

Publications Based on My Research in Gibson's Group

1. Huang, F.; Fronczek, F. R.; Gibson, H. W. "First Supramolecular Poly(taco complex)" *Chemical Communications* **2003**, 1480-1481.
2. Huang, F.; Fronczek, F. R.; Gibson, H. W. "A Cryptand/Bisparaquat [3]Pseudorotaxane by Cooperative Complexation" *Journal of the American Chemical Society* **2003**, *125*, 9272-9273.
3. Huang, F.; Gibson, H. W.; Bryant, W. S.; Nagvekar, D. S.; Fronczek, F. R. "First Pseudorotaxane-Like [3]Complexes Based on Cryptands and Paraquat: Self-Assembly and Crystal Structures" *Journal of the American Chemical Society* **2003**, *125*, 9367-9371.
4. Huang, F.; Zakharov, L. N.; Rheingold, A. L.; Jones, J. W.; Gibson, H. W. "Water Assisted Formation of a Pseudorotaxane and Its Dimer Based on a Supramolecular Cryptand" *Chemical Communications* **2003**, 2122-2123.
5. Gibson, H. W.; Ge, Z. Huang, F.; Jones, J. W.; Wang, H.; Farcas, A. "Mechanically Interlocked Macromolecular Systems via Pseudorotaxane Self-assembly" *Polymer Preprints* **2003**, *44*, 475-476.
6. Huang, F.; Jones, J. W.; Slobodnick, C.; Gibson, H. W. "Ion Pairing in Fast-Exchange Host-Guest Systems: Concentration Dependence of Apparent Association Constants for Complexes of Neutral Hosts and Divalent Guest Salts with Monovalent Counterions" *Journal of the American Chemical Society* **2003**, *125*, 14458-14464.
7. Jones, J. W.; Huang, F.; Bryant, W. S.; Gibson, H. W. "A Cautionary Note Regarding the Investigation of Supramolecular Complexes Involving Secondary Ammonium Salts in Acetone" *Tetrahedron Letters* **2004**, *45*, 5961-5963.
8. Huang, F.; Gibson, H. W. "Formation of a Supramolecular Hyperbranched Polymer from Self-Organization of an AB₂ Monomer Containing a Crown Ether and Two Paraquat Moieties" *Journal of the American Chemical Society* **2004**, *126*,

14738-14739.

9. Huang, F.; Zhou, L.; Jones, J. W.; Gibson, H. W.; Ashraf-Khorassani, M. "Formation of Dimers of Inclusion Cryptand/Paraquat Complexes Driven by Dipole-Dipole and Face-to-Face π -Stacking Interactions" *Chemical Communications* **2004**, 2670-2671.
10. Huang, F.; Nagvekar, D. S.; Slebodnick, C.; Gibson, H. W. "A Supramolecular Triarm Star Polymer from a Homotritopic Tris(Crown Ether) Host and a Complementary Monotopic Paraquat-Terminated Polystyrene Guest by a Supramolecular Coupling Method" *Journal of the American Chemical Society* **2005**, *127*, 484-485.
11. Huang, F.; Zakharov, L. N.; Rheingold, A. L.; Ashraf-Khorassani, M.; Gibson, H. W. "Synthesis of a Symmetric Cylindrical Bis(crown ether) Host and Its Complexation with Paraquat" *Journal Organic Chemistry* **2005**, *70*, 809-813.
12. Gibson, H. W.; Ge, Z.; Huang, F.; Jones, J. W.; Lefebvre, H.; Vergne, M. J.; Hercules, D. M. "Syntheses and Model Complexation Studies of Well-Defined Crown Terminated Polymers" *Macromolecules* **2005**, *38*, ASAP, Feb. 22nd.
13. Huang, F.; Gibson, H. W. "A Supramolecular Poly[3]pseudorotaxane from Self-Assembly of a Homoditopic Cylindrical Bis(crown ether) Host and a Bisparaquat Derivative" *Chemical Communications* **2005**, Advance Article, Feb. 3rd.
14. Huang, F.; Guzei, I. A.; Jones, J. W.; Gibson, H. W. "Remarkably Improved Complexation of a Bisparaquat by Formation of a Pseudocryptand-Based [3]Pseudorotaxane" *Chemical Communications* **2005**, Advance Article, Feb. 3rd.
15. Huang, F.; Pederson, A. M.; Gibson, H. W. "Polyrotaxanes" In *Physical Properties of Polymers Handbook*; Mark, J. E. Ed.; Springer-Verlag: New York, **2005**; In press.
16. Huang, F.; Switek, K. A.; Zakharov, L. N.; Fronczek, F. R.; Slebodnick, C.; Lam, M.; Golen, J. A.; Bryant, W. S.; Mason, P.; Rheingold, A. L.; Ashraf-Khorassani, M.; Gibson, H. W. "Bis(*m*-Phenylene)-32-Crown-10-Based Cryptands, Powerful Hosts for Paraquat Derivatives" *Journal of Organic Chemistry* **2005**, *70*, ASAP, March 19th.
17. Huang, F.; Slebodnick, C.; Gibson, H. W. "[3]Pseudorotaxanes Based on the

- Cryptand/Monopyridinium Salt Recognition Motif” *Chemical Communications* **2005**, Submitted.
18. Huang, F.; Bhattacharjee, S.; Gong, C.; Jones, J. W.; Gibson, H. W. “A Mechanically Interlocked Hyperbranched Polymer” *Journal of the American Chemical Society* **2005**, Submitted.
 19. Huang, F.; Slebodnick, C.; Rheingold, A. L.; Switek, K. A.; Gibson, H. W. “[2]Pseudorotaxanes Based on the Cryptand/Monopyridinium Recognition Motif” *Journal of Organic Chemistry* **2005**, Submitted.
 20. Huang, F.; Fronczek, F. R.; Ashraf-Khorassani, M.; Gibson, H. W. “Slow-Exchange C₃-Symmetric Cryptand/Trispyridinium Inclusion Complexes: A New Type of Threaded Structure” *Journal of the American Chemical Society* **2005**, Submitted.
 21. Huang, F.; Slebodnick, C.; Ratliff, A.; Gibson, H. W. “Bis(*m*-phenylene)-32-crown-10/Monopyridinium [2]Pseudorotaxanes” *Chemical Communications* **2005**, Submitted.
 22. Huang, F.; Zakharov, L. N.; Bryant, W. S.; Rheingold, A. L.; Gibson, H. W. “Promotion of Host Folding during the Formation of a Taco Complex” *Chemical Communications* **2005**, Submitted.
 23. Huang, F.; Gibson, H. W. “Polypseudorotaxanes and Polyrotaxanes” *Progress in Polymer Science* **2005**, Submitted.
 24. Huang, F.; Switek, K. A.; Gibson, H. W. “An Acid-Base Controllable Cryptand/Paraquat [2]Pseudorotaxane-Based Molecular Machine” *Chemical Communications* **2005**, In preparation.
 25. Huang, F.; Yamaguchi, N.; Nagvekar, D. S.; Gibson, H. W. “Linear Supramolecular Polymers Based on the Bis(*m*-phenylene)-32-crown-10/Paraquat Recognition Motif” *Journal of the American Chemical Society* **2005**, In preparation.
 26. Huang, F.; Slebodnick, C.; Ashraf-Khorassani, M.; Gibson, H. W. “A Unique Inclusion Complex of Diquat in the Cavity Provided by Two Dibenzo-24-Crown-8 Hosts” *Tetrahedron Letters* **2005**, In preparation.