemistry, Irsee, Germany, (Sept. 1995)
NATO Workshop on Modular Chemistry, Aspen, CO (Sept. 1995)
Symposium on Access in Nanoporous Materials, East Lansing, Michigan (June 1995)
209th meeting of the American Chemical Society, Anaheim, CA (April 1995)
Hoechst Celanese, Corpus Christi, Texas (March 1995)
University of Colorado-Colorado Springs, Department of Chemistry (Feb. 1995)
University of Texas-Arlington, Department of Chemistry (Jan. 1995)

1994

208th meeting of the American Chemical Society, Washington, D. C. (Aug. 1994)
Gordon Research Conference, Solid State Chemistry, Wolfeboro, NH, (July 1994)
207th meeting of the American Chemical Society, San Diego (March 1994)
NALCO Chemical Company, Chicago (Oct. 1994)
Second NSF Materials Chemistry Workshop, St. Louis, MO (Oct. 1994)