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### Research Interests:

Aqueous supramolecular chemistry: understanding how molecules interact in water: from specific ion-pairing and the hydrophobic effect, to protein aggregation pertinent to neurodegenerative disorders. Our research has primarily focused on: 1) novel hosts designed to probe the hydrophobic, Hofmeister, and Reverse Hofmeister effects, and; 2) designing supramolecular capsules as yocto-liter reaction vessels and separators. Current efforts to probe the hydrophobic and Hofmeister effects include studies of the supramolecular properties of proteins.

### 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 with 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:

Fellow of the Royal Society of Chemistry  
UNO, University Research Professor, 2007-2011.  
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

- 6) 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

- 23) Symposium organizer (with A. Patel) TSRC Workshop on hydrophobicity, Telluride, CO, USA, July 2020.
- 22) Symposium organizer (with E. Anslyn), Catalysis and Sensing in the Environment, Portree, UK, June 2020.
- 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*, 255<sup>th</sup> National ACS meeting, New Orleans, March 2018.
- 19) Administrator and co-founder of the Taylor and Francis, Sessler Early Career Researcher Prize; an annual \$1000 award for independent, junior researchers (2016-)

- 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 31<sup>st</sup> – June 4<sup>th</sup> 2015.
- 16) Visiting Professor, Wuhan University of Science and Technology as a Chair Professor of the Chutian Scholars Program (2015-2017)
- 15) Member, International Scientific Committee for the International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC) series (2015-2021).
- 14) Reviewer for the International Cram-Lehn-Pedersen Prize in (2015-).
- 13) Co-Editor-in-Chief with Philip A. Gale, *Supramolecular Chemistry* (Taylor & Francis Group. 2014-).
- 12) Columnist for *Nature Chemistry* (2009-)
- 11) Organizer: Mardi Gras Symposium, Tulane University; a one-day symposium with 7 internationally renowned speakers and 105 attendees (2014).
- 10) Member, International Advisory Committee, International Conference on Calixarenes (2011-).
- 9) Administrator 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, summer 2015.
- 8) Chartered Member for the National Institutes of Health (NIH), Synthetic and Biological Chemistry: A (SBC-A) Study Section (2007-2011).
- 7) Organizer, Supramolecular Chemistry Symposium, Joint SE/SW Regional ACS meeting, New Orleans, Nov/Dec 2010.
- 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 7<sup>th</sup> International Conference on Calixarenes, Vancouver, B.C., Canada (Aug. 2003).
- 3) Reviewer for journals: *Angewandte Chemie*, *Beilstein Journal of Organic Chemistry*, *Chemical Communications*, *Chemical Science*, *Chemistry: a European Journal*, *Collection of Czechoslovak Chemical Communications*, *Inorganic Chemistry*, *Langmuir*, *Journal of American Chemical Society*, *Journal of Computer Aided Molecular Design*, *Journal of Physical Chemistry B*, *Journal of Organic Chemistry*, *Supramolecular Chemistry*, *Organic Letters*, *Nature Chemistry*, *Nature Communications*, *Proceedings of the National Academy of Sciences*, *Spectroscopy Letters*, *Tetrahedron*, *Tetrahedron Letters*, *Macromolecules*, and *Structural Chemistry*.
- 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

### a) Book Chapters, Online Resources etc.

- 13) Ernst, N. E. and Gibb, B. C., *Water Runs Deep*, in *Supramolecular Chemistry in Water*, (Ed. Stefan Kubik) Wiley-VCH 2019.
- 12) Cai, X. and Gibb, B.C., *Deep-Cavity Cavitands in Self-Assembly*, in *Comprehensive Supramolecular Chemistry II* (Editor-in-chief, Atwood, J.), Elsevier 2017
- 11) 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.
- 10) 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

- 9) *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.
- 8) *Van der Waals Interactions and the Hydrophobic Effect*, Gibb, B. C., in *Chemosensors: Principles, Strategies, and Applications*, Eds. Wang, B., Anslyn, E., John Wiley and Sons, 2011.
- 7) *Nanocapsules Assembled by the Hydrophobic Effect*, Gibb, B. C., *Organic Nanostructures*, (Eds. Atwood, J., Steed, J.) Wiley-VCH, 2008, p291-304.
- 6) *Macrocyclic Synthesis through Templatation*, Laughrey, Z. R.; Gibb, B. C., *Topics in Current Chemistry*, 2005, 249, (Eds. Vögtle, F. and Schalley, C), p67-125.
- 5) *Guests within Large Synthetic Hydrophobic Pockets Synthesized via Self-Assembly*, Gibb, B. C., *Encyclopedia of Nanoscience and Nanotechnology* Eds. Schwarz, J. A.; Contescu, C.; Putyera, K. Marcel Dekker, New York, 2004, p1329-1355.
- 4) *Guests Within Large Synthetic Hydrophobic Pockets Synthesized Using Polymers And Conventional Techniques*, Gibb, B. C., *Encyclopedia of Nano-science and Nano-technology* Eds. Schwarz, J. A.; Contescu, C.; Putyera, K. Marcel Dekker, New York, 2004, p1305-1327.
- 3) *Strict Self-Assembly and Self-Assembly with Covalent Modification*, Gibb, B. C. *Encyclopedia of Supramolecular Chemistry* Eds. Atwood, J. & Steed, J. Marcel Dekker, 2004, p1372-1378.
- 2) *Carcerands and Hemarcerands*, Gibb, B. C. *Encyclopedia of Supramolecular Chemistry* Eds. Atwood, J. & Steed, J., Marcel Dekker, 2004, p189-192.
- 1) *Cavitands*, Gibb, B. C. *Encyclopedia of Supramolecular Chemistry* Eds. Atwood, J. & Steed, J., Marcel Dekker, 2004, p219-222.

#### **b) Journal Research Articles and Reviews**

- 91) *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
- 90) *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 75<sup>th</sup> birthday). DOI: 10.1039/C9QO00182D.
- 89) *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.
- 88) *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 ISMSC2018), **2019**, *31*, 184-189.
- 87) *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.
- 86) *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
- 85) *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.
- 84) *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).
- 83) *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
- 82) *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
- 81) *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
- 80) *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
- 79) *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.7b05602
- 78) *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
- 77) *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.
- 76) *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.* (50<sup>th</sup> Anniversary Supramolecular Chemistry), **2017**, *46*, 2479-2496. DOI: 10.1039/C7CS00095B.
- 75) *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
- 74) *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
- 73) *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
- 72) *From steroids to aqueous supramolecular chemistry: an autobiographical career review*, Gibb, B.C., *Beilstein Journal of Organic Chemistry*, **2016**, *12*, 684-701.
- 71) *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
- 70) *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
- 69) *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 60<sup>th</sup> birthday), **2016**, *28*, 84-90. DOI: 10.1080/10610278.2015.1082563
- 68) *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
- 67) *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

- 66) *Molecular Containers Assembled through the Hydrophobic Effect*, Jordan, J. H., Gibb, B. C., *Chem. Soc. Rev.*, **2015**, 44, 547 - 585. DOI: 10.1039/C4CS00191E.
- 65) *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.
- 64) *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.
- 63) *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.
- 62) *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.
- 61) *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.
- 60) *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.
- 59) *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).
- 58) *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.
- 57) *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.
- 56) *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.
- 55) *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.
- 54) *Non-Monotonic Assembly of a Deep-Cavity Cavitand*, Gan, H.; Benjamin, C. J.; Gibb, B. C., *J. Am. Chem. Soc.*, **2011**, 133, 4770-4773. DOI: 10.1021/ja200633d.
- 53) *Solvent Denaturation of Supramolecular Capsules Assembled via the Hydrophobic Effect*, Liu S., Gibb, B. C., *Chemical Commun.*, **2011**, 3574-3576. DOI: 10.1039/c1cc10122f.
- 52) *Water-Soluble, Self-Assembling Container Molecules: An Update*, Laughrey, Z. and Gibb, B. C., *Chem. Soc. Rev.*, **2011**, 40, 363-386. DOI: 10.1039/C0CS00030B.
- 51) *ITC Analysis of Guest Binding to a Deep-Cavity Cavitand*, Gan, H.; Gibb, B. C., *Supramolecular Chemistry*, **2010**, 22, 808-814. DOI: 10.1080/10610278.2010.506551.
- 50) *Kinetic Resolution of Constitutional Isomers Controlled by Selective Protection Inside a Supramolecular Nanocapsule*, Liu, S., Gan, H., Hermann, A. T., Rick, S. W., Gibb, B. C. *Nature Chemistry*, **2010**, 2, 847-852. DOI: 10.1038/nchem.751. NIHMSID 231021.
- 49) *Dendronized cavitands: A Step Towards a Synthetic Viral Capsid?* Grayson, S. M., Gibb, B. C., *Soft Matter*, **2010**, 6, 1377-1382. DOI: 10.1039/B921935H.
- 48) *Characterization of an Exception to the “Even Electron Rule” upon Low Energy Collision Induced Decomposition in Negative Ion Electrospray Tandem Mass Spectrometry*, Cai, Y.; Zhenzhen Mo, Z.; Rannulu, N. S.; Guan, B.; Kannupal, S.; Gibb, B. C. and Cole, R. B., *J. Mass. Spec.*, **2010**, 45, 235-240 (Special Feature: Selected Article). DOI: 10.1002/jms.1706.

- 47) *Chiral Photochemistry within a Confined Space: Diastereoselective Photo-rearrangements of a Tropolone and a Cyclohexadienone Included in a Synthetic Cavitand*, Sundaresan, A. K.; Kaanumalle, L.; Gibb, C. L. D.; Gibb, B. C.; Ramamurthy, V. *Dalton Transactions*, **2009**, 20, 4003-4011. DOI: 10.1039/b900017h. NIHMSID # 104333.
- 46) *Chiral Photochemistry in a Confined Space: Torquoselectivity during the Photocyclization of Pyridones within an Achiral Hydrophobic Capsule*, Sundaresan, A. K.; Gibb, C. L. D.; Gibb, B. C. and Ramamurthy, V., *Tetrahedron* (Symposium in Print), **2009**, 65(35), 7277-7288. DOI: 10.1016/j.tet.2009.01.110.
- 45) *Guests of Differing Polarities Provide Insight into Structural Requirements for Templates of Water-Soluble Nano-Capsules*, Gibb C. L. D. and Gibb, B. C. *Tetrahedron* (Symposium in Print), **2009**, 65(35), 7240-7248. DOI: 10.1016/j.tet.2009.01.106. NIHMSID # 138307.
- 44) *Divergent Dendronization of Deep-Cavity Cavitands to Tune Host Solubility*, Giles, M. D.; Liu, S.; Emanuel, R. L.; Gibb, B. C.; and Grayson, S. M., *Isr. J. Chem.* **2009**, 49, 31-40. DOI: 10.1560/IJC.49.1.31.
- 43) *Dendronized Supramolecular Nano-Capsules: pH Independent, Water-Soluble, Deep-Cavity Cavitands Assemble via the Hydrophobic Effect*, Giles, M. D.; Liu, S.; Emanuel, R. L.; Gibb, B. C.; and Grayson, S. M., *J. Am. Chem. Soc.*, **2008**, 130, 14430-14431. DOI: 10.1021/ja806457x. NIHMSID # 86398.
- 42) *Synthesis of Nano-Scale Carceplexes from Deep-Cavity Cavitands*, Srinivasan, K., Gibb, B. C., *Chem. Commun.*, **2008**, 4640-4642. DOI: 10.1039/B811594J.
- 41) *Water Inside a Hydrophobic Cavitand Molecule*, Ewell, J.; Gibb, B. C.; Rick, S., *J. Phys. Chem. B*, **2008**, 112, 10272-10279. DOI: 10.1021/jp804429n.
- 40) *High-Definition Self-Assemblies driven by the Hydrophobic Effect: Synthesis and Properties of a Supramolecular Nano-Capsule*, Liu, S. and Gibb, B. C., *Chem Commun.* **2008**, 3709-3716 (Feature Article). DOI: 10.1039/b805446k. NIHMSID # 83345.
- 39) *Broad Functionalization of Deep-Cavity Cavitands by Directed Ortho Metalation*, Kannupal, S. and Gibb, B. C., *Euro. J. Org. Chem.* (Cover article), **2008**, 3265-3271. DOI: 10.1002/ejoc.200800206.
- 38) *Templation of the Excited State Chemistry of  $\alpha$ -(n-alkyl)-dibenzylketones: How Guest Packing within a Nano-scale Supramolecular Capsule influences Photochemistry*, Gibb, C. L. D.; Sundaresan, A. K.; Ramamurthy, V.; Gibb, B. C., *J. Am. Chem. Soc.*, **2008**, 130, 4069-4080. DOI: 10.1021/ja7107917.
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#### d. Highlights, write-ups etc.

- 15) Cover Article. *ChemPhysChem*, **2018**, 19 (18) 2285-2289. (Cover issue).
- 14) *JACS Spotlight Article*, *J. Am. Chem. Soc.*, **2018**, 140, 4185.
- 13) *Angew Chemie*, **2017**, 56, 15314-15318, highlighted in "ChemistryViews"  
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- 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
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- 8) Cover Article. *Chem Commun.* **2008**, 3709-3716.
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- 4) Cover article, *J. Org. Chem.*, **2006**, 71, 1289-1294.
- 3) Research write-up. Freemantle, M., *C & E News* Jan 3<sup>rd</sup>, **2005**, 30-34.
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- 1) Concept article. *Chemistry: A European Journal*, **2003**, 9, 5180-5187.

#### Invited Lectures

- 136) Probing and harnessing the hydrophobic and Hofmeister Effects, 257<sup>th</sup> 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, 256<sup>th</sup> 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, 13<sup>th</sup> 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, 101<sup>st</sup> 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, 255<sup>th</sup> 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*, 14<sup>th</sup> 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 251<sup>st</sup> National Meeting, March 2016.
- 101) *Self-assembled nano-containers assembled via the hydrophobic effect*, American Chemical Society 251<sup>st</sup> National Meeting, March 2016.
- 100) *The Thermodynamics of Guest Binding to Deep-Cavity Cavitands*, March 10<sup>th</sup> 2016, 1<sup>st</sup> Annual Workshop, Drug Design Data Resource, University of California San Diego.
- 99) (Highland) *Aqueous Supramolecular Chemistry*, 24<sup>th</sup> 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, 20-22<sup>nd</sup> 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, 8<sup>th</sup> July, 2015, Giardini Naxos, Italy.
- 95) *Probing the Hydrophobic Effect*, 30<sup>th</sup> June 2015, ISMSC-2015, Strasbourg, France.
- 94) *Properties of Water-Soluble Cavitands: Probing the Hydrophobic Effect*, 18<sup>th</sup> May 2015, Fudan University, Shanghai, China.
- 93) *Properties of Water-Soluble Cavitands: Probing the Hydrophobic Effect* (Chair Professor of the Chutian Scholars Program seminar), 14<sup>th</sup> May, 2015, Wuhan University of Science and Technology, Wuhan, China.
- 92) *Properties of Water-Soluble Cavitands: Probing the Hydrophobic Effect*, 11<sup>th</sup> 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, 15-16<sup>th</sup> December 2014, Norwich. UK.
- 90) *Synthesis, Self-Assembly, and Properties of Organic Supramolecular Nanoparticles*, 248<sup>th</sup> ACS National Meeting, San Francisco, California, August 2014.
- 89) *Water-Soluble Cavitands: Probing and Exploiting the Hydrophobic Effect*, 248<sup>th</sup> 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, 247<sup>th</sup> National ACS Meeting, Dallas, TX, March 2014.
- 85) *Properties of Deep-Cavity Cavitands*, 12<sup>th</sup> International Conference on Calixarenes, Memorial University of Newfoundland, Canada, July 2013.
- 84) *Properties of Deep-Cavity Cavitand*, 8<sup>th</sup> 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?* 6<sup>th</sup> International Symposium on Macrocyclic and Supramolecular Chemistry, Brighton, July 2011.
- 72) *The Assembly and Binding Properties of Deep-Cavity Cavitands in Water*, 11<sup>th</sup> 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 239<sup>th</sup> 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", 61<sup>st</sup> 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*, 10<sup>th</sup> 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*, 3<sup>rd</sup> International Symposium of Macrocyclic and Supramolecular Chemistry (ISMSC), Las Vegas, July 2008.
- 58) *Encapsulation Chemistry*, 235<sup>th</sup> 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, 18-19<sup>th</sup> 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, 234<sup>th</sup> American Chemical Society National Meeting, Boston, August, 2007.
- 45) *Unusual Properties of Deep-Cavity Cavitands*, 9<sup>th</sup> 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, 232<sup>nd</sup> 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*, 231<sup>st</sup> 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, 8<sup>th</sup> International Conference on Calixarenes, Prague, Czech Republic, July 25<sup>th</sup>-29<sup>th</sup> 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., 13<sup>th</sup> 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*, 7<sup>th</sup> 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*, 27<sup>th</sup> International Symposium on Macrocyclic Chemistry (ISMC), Park City, Utah, June 2002.
- 11) *Nano-scale Molecular Baskets*, 6<sup>th</sup> 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*, 52<sup>nd</sup> Southeast/56<sup>th</sup> Southwest Combined Regional Meeting of the American Chemical Society, New Orleans, USA, December 6-8<sup>th</sup> 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.K. 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*, 95<sup>th</sup> Annual Meeting of the Southern Association of Agricultural Scientists, Little Rock, Arkansas, February 1998.
- 1) *Towards Extended Carceplexes*, Xi, H., Gibb, B. C., The 4<sup>th</sup> International Conference of Calixarenes, Parma, Italy, August, 1997.

### Current Co-Workers

|                  |                |                 |
|------------------|----------------|-----------------|
| Corinne Gibb     | Wei Yao        | Hannah Aziz     |
| Matthew Sullivan | Paolo Suating  | Anthony Wishard |
| Xaioyang Cai     | Nicholas Ernst |                 |

### Past Students and Post-Doctoral Researchers

|                         |   |
|-------------------------|---|
| 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          | Between jobs  |
| 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, Geocent Inc.                       |
| 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)  
John-Henry Baird (MS)

Instructor, South Eastern University of Louisiana  
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### Current Collaborators

Prof. Amnon Bar-Shir (Dept. of Organic Chemistry, Weizmann Institute, Rehovot, Israel)  
Prof. Henry Ashbaugh (Dept. of Chemical and Biomolecular Engineering, Tulane University, New Orleans)  
Prof. Dor Ben-Amotz (Dept. Chemistry, Purdue University, West Lafayette)  
Prof. Cornelia Bohne (Dept. of Chemistry, University of Victoria, Canada)  
Prof. Steven Rick, (Dept. of Chemistry, University of New Orleans, New Orleans)  
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)

### Current Grants/Awards

- 5) *"Ion-Ion Interactions and the Reverse Hofmeister Effect."* National Institutes of Health, (GM-125690) 07/01/2018 – 06/30/2022, \$1,718,846.
- 4) *"Cavitands and Self-Assembled Capsules as Supramolecular Reagents and Organo-Catalysts."* National Science Foundation (CHE-1807101) 09/01/2018 – 08/31/21, \$493,000.
- 3) *"Advancing predictive physical modeling through focused development of model systems to drive new modeling innovations"* National Institutes of Health (GM124270), 09/10/2018 – 08/31/2022, \$1,116,891 (PI David Mobley, UC Irvine).
- 2) *Manipulating Supramolecular Assembly in Water and Aqueous Mixtures*, National Science Foundation (CBET-1805167), 07/01/18 – 06/30/21, \$320,000 (PI Henry Ashbaugh, Tulane University).
- 1) *"Recruitment of Superior Graduate Students in Chemistry"* Louisiana Board of Regents (LEQSF(2018-23)-GF-14), 07/01/18 – 06/30/22, \$128,000.