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Research Interests:

Aqueous supramolecular chemistry: how water, salts and co-solute molecules interact with each other. The group investigates the different non-covalent interactions responsible for the hydrophobic effect and Hofmeister effects, seeking both to understand phenomena observed in biochemical systems, and exploit these supramolecular interactions to create new tools and reagents of utility for the community. Examples include, the exploration of the normal and reverse Hofmeister effects and how they pertain to amyloidogenesis and protein crystallography, designing new tools for chemical and physical separations, and developing new approaches to (organo) catalysis.

Professional Positions:

Visiting Professor, Wuhan University of Science and Technology as a Chair Professor of Chutian Scholars Program (2015-2018).

Professor of Chemistry, Tulane University, New Orleans, USA (2012-present).

University Research Professor, University of New Orleans, USA (2007-2011).

Professor of Chemistry, University of New Orleans, USA (2005-2007).

Associate Professor of Chemistry, University of New Orleans, USA (2002-2005).

Assistant Professor of Chemistry, University of New Orleans, USA, (1996-2002).

Education:

Postdoctoral Work

Department of Chemistry, New York University. Synthesis of Carbonic Anhydrase (CA) mimics. Advisor: Prof. J. W. Canary (1994-1996).

Department of Chemistry, University of British Columbia, Canada *De Novo* Protein development. Advisor: Prof. J. C. Sherman (1993-1994).

Ph.D.

Robert Gordon's University, Aberdeen, UK. Synthesis and Structural Examination of $3\alpha,5\text{-cyclo-}5\alpha\text{-Androstane}$ Steroids. Advisors: Dr. Philip J. Cox and Dr. Steven MacManus (1987-92).

B.Sc. with Honors in Physical Sciences

Robert Gordon's University, Aberdeen, UK. Honors research: *The Synthesis and Reactivity of 7-Amino-2-Phenyl-6-Azaindolizine*. Advisors: Dr. M. Fraser and Dr. R. Buchan.

Awards, Lectureships, or Prizes:

Tulane School of Science and Engineering, All Round Professor Award (2022).

NSF, Special Creativity Extension (2021-22).

Fellow of the Royal Society of Chemistry (2018-).

UNO, University Research Professor (2007-2011).

Accomplishment Based Renewal (ABR) award from NSF (2015).

Research Corporation, Research Innovation Award (1997).
UNO Summer Scholar Award (1996 and 1999).
UNO Science Research Development Award (1997).

Professional Society Membership:

American Chemical Society.
American Association for the Advancement of Science.
Royal Society of Chemistry.

Departmental and University Service

Tulane University

- 10) Chair of Organic division (2017-).
- 9) Chair, *ad hoc* committee for redevelopment of the undergraduate organic labs (2021-).
- 8) Chair, Department of Chemistry Graduate Affairs Committee (2019-).
- 7) Tulane School of Science and Engineering Graduate Affairs Committee (2019-).
- 6) Tulane University Senate (2017-2020).
- 5) Faculty Search Committee (2016-2017).
- 4) Chair, Department of Chemistry Graduate Student Recruitment Committee (2016).
- 3) School of Science and Engineering Promotion and Tenure Committee (2013-2016).
- 2) Organizer, School of Science and Engineering, Faculty Research Seminar Series, (2012 and 2016).
- 1) Department of Chemistry Graduate Student Recruitment Committee (2012-).

University of New Orleans

- 19) Chair, Department of Chemistry Faculty Development Committee (2009-2011).
- 18) Member, Department of Chemistry External Affairs Committee (2009-2011).
- 17) Associate Chair, Department of Chemistry (2008-2011).
- 16) Member, Department of Chemistry Executive Committee (2008-2011).
- 15) Department of Chemistry *Ad Hoc* Committee for revamping Undergraduate General Chemistry Courses (2004-2011).
- 14) Department of Chemistry *Ad Hoc* Committee for Graduate Student Recruitment (2004-2011).
- 13) University Graduate Council (2004-2009).
- 12) Chair, Department of Chemistry Graduate Affairs (2004-2009).
- 11) Department of Chemistry *Ad Hoc* Biochemistry Committee (2000-2011).
- 10) Department of Chemistry *Ad Hoc* Committee for revamping the Undergraduate Organic Curriculum (2003-2011).
- 9) Department of Chemistry representative for Faculty Initiative for Technology in Teaching (2000-2011).
- 8) Department of Chemistry Graduate Affairs (1999-2003).
- 7) Chair, Department of Chemistry *Ad Hoc* Technology Committee (1999-2001).
- 6) Co-organizer (with Corinne L. D. Gibb) of a placement program for students from the IUT system in France. Thirty students placed (1998-2005).
- 5) Chair, Department of Chemistry *Ad Hoc* Research Poster Competition Committee (1998-2005).
- 4) Department of Chemistry, Undergraduate Affairs Committee (1996-1999, 2003-2004).
- 3) Member, Department of Chemistry *Ad Hoc* Graduate Redevelopment Program (1999-2000).
- 2) Department of Chemistry, Departmental Brochure Development (1996-2004).
- 1) Department of Chemistry Faculty Minutes Secretary (1996-1999).

Professional and Community Service

- 25) Co-chair (with M. Cloninger), 3rd aqueous supramolecular chemistry workshop, Bozeman, MT, 17-21st July 2022.

- 24) Chair, organizing committee 16th International Conference on Calixarenes (Calix2022), New Orleans, LA, USA, 10-14th July 2022.
- 23) Co-chair (with Amish Patel) TSRC Workshop: Hydrophobicity: From Theory, Simulation, to Experiment, Telluride, CO USA, June 26 – 30, 2022.
- 22) Symposium organizer (with E. Anslyn), Catalysis and Sensing in the Environment (CASE2020), Portree, UK, June 2020. CANCELLED due to Covid-19.
- 21) Symposium organizer (with P. Cremer and V. Pierre) TSRC Workshop on aqueous supramolecular chemistry, Telluride, CO, USA, August 2019.
- 20) Symposium organizer (with J Sessler and M Fujita), *Confinement Effects in Container Molecules*, 255th National ACS meeting, New Orleans, March 2018.
- 19) Custodian and co-founder of the Taylor and Francis, Sessler Early Career Researcher Prize; an annual \$1000 award for independent, junior researchers (2018-).
- 18) Consultant, Statistical Assessment of the Modeling of Proteins and Ligands (SAMPL), OpenEye Scientific.
- 17) PI, NSF Workshop (CHE 1450865); “Accelerating our Understanding of Supramolecular Chemistry in Aqueous Solutions”, May 31st – June 4th 2015.
- 16) Visiting Professor, Wuhan University of Science and Technology as a Chair Professor of the Chutian Scholars Program (2015-2018).
- 15) Member, International Scientific Committee for the International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC) series (2015-).
- 14) Custodian and co-founder of the C. David Gutsche Award, a biennial \$5000 award for senior researchers who have made a significant impact in the field of calixarene chemistry. Inaugural award, 2015.
- 13) Reviewer for the International Cram-Lehn-Pedersen Prize in (2015-).
- 12) Organizer: Mardi Gras Symposium, Tulane University; a one-day symposium with 7 internationally renowned speakers and 105 attendees (2014).
- 11) Co-Editor-in-Chief with Philip A. Gale, *Supramolecular Chemistry* (Taylor & Francis Group. 2014-)
- 11) Chairperson, International Advisory Committee, International Conference on Calixarenes (2017-)
- 10) Member, International Advisory Committee, International Conference on Calixarenes (2011-)
- 9) Chartered Member for the National Institutes of Health (NIH), Synthetic and Biological Chemistry: A (SBC-A) Study Section (2007-2011).
- 8) Organizer, Supramolecular Chemistry Symposium, Joint SE/SW Regional ACS meeting, New Orleans, Nov/Dec 2010.
- 7) Essayist for *Nature Chemistry* (2009-).
- 6) Ad hoc study section member for the National Institutes of Health (NIH), Synthetic and Biological Chemistry: A (SBC-A) Study Section (2006).
- 5) Ad hoc study section member for the National Institutes of Health (NIH), Chemistry/Biophysics SBIR/STTR Study Section (2004-).
- 4) Co-chair of the organizing committee for the 7th International Conference on Calixarenes, Vancouver, B.C., Canada (Aug. 2003).
- 3) Reviewer for 30+ journals.
- 2) Funding agency reviewer (National Science Foundation, National Institutes of Health, Department of Defense, Petroleum Research Foundation, Research Corporation, Science Foundation Ireland).
- 1) Reviewer for the International Izatt-Christensen Award in Macrocyclic Chemistry.

Publications

Publications from Independent Career

- 127) *On the Nature of Guest Complexation in Water: Triggered Wetting–Water-Mediated Binding*, Suating, P. Ernst N. E., Alagbe, B. D., Skinner, H. A. Mague, J. T., Ashbaugh, H. S., and Gibb, B. C., *J. Phys. Chem. B*, **2022**, 126, 3150–3160. DOI: 10.1021/acs.jpccb.2c00628.

- 126) *Water-Soluble Yoctoliter Reaction Flasks*, Ismaiel, Y. A. and Gibb, B. C., in *Supramolecular Catalysis - New Directions and Developments*, Wiley-VCH, 2021, Eds. Raynal, M., Van Leeuwen, P., **2022**, 519-36. DOI: 10.1002/9783527832033.ch35
- 125) *Dual Binding Modes of a Small Cavitand*, Aziz, H. R. Yao, W, Jordan, J. H. and Gibb, B. C., *Supramolecular Chemistry* (Special Issue dedicated to the memory of C. David Gutsche), **2021**, 33, 266-271. DOI: 10.1080/10610278.2021.1987433.
- 124) *Buffer and salt effects in aqueous host-guest systems: screening, competitive binding, or both?* Jordan, J. H., Ashbaugh, H. S., Mague, J. T. and Gibb, B. C. *J. Am. Chem. Soc.* **2021**, 143, 18605–18616. DOI: 10.1021/jacs.1c08457.
- 123) *Effect of Nanocellulose on the Properties of Cottonseed Protein Isolate as a Paper Strength Agent*, Jordan, J. H.; Cheng, H. N.; Easson, M. W.; Yao, W.; Condon, B. D., and Gibb, B. C., *Materials*, **2021**, 14, 4128. DOI: 10.3390/ma14154128.
- 122) *Electrostatic potential field effects on amine macrocyclizations within yocto-liter spaces: Supramolecular electron withdrawing/donating groups*, Yao, W., Wang, K., Ismaiel, Y. A., Wang, R., Cai, X., Teeler, M., and Gibb, B.C. *J. Phys. Chem. B.*, **2021**, 125, 9333–9340. DOI: 10.1021/acs.jpcc.1c05238.
- 121) *Evolution of the Free Energy Landscapes of n-Alkane Guests Bound within Supramolecular Complexes*, Alagbe, B.; Gibb B. C.; Ashbaugh, H. J., *Phys. Chem. B.*, **2021**, 125, 7299–7310. DOI: 10.1021/acs.jpcc.1c03640.
- 120) *Single fluorinated agent for multiplexed ¹⁹F-MRI with micromolar detectability based on dynamic exchange*, Shusterman-Krush, R., Tirukoti, N. D., Kumar, A.B., Avram, L., Allouche-Arnon, H. Cai, X., Gibb, B.C., Bar-Shir, A. *Angew. Chemie*, **2021**, 60, 15405-15411. DOI: 10.1002/anie.202100427.
- 119) *Cavitand Complexes in Aqueous Solution: Collaborative Experimental and Computational Studies of the Wetting, Assembly, and Function of Nanoscopic Bowls in Water*, Ashbaugh, H. S., Gibb, B. C., Suating, P. S., *J. Phys. Chem. B*, **2021**, 125, 3253-3268 (Cover Article). DOI: 10.1021/acs.jpcc.0c11017.
- 118) *Anion binding to Ubiquitin and its Relevance to the Hofmeister Effects*, Yao, W., Wang, K., Wu, A., Reed, W. F., Gibb, B. C., *Chemical Science*, **2020**, 12, 320-330. DOI: 10.1039/d0sc04245e.
- 117) *Thermal Properties and Surface Chemistry of Cotton Varieties Mineralized with Calcium Carbonate Polymorphs by Cyclic Dipping*, Gibb, B. C., Hillyer, M.; Ernst, N.; Nam, S.; *RSC Advances*, **2020**, 10, 35214-35225. DOI: 10.1039/d0ra06265k.
- 116) *Pressure Induced Wetting and Dewetting of the Non-Polar Pocket of Deep-Cavity Cavitands in Water*, Tang, D. Dwyer, T. Bukannan, H.; Blackmon, O. Delpo, C. Barnett, J. W. Gibb, B.C., Ashbaugh, H. S., *J. Phys. Chem. B.*, **2020**, 124(23), 4781-92. DOI: 10.1021/acs.jpcc.0c02568.
- 115) *Intrinsic and extrinsic control of the pK_a of thiol guests inside yocto-liter containers*, Cai, X., Kataria, R.; Gibb, B. C., *J. Am Chem. Soc.*, **2020**, 142, 8291-8298. DOI: 10.1021/jacs.0c00907. *Spotlight Article, J. Am Chem. Soc.*, **2020**, 142, (19), 8539-8540. DOI: 10.1021/jacs.0c04882.
- 114) *Proximal charge effects on guest binding to a non-polar pocket*, Suating, P., Nguyen, T. N. Ernst, N. E. Wang, Y., Jordan, J. H., Gibb, C. L. D. Ashbaugh, H. S., and Gibb, B. C., *Chemical Science*, **2020**, 11, 3656-3663. DOI: 10.1039/C9SC06268H.
- 113) *Spontaneous Drying of Non-Polar Deep-Cavity Cavitand Pockets in Aqueous Solution*, Barnett, J. W., Sullivan, M. R., Long, J. A., Tang, D., Nguyen, T., Ben-Amotz, D., Gibb, B. C., Ashbaugh, H. S. *Nature Chemistry*, **2020**, 12, 589–594. Cover Article. DOI: 10.1038/s41557-020-0458-8. PMID: 32424255.
- 112) *Practical SERS method for assessment of the washing durability of textiles containing silver nanoparticles*, Nam, S.; Ernst, N.; Chavez, S. E.; Hillyer, M. B.; Condon, B. D.; Gibb, B. C.; Sun, L.; Guo, H.; He, L., *Analytical Methods*, **2020**, 12 (9), 1186-1196.

- 111) *Emergence of Non-Monotonic Deep Cavity Cavitand Assembly with Increasing Portal Methylation*, Saltzman, A.; Tang, D.; Gibb, B. C.; Ashbaugh, H. S., *Mol. Sys. Design & Eng.*, **2020**, 5, 656–665. DOI: 10.1039/C9ME00076C.
- 110) Gibb B. C., James T. D., Sessler J. L., *The mechanics of supramolecular chemistry*. *Chem. Commun.*, **2020**, 56, 6467 – 6468. DOI: 10.1039/D0CC90220A.
- 109) *Molecular protection of fatty acid methyl esters within a supramolecular capsule*, Wang, K., Jordan, J. H., and Gibb B. C., *Chemical Communications*, **2019**, 55, 11695-11698. DOI: 10.1039/C9CC06501F.
- 108) *Bright G-Quadruplex Nanostructures Functionalized with Porphyrin Lanterns*, Pathak, P.; Yao, W. Hook, K.; Vik, R.; Winnerdy, F. R.; Brown, J.; Gibb, B. C.; Pursell, Z.; Phan, A. T.; Jayawickramarajah, J., *J. Am. Chem. Soc.*, **2019**, 141,12582-12591. DOI: 10.1021/jacs.9b03250.
- 107) *Revisiting Fluorescent Calixarenes: From Molecular Sensors to Smart Materials*, Kumar, R., Sharma, A., Singh, H., Suating, P. Kim, H. S., Sunwoo, K., Shim I.; Gibb, Bruce C; Kim, J. S., *Chemical Reviews*, **2019**, 119, 9657–9721. DOI: 10.1021/acs.chemrev.8b00605.
- 106) *Dynamic Light Scattering – an all-purpose guide for the supramolecular chemist*, Wishard, A., and Gibb B. C., *Supramolecular Chemistry*, **2019**, 31, 608-615. DOI: 10.1080/10610278.2019.1629438
- 105) *Electrostatic control of macrocyclization reactions within nano-spaces*, Wang, K.; Cai, X.; Yao, W.; Tang, D.; Kataria, R.; Ashbaugh, H. S.; Byers, L. D.; Gibb, B. C., *J. Am. Chem. Soc.*, **2019**, 141, 6740–6747. DOI: 10.1021/jacs.9b02287.
- 104) *Binding Properties and Supramolecular Polymerization of a Water-Soluble Resorcin[4]arene*, Jordan, J. H., Wishard, A., Mague, J. T., and Gibb B. C., *Organic Chemistry Frontiers*, **2019** 6, 1236-1243 (special issue for Julius Rebek Jr's 75th birthday). DOI: 10.1039/C9QO00182D.
- 103) *Overview of the SAMPL6 host–guest binding affinity prediction challenge*, Rizzi, A.; Murkli, S.; McNeill, J. N.; Yao, W.; Sullivan, M.; Gilson, M. K.; Chiu, M. W.; Isaacs, L.; Gibb, B. C.; Mobley, D. L.; Chodera, J. D., *J. Comput. Aided Mol. Des.*, **2019**, 32, 937-963, DOI: 10.1007/s10822-018-0170-6.
- 102) *The thermodynamics of guest complexation to octa-acid and tetra-endo-methyl octa-acid: reference data for the sixth statistical assessment of modeling of proteins and ligands (SAMPL6)*, Sullivan, M. R., Yao, W., Gibb, B.C., *Supramolecular Chemistry* (Special issue for ISMSC 2018), **2019**, 31, 184-189.
- 101) Ernst, N. E. and Gibb, B. C., *Water Runs Deep*, in *Supramolecular Chemistry in Water*, Cpt. 1, 1-34, (Ed. Stefan Kubik) Wiley-VCH 2019.
- 100) *Dynamic Light Scattering studies of the effects of salts on the diffusivity of cationic and anionic cavitands*, Wishard A. and Gibb, B. C., *Beilstein J. Org. Chem.* (Thematic Series “Macrocyclic and Supramolecular Chemistry”, Eds. Mei-Xiang Wang and Hai-bo Yang), **2018**, 14, 2212–2219. doi:10.3762/bjoc.14.195.
- 99) *Precision switching in a discrete supramolecular assembly: alkali metal ion-carboxylate selectivities and the cationic Hofmeister effect*, Hillyer, M. B.; Gan, H.; Gibb, B. C., *ChemPhysChem*, **2018**, 19 (18) 2285-2289. (Cover issue). DOI: 10.1002/cphc.201800554.
- 98) *Alkane guest packing drives switching between multimeric deep-cavity cavitand assembly states*, Barnett, J. W., Tang, D., Gibb, B. C., Ashbaugh, H. S., *Chemical Communications*, **2018**, 54, 2639-2642. DOI: 10.1039/C8CC00036K.
- 97) *Ion-Hydrocarbon and/or Ion-Ion Interactions: The Direct and Reverse Hofmeister Effects in a Synthetic Host*, Jordan, J. H., Gibb, C. L. D., Wishard, A. Pham, T.; Gibb, B. C., *J. Am. Chem. Soc.*, **2018**, 140, 4092–4099. DOI: 10.1021/jacs.8b00196. *JACS Spotlight Article* (**2018**, 140, 4185).

- 96) *The Thermodynamics of Anion Complexation to Non-Polar Pockets*, Sullivan, M. R., Yao, W., Tang, D., Ashbaugh, H. S., Gibb, B. C., *J. Phys. Chem. B.*, **2018**, *122*, 1702–1713. DOI: 10.1021/acs.jpcc.7b12259.
- 95) *Collaborative Routes to Clarifying the Murky Waters of Aqueous Supramolecular Chemistry*, Cremer, P. S., Flood, A. H., Gibb, B. C., Mobley, D. L., *Nature Chemistry*, **2018**, *10*, 8-16. DOI: 10.1038/NCHEM.2894. PMID: 29256514.
- 94) *Guest Controlled Non-Monotonic Deep Cavity Cavitand Assembly State Switching*, Tang, D.; Barnett, J. W., Gibb, B., Ashbaugh, H. S., *J. Phys. Chem. B.*, **2017**, *121*, 10717-10725. DOI: 10.1021/acs.jpcc.7b09021.
- 93) *Quantifying Guest Exchange in Supramolecular Systems*, Avram, L., Wishard, A., Gibb, B. C., and Bar-Shir, A., *Angew Chemie* (Hot Paper, and Back cover art), **2017**, *56*, 15314-15318. DOI: 10.1002/anie.201708726.
- 92) *Pore Modified FDU-12 as a Novel Container for Dendron Growth*, Han, J., Lou, Y., Cai, X., Gibb, B. C. and Shantz, D. F., *J. Phys. Chem. C.*, **2017**, *121*, 22031–22039. DOI: 10.1021/acs.jpcc.7b0560.
- 91) *Tuning the Binding Dynamics of a Guest-Octaacid Capsule Through Non-Covalent Anchoring*, Thomas, S. S., Tang, H., Gaudes, A., Baggesen, S. B., Gibb, C. L.D., Gibb, B. C., Bohne, C., *J. Phys. Chem. Lett.*, **2017**, *8* (12), 2573–2578. DOI: 10.1021/acs.jpclett.7b00917.
- 90) *Mapping the Binding Motifs of Deprotonated Mono-Unsaturated Fatty-Acids and Their Corresponding Methyl Esters Within Supramolecular Capsules*, Wang, K., Gibb, B.C., *J. Org. Chem.* **2017**, *82*, 4279–4288. DOI: 10.1021/acs.joc.7b00264.
- 89) *The Aqueous Supramolecular Chemistry of Cucurbiturils, Pillar[n]arenes and Deep-Cavity Cavitands*, Murray, J., Kim, K., Ogoshi, T., Yao, W., Gibb, B.C., *Chem. Soc. Rev.* (50th Anniversary Supramolecular Chemistry), **2017**, *46*, 2479-2496. DOI: 10.1039/C7CS00095B.
- 88) *Binding of carboxylate and trimethylammonium salts to octa-acid and TEMOA deep-cavity cavitands*. Sullivan M. R., Sokkalingam P., Nguyen T., Donahue J. P., Gibb B. C., *J. Comp. Aided Molec. Design*, (SAMPL5 Special Issue), **2017**, *31*, 21–28. DOI: 10.1007/s10822-016-9925-0.
- 87) Cai, X. and Gibb, B.C., *Deep-Cavity Cavitands in Self-Assembly*, in *Comprehensive Supramolecular Chemistry II* (Editor-in-chief, Atwood, J.), Elsevier 2017.
- 86) *Succession of Alkane Conformational Motifs Bound within Hydrophobic Supramolecular Capsular Assemblies*, Barnett, J.W., Gibb, B. C., Ashbaugh, H. S., *J. Phys. Chem. B.*, **2016**, *120* (39), 10394–10402. DOI: 10.1021/acs.jpcc.6b06496.
- 85) *Synthesis Of Water-Soluble Deep-Cavity Cavitands*, Hillyer M. B., Gibb C. L. D., Sokkalingam P., Jordan J. H., Ioup S. E., Mague, J., Gibb B. C. *Organic Letters*, **2016**, *18* (16), 4048–4051. DOI: 10.1021/acs.orglett.6b01903.
- 84) *From steroids to aqueous supramolecular chemistry: an autobiographical career review*, Gibb, B.C., *Beilstein J. Org. Chem.*, **2016**, *12*, 684-701.
- 83) *Binding Hydrate Anions with Hydrophobic Pockets*, Sokkalingam, P., Shraberg, J., Rick, S. W., Gibb B. C., *J. Am. Chem. Soc.*, **2016**, *138*, 48-51. DOI.org/10.1021/jacs.5b10937. PMID: 26702712.
- 82) *Molecular Shape and the Hydrophobic Effect*, Hillyer, M. B., Gibb, B.C., *Ann. Rev. Phys. Chem.*, **2016**, *67*, 307-329. DOI: 10.1146/annurev-physchem-040215-112316. PMID: 27215816.
- 81) *ITC and NMR Analysis of the Encapsulation of Fatty Acids within a Water-Soluble Cavitand and its Dimeric Capsule*, Wang, K., Sokkalingam, P., Gibb, B. C., *Supramolecular Chemistry* (Special Issue in honor of Jonathan Sessler's 60th birthday), **2016**, *28*, 84-90. DOI: 10.1080/10610278.2015.1082563.
- 80) Wishard, A. and Gibb B.C., *A Chronology of Cavitands in "Calixarenes and Beyond"* (Eds. Neri, P., Sessler, J. L., Wang, M.-X.) Springer, 2016.

- 79) *Thermodynamic Profiles of Salt Effects on a Host-Guest System: New Insight into the Hofmeister Effect*, Gibb, C. L. D., Oertling, E. E., Velaga S., and Gibb, B. C., *J. Phys. Chem. B*, **2015**, *119*, 5624-5638. DOI: 10.1021/acs.jpcc.5b01708.
- 78) *Differentiation of small alkane and alkyl halide constitutional isomers via encapsulation*, Sullivan, M. R.; Gibb, B. C., *Org. Biomol. Chem.*, **2015**, *13*, 1869-1877. DOI: 10.1039/C4OB02357A.
- 77) *Molecular Containers Assembled through the Hydrophobic Effect*, Jordan, J. H., Gibb, B. C., *Chem. Soc. Rev.*, **2015**, *44*, 547 - 585. DOI: 10.1039/C4CS00191E.
- 76) Jordan J. H., Gibb B. C., (2015) *Water-Soluble Cavitands*. In: Reedijk, J. (Ed.) Elsevier Reference Module in Chemistry, Molecular Sciences and Chemical Engineering. Waltham, MA: Elsevier. 29-Jul-2015 doi:10.1016/B978-0-12-409547-2.10789-9.
- 75) *Anion Complexation and The Hofmeister Effect*, Carnegie, R. S., Gibb, C. L. D., and Gibb, B. C., *Angew. Chemie*, **2014**, *53*, 11498–11500 (Hot Paper). DOI.org/10.1002/anie.201405796.
- 74) *Binding of Cyclic Carboxylates to Octa-Acid Deep-Cavity Cavitand*, Gibb C. L. D. and Gibb, B. C., *J. Computer Aided Molec. Des.* (SAMPL4 special issue), **2014**, *28*(4), 319-25. DOI: 10.1007/s10822-013-9690-2.
- 73) *Simulation Optimization of Non-Polar Guest Recognition by Deep-Cavity Cavitands*, Wanjari, P. P., Gibb B. C. and Ashbaugh, H. S., *J. Chem. Phys.* **2013**, *139*, 234502. DOI: org/10.1063/1.4844215.
- 72) *Guest Packing Motifs within a Supramolecular Nano-Capsule and a Covalent Analogue*, Liu, S.; Russell, D. H.; Zinnel, N.; Gibb, B. C., *J. Am. Chem. Soc.*, **2013**, *135*, 4314–4324. DOI: 10.1021/ja310741q.
- 71) *Guest-Mediated Switching of The Assembly State of a Water-Soluble Deep-Cavity Cavitand*, Gan, H. and Gibb, B. C., *Chem. Commun.*, **2013**, 1395-1397. DOI: 10.1039/c2cc38227j.
- 70) *Dynamics of a Supramolecular Capsule Assembly with Pyrene*, Tang, H.; de Oliveira, C.; Sonntag, G.; Gibb, C. L. D.; Gibb, B. C.; Bohne, C., *J. Am. Chem. Soc.* **2012**, *134*, 5544-5547. DOI: 10.1021/ja301278p.
- 69) *Guest-Controlled Self-Sorting in Assemblies Driven by the Hydrophobic Effect*, Gan, H.; Gibb, B.C. *Chem. Commun.*, **2012**, *48*, 1656-1658. DOI: 10.1039/C2CC16603H. (Top 10 most accessed articles December 2012).
- 68) *The Thermodynamics of Molecular Recognition*, Gibb, C. L. D. and Gibb, B. C., in *Supramolecular Chemistry: From Molecules to Nano-materials* (Eds. Gale, P. A., Steed, J. W.) John Wiley and Sons, 2012, Vol. 1, p45-65.
- 67) *Supramolecular Assembly and Binding in Aqueous Solution: Useful Tips Regarding the Hofmeister and Hydrophobic Effects*, Gibb, B. C., *Isr. J. Chem.* **2011**, *51*, 798-806. DOI: 10.1002/ijch.201100058.
- 66) *A Versatile and Modular Approach to Functionalization of Deep-Cavity Cavitand via "Click" Chemistry*, Li, Y., Giles, M. D., Liu, S., Laurent, B. A., Hoskins, J. N., Cortez, M. A., Sreerama, S. G., Gibb, B. C., Grayson, S. M., *Chem. Commun.*, **2011**, *47*, 9036-9038. DOI: 10.1039/C1CC11259G.
- 65) *Anion Binding to Hydrophobic Concavity is Central to the Salting-in Effects of Hofmeister Chaotropes*, Gibb, C. L. D.; Gibb, B. C., *J. Am. Chem. Soc.*, **2011**, *133*, 7344-7347. DOI: 10.1021/ja202308n.
- 64) *An Improved Synthesis of 'Octa-Acid' Deep-Cavity Cavitand*, Liu, S., Whisenhunt-loup, S. E., Gibb, C. L. D., and Gibb, B. C., *Supramolecular Chemistry*, **2011**, 480-485. DOI: 10.1080/10610278.2010.550290. NIHMSID # 273827.
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- 17) Cover Article. *ChemPhysChem*, **2018**, 19 (18) 2285-2289.
- 16) Tulane News, *Researcher awarded \$1.65M to study fundamentals behind protein build-up linked to Alzheimer's*. August 14th, 2018. <https://news.tulane.edu/pr/researcher-awarded-165m-study-fundamentals-behind-protein-build-%C2%A0linked-alzheimer%E2%80%99s>.
- 15) Tulane News, *Royal Society of Chemistry honors Tulane professor*. March 23rd 2018. <https://news.tulane.edu/news/royal-society-chemistry-honors-tulane-professor>.
- 14) *JACS Spotlight Article*, *J. Am. Chem. Soc.*, **2018**, 140, 4185.
- 13) *Angew. Chemie*, **2017**, 56, 15314-15318, highlighted in "ChemistryViews" https://www.chemistryviews.org/details/ezone/10704690/Quantifying_Exchange_in_HostGuest_Systems.html.
- 12) Hot Paper, and Back cover-art, *Angew. Chemie*, **2017**, 56, 15314-15318.

- 11) Cover article (back cover) *Chemical Society Reviews*, 07 May **2017**, 9, 2367- 2650.
- 10) Opinion article. Dralh, C., *C & E News* Feb 10th 2014, 28-29.
- 9) Concept Article. *Soft Matter*, **2010**, 6, 1377-1382.
- 8) Cover Article. *Chem Commun.* **2008**, 3709-3716.
- 7) Cover article. *Euro. J. Org. Chem.*, **2008**, 3265-3271.
- 6) Article highlighted. Greer, A., *Nature*, **2007**, 447, 273-274.
- 5) Article highlighted. Cantrill, S., *Nature Nanotechnology*, <http://www.nature.com/nnano/reshigh/2006/1206/full/nnano.2006.204.html>.
- 4) Cover article, *J. Org. Chem.*, **2006**, 71, 1289-1294.
- 3) Research write-up. Freemantle, M., *C & E News* Jan 3rd, **2005**, 30-34.
- 2) Article highlighted. Peplow, M., *Nature*, **2004**, 432, p163.
- 1) Concept article. *Chemistry: A European Journal*, **2003**, 9, 5180-5187.

Invited Lectures etc.

- 152) *Things that go on within yoctoliter reaction flasks*, Louisiana State University, Baton Rouge, LA, November 11th, 2022.
- 151) *You can lead a chemist to water... and sometimes make them drink*, 3rd Aqueous Supramolecular Chemistry Workshop, Bozeman, MT, 17-21st July 2022.
- 150) *Solvation of, and guest binding mechanisms to, non-polar pockets*, Telluride Science Research Center (TSRC) Workshop: Hydrophobicity: From Theory, to Simulation, to Experiment, June 26-30th 2022, Telluride, Colorado, USA.
- 149) *Probing and harnessing the hydrophobic and Hofmeister effects: from model hosts to proteins*, 16th International Symposium on Macrocyclic & Supramolecular Chemistry (ISMSC), June 19-24th, 2022, Eugene, Oregon, USA.
- 148) *Using aqueous supramolecular chemistry to control chemical reactivity*, University of Texas, Austin, April 22nd, 2022.
- 147) *Probing and harnessing the hydrophobic and Hofmeister effects: from model hosts to proteins*, (at the ACS Ronald Breslow Award for Achievement in Biomimetic Chemistry honoring Jonathan L Sessler (2021 winner)), ACS National Meeting, San Diego CA, Spring 2022.
- 146) *Probing and harnessing non-covalent interactions in water: From model hosts to proteins*, (at the ACS Award in Inorganic Chemistry Symposium honoring Kristin Bowman-James), Virtual ACS National Meeting, Spring 2021.
- 145) *Probing and Harnessing Non-Covalent Interactions in Water: from Yocto-Liter Reaction Flasks to Protein-Salt Interactions*, Virtual seminar, Old Dominion University, Feb. 2021.
- 144) *Proximal charge effects on guest binding to a non-polar pocket*, 16th German Conference on Cheminformatics and SAMPL Satellite Workshop - Virtual Edition, Nov. 2020.
- 143) *Probing and harnessing non-covalent interactions in water: from models hosts to proteins*. Virtual seminar, Indiana University, September 2020.
- 142) *Probing and harnessing the hydrophobic and Hofmeister Effects*, Texas Christian University, Fort Worth, November 2019.
- 141) *The hosting properties of deep-cavity cavitands: From self-assembled yocto-liter reaction flasks and separation devices to tools for probing the Hofmeister effects*, Department of Chemistry, Pennsylvania State University, Oct. 2019.
- 140) *Probing and harnessing the Hofmeister Effect*, Department of Chemical and Biochemical Engineering, Tulane University, Sept. 2019.
- 139) *Hofmeister and reverse Hofmeister effects in models and Ubiquitin*, Telluride Science Research Center (TSRC), Telluride, CO, USA, August 2020.
- 138) *Probing and harnessing the hydrophobic and Hofmeister Effects*, 6th International Conference on Cucurbiturils (ICCB), July 2019.

- 137) Probing and harnessing aqueous supramolecular chemistry, International Conference on Calixarenes, Cassis, France, June 2019.
- 136) Probing and harnessing the hydrophobic and Hofmeister Effects, 257th National ACS Meeting, Orlando, April 2019 (James Flack Norris Award symposium for Eric Anslyn).
- 135) Probing and harnessing the hydrophobic and Hofmeister Effects, University of Alabama, Tuscaloosa, March 2019.
- 134) Probing and harnessing the hydrophobic and Hofmeister Effects, University of Glasgow, Glasgow, UK, February 2019.
- 133) Probing and harnessing the hydrophobic and Hofmeister Effects, St Andrews University, St. Andrews, UK, February 2019.
- 132) Probing the hydrophobic and Hofmeister Effects, Aberdeen University, Aberdeen, UK, February 2019.
- 131) Probing and harnessing the Hofmeister Effect, University of Chicago, Chicago, Burn's Symposium, January 2019.
- 130) Probing and harnessing the Hofmeister Effect, University of Kansas, Lawrence, Kansas, October 2018.
- 129) The Hofmeister and Inverse Hofmeister Effects, 256th National ACS Meeting, Boston, August 2018.
- 128) Molecular and supramolecular hosts for probing the hydrophobic, Hofmeister, and reverse Hofmeister effects, TSRC workshop on hydrophobicity, Telluride, CO, USA, July 2018.
- 127) Studying and Utilizing the Supramolecular Interactions behind the Hofmeister and Reverse Hofmeister Effects, 13th International Symposium on Macrocyclic and Supramolecular Chemistry, Quebec City, Canada, July 2018.
- 126) Studying and Utilizing the Supramolecular Interactions behind the Hofmeister and Reverse Hofmeister Effects, 101st Canadian Society of Chemistry National Meeting, Edmonton, Canada, May 2018.
- 125) Studying and Utilizing the Supramolecular Interactions behind the Hofmeister and Reverse Hofmeister Effects, Montana State University, Bozeman, Montana, May 2018.
- 124) Studying and Utilizing the Supramolecular Interactions behind the Hofmeister and Reverse Hofmeister Effects, University of Mississippi, Oxford, Mississippi, March 2018.
- 123) Studying and Utilizing the Supramolecular Interactions behind the Hofmeister and Reverse Hofmeister Effects, 255th National ACS Meeting, New Orleans, March 2018.
- 122) *The Normal and Reverse Hofmeister Effects: RSC Macrocyclic and Supramolecular Chemistry Early Career Meeting, Plenary Lecture*, Southampton, December 2017.
- 121) *The many faces of Hydrophobic Pockets*, Queen Mary University, London, UK, December 2017.
- 120) *The many faces of Hydrophobic Pockets*, University of New Orleans, Louisiana, USA, September 2017.
- 119) *The many faces of Hydrophobic Pockets*, University of Southern Florida, Tampa, Florida, USA, October 2017.
- 118) *Guest Packing and Reactivity within Containers Assembled via the Hydrophobic Effect*, 14th International Conference on Calixarenes, Nankai University, Tianjin, China, August 2017.
- 117) *Properties of Water-Soluble Cavitands: Probing the Hofmeister and Inverse Hofmeister Effects*, Tsinghua University-ICCAS Supramolecular Chemistry Symposium, Tsinghua University, Beijing, China, August 2017.
- 116) *Guest Packing and Reactivity within Containers Assembled via the Hydrophobic Effect*, Supramolecular Chemistry Ireland Symposium, Maynooth University, June 2017.
- 115) *Water-Soluble Cavitands: Tools for controlling reactions, and studying the (Inverse) Hofmeister Effect*, South University of Science and Technology of China, Shenzhen, China, May 2017.
- 114) *Water-Soluble Cavitands: Tools for controlling reactions, and studying the (Inverse) Hofmeister Effect*, Wuhan University of Science and Technology, Wuhan, China, May 2016.
- 113) *The Many Faces of Hydrophobic Pockets*, "The Scottish Symposium" Northwestern University, Evanston, IL, January 2017.

- 112) *The Many Faces of Hydrophobic Pockets*, Royal Society of Chemistry Macrocyclic and Supramolecular Chemistry Meeting, December 2016, The University of Edinburgh, UK.
- 111) *Notes on the Hofmeister Effect*, ACS Central Science Plenary Flash Presentation, MSMLG-2016, Bath, United Kingdom, July 2016.
- 110) *Guest Packing within Containers Assembled via the Hydrophobic Effect*, ISMSC-2016, Seoul, South Korea, July 2016.
- 109) *Properties and Applications of Water-Soluble Cavitands*, Nankai University, Tianjin, China, June 2016.
- 108) *Properties and Applications of Water-Soluble Cavitands*, Zhejiang University, Hangzhou, China, June 2016.
- 107) *Properties and Applications of Water-Soluble Cavitands*, East China University of Science and Technology, Shanghai, China, June 2016.
- 106) *Properties and Applications of Water-Soluble Cavitands*, Nanjing University, Nanjing, China, June 2016.
- 105) *Properties and Applications of Water-Soluble Cavitands*, Central China Normal University, Wuhan, China, May 2016.
- 104) *Properties and Applications of Water-Soluble Cavitands*, Wuhan University of Science and Technology, Wuhan, China, May 2016.
- 103) *Properties and Applications of Water-Soluble Cavitands*, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China, May 2016.
- 102) *Anions and hydrophobic cavities*, American Chemical Society 251st National Meeting, San Diego CA, March 13-16th 2016.
- 101) *Self-assembled nano-containers assembled via the hydrophobic effect*, American Chemical Society 251st National Meeting, March 13-16th 2016, San Diego.
- 100) *The Thermodynamics of Guest Binding to Deep-Cavity Cavitands*, March 10th 2016, 1st Annual Workshop, Drug Design Data Resource, University of California San Diego.
- 99) (Highland) *Aqueous Supramolecular Chemistry*, 24th January 2016, Department of Chemistry and Biochemistry, University of Texas, Austin, TX, USA.
- 98) *Guest Sequestration, Packing, and Folding within Water-Soluble Nano-Capsules*, Royal Society of Chemistry Macrocyclic and Supramolecular Chemistry Meeting, 20-22nd December 2015, University of Durham, UK.
- 97) *Guest Sequestration, Packing, and Folding within Water-Soluble Nano-Capsules*, "Pacifichem 2015, December 2015, Honolulu, HI, USA.
- 96) *Properties of Water-Soluble Cavitands: Probing the Hydrophobic Effect*, Calix 2015, 8th July, 2015, Giardini Naxos, Italy.
- 95) *Probing the Hydrophobic Effect*, ISMSC-2015, Strasbourg, France, 30th June 2015.
- 94) *Properties of Water-Soluble Cavitands: Probing the Hydrophobic Effect*, 18th May 2015, Fudan University, Shanghai, China.
- 93) *Properties of Water-Soluble Cavitands: Probing the Hydrophobic Effect* (Chair Professor of the Chutian Scholars Program seminar), 14th May 2015, Wuhan University of Science and Technology, Wuhan, China.
- 92) *Properties of Water-Soluble Cavitands: Probing the Hydrophobic Effect*, 11th May 2015, Tsinghua University, Beijing, China.
- 91) *Properties of Water-Soluble Cavitands: Probing the Hydrophobic Effect*, Royal Society of Chemistry Macrocyclic and Supramolecular Chemistry Meeting, 15-16th December 2014, Norwich. UK.
- 90) *Synthesis, Self-Assembly, and Properties of Organic Supramolecular Nanoparticles*, 248th ACS National Meeting, San Francisco, California, August 2014.
- 89) *Water-Soluble Cavitands: Probing and Exploiting the Hydrophobic Effect*, 248th ACS National Meeting, San Francisco, California, August 2014.
- 88) *Water-Soluble Cavitands: Probing and Exploiting the Hydrophobic Effect*, Telluride Workshop on "Interfacial Molecular and Electronic Structure and Dynamics" Telluride, Colorado, July 2014.

- 87) *Properties of Water-Soluble Cavitands: Probing and Exploiting the Hydrophobic Effect*, Purdue University, Indiana, April 2014.
- 86) *It's a Revolution! (And you're part of it!)*, Graduate Student Symposium, 247th National ACS Meeting, Dallas, TX, March 2014.
- 85) *Properties of Deep-Cavity Cavitands*, 12th International Conference on Calixarenes, Memorial University of Newfoundland, Canada, July 2013.
- 84) *Properties of Deep-Cavity Cavitand*, 8th International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC-8), Arlington VA, USA, July 2013.
- 83) *Properties of Deep-Cavity Cavitands* Third Biannual Conference on Catalysis and Sensing for the Environment (CASE), The University of Texas at Austin, April 2013.
- 82) *Properties of a New Deep-Cavity Cavitand*, AMRI 2013 Annual Review and Mardi Gras Symposium, University of New Orleans, February 2013.
- 81) *Hofmeister Chaotropic Anions and their Affinity for Hydrophobic Concavity*, IUPAC International Conference of Physical Organic Chemistry, Durham, UK, September 2012.
- 80) *Properties of Water-Soluble Cavitands: Probing and Exploiting the Hydrophobic Effect*, Bowling Green State University, Ohio, April 2012.
- 79) *Properties of Water-Soluble Cavitands: Probing and Exploiting the Hydrophobic Effect*, Ohio University. Athens, April 2012.
- 78) *Properties of Water-Soluble Cavitands: Probing and Exploiting the Hydrophobic Effect*, Florida State University, February 2012.
- 77) *Binding Properties of Water-Soluble Cavitands*, Rutgers University, Newark, December 2011.
- 76) *Binding Properties of Water-Soluble Cavitands*, SW ACS Meeting, Austin, November 2011.
- 75) *Binding Properties of Water-Soluble Cavitands*, Joint Mid-West and Great Lakes ACS Meeting, St. Louis, October 2011.
- 74) *Binding Properties of Water-Soluble Cavitands*, University of North Carolina, Chapel Hill, October 2011.
- 73) *Selective Anion Binding to Hydrophobic Pockets: A Major Facet of the Hofmeister Effect?* 6th International Symposium on Macrocyclic and Supramolecular Chemistry, Brighton, July 2011.
- 72) *The Assembly and Binding Properties of Deep-Cavity Cavitands in Water*, 11th International Conference on Calixarenes, Tarragona, June 2011 (Plenary lecture).
- 71) *Reactions Inside and Outside of Water-Soluble Nano-Capsules*, Pacificchem 2010, The International Chemical Congress of Pacific Basin Nations, Honolulu, Dec. 2010.
- 70) *Hydrophobic Surfaces meet Bulk Water: The Unusual Properties of Discrete Complexes and Assemblies Driven by the Hydrophobic Effect*, Northwestern University, Sept. 2010.
- 69) *Hydrophobic Surfaces meet Bulk Water: The Unusual Properties of Discrete Complexes and Assemblies Driven by the Hydrophobic Effect*, New York University, August. 2010.
- 62) *Reactions Inside and Outside Water-Soluble Nano-Capsules*, University of Georgia, April 2010.
- 68) *Reactions Inside and Outside Water-Soluble Nano-Capsules*. Symposium on Self-Assembled Molecular Containers, American Chemical Society 239th National Meeting, March 2010.
- 67) *Reactions Inside and Outside Water-Soluble Nano-Capsules*, University of Pittsburgh, October 2009.
- 66) *Reactions Inside and Outside Water-Soluble Nano-Capsules*, Symposium on "Supramolecular Science and Self-Assembly", 61st ACS Southeastern Regional Meeting (SERMACS 2009), San Juan, Puerto Rico, October 2009.
- 65) *Reactions Inside and Outside Water-Soluble Nano-Capsules*, University of Houston, September 2009
- 64) *Reactions Inside and Outside Water-Soluble Nano-Capsules*, 10th International Conference on Calixarenes, July 2009, Seoul, South Korea.
- 63) *Properties of Water-Soluble Deep-Cavity Cavitands*, Tulane University, Department of Chemical Engineering, May 2009.
- 62) *Properties of Water-Soluble Supramolecular Capsules*, Tulane University Department of Tropical Medicine, December 2008.

- 61) Properties of Water-Soluble Supramolecular Capsules, University of New Orleans Department of Biology, November 2008.
- 60) *Properties of Water-Soluble Deep-Cavity Cavitands*, Jackson State University, September 2008.
- 59) *Nano-Capsules in Water*, 3rd International Symposium of Macrocyclic and Supramolecular Chemistry (ISMSC), Las Vegas, July 2008.
- 58) *Encapsulation Chemistry*, 235th ACS National Meeting, New Orleans, April 2008.
- 57) *Properties of Water-Soluble Deep-Cavity Cavitands*, University of Oregon, April 2008.
- 56) *Properties of Water-Soluble Deep-Cavity Cavitands*, Portland State University, April 2008.
- 55) *Properties of Water-Soluble Deep-Cavity Cavitands*, University of Texas at Austin, February 2008.
- 54) *Properties of Water-Soluble Deep-Cavity Cavitands*, Texas A & M University, February 2008.
- 53) *The Complex Repertoire of Deep-Cavity Cavitands: How Molecular Concavity and the Hydrophobic Effect can Engender Unusual Physical Properties*, University of Leeds, December 2007.
- 52) *The Complex Repertoire of Deep-Cavity Cavitands: How Molecular Concavity and the Hydrophobic Effect can Engender Unusual Physical Properties*, University of Edinburgh, December 2007.
- 51) *The Complex Repertoire of Deep-Cavity Cavitands: How Molecular Concavity and the Hydrophobic Effect can Engender Unusual Physical Properties*, University of Durham, December 2007.
- 50) *The Complex Repertoire of Deep-Cavity Cavitands: How Molecular Concavity and the Hydrophobic Effect can Engender Unusual Physical Properties*, University of Cambridge, December 2007.
- 49) *Concave Chemistry*, UK Macrocycles and Supramolecular Chemistry Meeting, University of Manchester, 18-19th December 2007.
- 47) *Concave Chemistry*, University of Alberta, Edmonton, November 2007.
- 47) *Concave Chemistry*, Montana State University, Bozeman, November 2007.
- 46) *Unusual Properties of Deep-Cavity Cavitands*, The Mechanical Bond and Beyond: A symposium in Honor of Professor Sir Fraser Stoddart, 234th American Chemical Society National Meeting, Boston, August 2007.
- 45) *Unusual Properties of Deep-Cavity Cavitands*, 9th International Meeting on Calixarenes, University of Maryland College Park, August 2007.
- 44) *Selectively Sticky SAMS*, Advanced Materials Research Institute/DARPA Review. J.W. Marriot Hotel, New Orleans, February 2007.
- 43) *Concave Chemistry*, Notre Dame University, March 2007.
- 42) *Concave Chemistry*, Mississippi State, November 2006.
- 41) *Nano-Capsules in Water*, Loyola University, New Orleans, October 2006.
- 40) *The Assembly and Properties of Nano-Capsules in Water*. Symposium on Molecular Containers, American Chemical Society, 232nd National Meeting, San Francisco, September 2006.
- 39) *The Assembly and Properties of Nano-Capsules in Water*. First International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC), Victoria, BC, Canada, June 2006.
- 38) *Concave Chemistry*, Brandeis University, Boston, April 2006.
- 37) *Concave Chemistry*, 231st ACS National Meeting, Atlanta, September 2006.
- 36) *Synthesis and Properties of Deep-Cavity Cavitands*, University of Iowa, October 2005.
- 35) *Synthesis and Properties of Deep-Cavity Cavitands*, University. Maryland, October 2005.
- 34) *Concave Chemistry*, University of South Carolina, Columbia, September 2005.
- 33) *Concave Chemistry*, Calix2005, 8th International Conference on Calixarenes, Prague, Czech Republic, July 25th-29th 2005.
- 32) *Concave Chemistry*, University of Massachusetts, Amherst, June 2005.
- 31) *Concave Chemistry*, University of Miami, April 2005.
- 30) *Concave Chemistry*, Tulane University, January 2005.
- 29) *Synthesis and Properties of Deep-Cavity Cavitands and Water-Soluble, Nano-Scale Capsules*, University of Twente, The Netherlands, December 2004.
- 28) *Synthesis and Properties of Deep-Cavity Cavitands and Water-Soluble, Nano-Scale Capsules*, Technical University of Eindhoven, The Netherlands, December 2004.

- 27) *Synthesis and Properties of Deep-Cavity Cavitands and Water-Soluble, Nano-Scale Capsules*, University of Groningen, The Netherlands, December 2004.
- 26) *Synthesis and Properties of Deep-Cavity Cavitands and Water-Soluble, Nano-Scale Capsules*, Xavier University, October 2004.
- 25) *Synthesis and Properties of Deep-Cavity Cavitands and Water-Soluble, Nano-Scale Capsules*, University of Southern Mississippi, October 2004.
- 24) *Synthesis and Properties of Deep-Cavity Cavitands and Water-Soluble, Nano-Scale Capsules*, Special Symposium on Calixarenes, SW Regional ACS Meeting Dallas, September 2004.
- 23) *Well-Defined, Organic Nano-Environments in Water: The Hydrophobic Effect Drives a Capsular Assembly*, Gibb, B. C., 13th International Symposium on Supramolecular Chemistry, July 2004.
- 22) *Properties of Deep-cavity Cavitands*, University of British Columbia, March 2004.
- 21) *Properties of Deep-cavity Cavitands*, University of Victoria, March 2004.
- 20) *Properties of Deep-cavity Cavitands*, University of Texas at Arlington, February 2004.
- 19) *Properties of Deep-cavity Cavitands*, University of Missouri, Columbia, February 2004.
- 18) *Towards Concave Reagents*, NSF Young Supramolecular Chemist's Workshop, Sanibel Island, Florida, January 2004.
- 17) *Deep Cavity Cavitands as Hosts and Intermediates in the Resorcinarene Templated Synthesis of Large Macrocycles*, 7th International Conference on Calixarenes, University of British Columbia, Vancouver, BC, Canada August 2003.
- 16) *Deep Cavity Cavitands: Binding Properties, and Their Role in the Templatation of Large Macrocycles*, Department of Chemistry, George Town University, April 2003.
- 15) *Deep Cavity Cavitands: Binding Properties, and Their Role in the Templatation of Large Macrocycles*, Department of Chemistry, New York University, February 2003.
- 14) *Synthesis and Binding Properties of Molecular Baskets*, South-East Regional Meeting of the American Chemical Society, Charleston, Fall 2002
- 13) *Synthesis and Binding Properties of Molecular Baskets*, Department of Chemistry, Kansas State University, Fall, 2002.
- 12) *Molecular Movement into, out of, and within Large Synthetic Hydrophobic Pockets*, 27th International Symposium on Macrocyclic Chemistry (ISMC), Park City, Utah, June 2002.
- 11) *Nano-scale Molecular Baskets*, 6th International Conference on Calixarenes, University of Twente, Enschede, The Netherlands, May/June 2001.
- 10) *Nano-Scale Molecular Baskets*, Department of Chemistry, Tulane University, New Orleans, Spring 2001.
- 9) *Kinetic Based Self-Assemblies*, 52nd Southeast/56th Southwest Combined Regional Meeting of the American Chemical Society, New Orleans, USA, December 6-8th 2000.
- 8) *Two Ways to have Fun with Supramolecular Forces*, Department of Chemistry, Brigham Young University, Provo, Utah, September 2000.
- 7) *Irreversible Self-Assembly*, Louisiana State University, Department of Chemistry, Baton Rouge, March 2000.
- 6) *Efficient Kinetic Self-Assemblies for Nano-Scale Materials*, XXV International Symposium on Macrocyclic Chemistry (Macrocycles 2000), University of St Andrews, St Andrews, Scotland, University. July 2000.
- 5) *Kinetic Self-Assembly: Without a Single Molecular Template*, XXIV International Symposium on Macrocyclic Chemistry, Barcelona, July 1999.
- 4) *The Synthesis of Hydrophobic Pockets*, University of Memphis, Department of Chemistry, October 1998.
- 3) *The Synthesis of Hydrophobic Pockets*, Tulane University, Department of Biochemistry; October 1998.
- 2) *Container Molecules: On the Increase*, 95th Annual Meeting of the Southern Association of Agricultural Scientists, Little Rock, Arkansas, February 1998.

- 1) *Towards Extended Carceplexes*, Xi, H., Gibb, B. C., The 4th International Conference of Calixarenes, Parma, Italy, August 1997.

Current Co-Workers

Lab Manager

Corinne Gibb

Graduate Students

Yahya Ismaiel, Kenny Kim, Thien Tran, Ruiqing Wang, Yujian Xu, André Hebert, Priyanka Prusty

Current Undergraduate Students

Lilly Grunski, Beren Rogers, Emi Monceaux, Lekh Parekh.

Past Students and Post-Doctoral Researchers

Dr. Paolo Suating	Post-doctoral research associate (Trinity University)
Dr. Nicholas Ernst	Visiting Assistant Professor, Purdue University Northwest
Hannah Aziz (MS)	Graduate student, Tulane University.
Dr. Xiaoyang Cai	Senior Scientist, 10× Genomics, CA.
Dr. Wei Yao	Scientist, Seattle Genetics, Seattle, WA.
Dr. Matthew Sullivan	Unknown
Dr. Jacobs Jordan	USDA, Southern Regional Research Center, New Orleans
Dr. Thong Nguyen	Winder Laboratories, LLC, Winder, Georgia
Dr. Matthew Hillyer	USDA, Southern Regional Research Center, New Orleans
Dr. Kaiya Wang	Post-doc, Nanjing University of Aeronautics and Astronautics (supervisor, Prof. Hu Xiaoyu).
Dr. Punidha Sokkalingam	ECI pharmaceuticals, Fort Lauderdale, Florida
Dr. Simin Li	Faculty, Wuhan University. of Science and Tech., China
Dr. Sarah Whisenhunt	Senior Laboratory Analyst, NASA Michoud Assembly Facility
Dr. Haiying Gan	Business owner: Light Orange Bean, LLC/Freelance photographer
Dr. Peng Yang	Faculty, Shen Yang Pharmaceutical University., China
Dr. Hao Sun	Post doc., University. of Utah
Dr. Kannupal Srinivasan	Faculty, School of Chem., Bharathidasan University., India
Dr. Zachery Laughrey	Proteomics Manager at Arizona State University
Dr. Melissa Latter	Principal Radiochemist, Royal Brisbane Women's Hospital
Dr. Mayuri Dighe	Dow Chemical, Pune India
Dr. Jiachang Gong	Senior Research Investigator, Bristol Myers Squibb
Dr. Xuehe Li	Senior Fellow, University. Washington, Dept. of Radiology
Dr. Huaping Xi	Research Scientist, NIST
Jodie O. Green (MS)	Instructor, South-Eastern University of Louisiana
John-Henry Baird (MS)	Founder/owner Florida Environmental Laboratories

Current Collaborators

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Prof. Henry Ashbaugh (Dept. of Chemical and Biomolecular Engineering, Tulane University, New Orleans)
Prof. Dor Ben-Amotz (Dept. Chemistry, Purdue University, West Lafayette)
Prof. David Mobley (Dept. of Pharmaceutical Sciences, University of California Irvine, Irvine)
Prof. Simin Liu (School of Chem. and Chem. Eng., Wuhan U. of Sci. and Technology, Wuhan, China)