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Carolina Distinguished Professor

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**A. Professional Preparation**

Tsinghua University, P.R. China	Chemistry	B.S., 1987-1992
Tsinghua University, P.R. China	Chemistry	Ph.D., 1992-1997
University of Lausanne, Lausanne, Switzerland	Chemistry	Postdoc., 1997-1999
The Scripps Research Institute, La Jolla, USA	Chemistry	Postdoc., 1999-2001

**B. Appointments**

<u>Dates</u>	<u>Title</u>	<u>Institution</u>	<u>Department</u>
2013-	Carolina Distinguished Professor	University of South Carolina	University of South Carolina
2009-2012	Robert L. Sumwalt Professor of Chemistry	University of South Carolina	University of South Carolina
2011-	Professor	University of South Carolina	Chemistry
2008-2011	Associate Professor	University of South Carolina	Chemistry
2003-2008	Assistant Professor	University of South Carolina	Chemistry
2001-2003	Senior Scientist	The Scripps Research Institute	Chemistry

**C. Products** (recent representative publications from > **260**; h-index **59**)

1. Zhao, X.; Liu, L.; An, T.; Xian, M.; Luckanagul, J. A.; Su, Z.; Lin, Y.; Wang, Q.; "A Hydrogen Sulfide-Releasing Alginate Dressing for Effective Wound Healing", *Acta Biomaterialia* **2020**, *104*, 85-94.
2. Metavarayuth, K.; Chen, X.; Sitasuwan, P.; Lu, L.; Su, J.; Wang, Q.; "Nanotopographical cues mediate osteogenesis of stem cells on virus substrates through BMP-2 intermediate", *Nano Letters*, **2019**, *19*, 8372-8380. (Highlighted as cover)
3. Wu, J.; Chen, A.; Zhou, Y.; Zheng, S.; Yang, Y.; An, Y.; Xu, K.; He, H.; Luckanagul, J. A.; Xian, M.; Xiao, J.; Wang, Q.; "Novel H<sub>2</sub>S-Releasing Hydrogel for Wound Repair via in situ Polarization of M2 Macrophages", *Biomaterials*, **2019**, 119398.
4. Ratnatilaka Na Bhuket, P.; Luckanagul, J.; Rojsitthisak, P.; Wang, Q.; "Chemical Modification of Enveloped Viruses for Biomedical Applications", *Integrative Biology* **2018**, *10*, 666-679. (Highlight as the front cover)
5. Guo, J.; Zhao, X.; Hu, J.; Lin, Y.; Wang, Q.; "Tobacco mosaic virus with peroxidase-like activity for cancer cells detection through colorimetric assay", *Molecular Pharmaceutics* **2018**, *15*, 2946-2953.
6. Zhang, X.; Zhao, X.; Luckanagul, J. A.; Yan, J.; Nie, Y.; Lee, L. A.; Wang, Q.; "Polymer-Protein Core-Shell Nanoparticles for Enhanced Antigen Immunogenicity", *ACS Micro Letters*, **2017**, *6*, 442-446.
7. Maturavongsadit, P.; Bi, X.; Metavarayuth, K.; Luckanagul, J. A.; Wang, Q.; "Influence of Crosslinkers on the *In Vitro* Chondrogenesis of Mesenchymal Stem Cells in Hyaluronic Acid Hydrogel", *ACS Applied Materials and Interfaces*, **2017**, *9*, 3318-3329.
8. Metavarayuth, K.; Sitasuwan, P.; Luckanagul, J. A.; Feng, S.; Wang, Q.; "Virus nanoparticles mediated osteogenic differentiation of bone derived mesenchymal stem cells", *Advanced Science*, **2015**, *2*, 1500026 (DOI: 10.1002/advs.201500026).

9. Zan, X.; Feng, S.; Balizan, E.; Lin, Y.; Wang, Q.; “General and facile method to align one dimensional nanoparticles in macro scale and control over myoblast orientation and differentiation”, *ACS Nano* **2013**, 7, 8385-8396. (Highlighted as the front cover)
10. Li, T.; Zan, X.; Winans, R. E.; Wang, Q.; Lee, B.; “Biomolecular assembly of thermoresponsive superlattices of the tobacco mosaic virus with large tunable interparticle distances”, *Angew. Chem. Int. Ed.* **2013**, 52, 6638-6642.
11. Liu, Z.; Qiao, J.; Niu, Z.; Wang, Q.; “Natural supramolecular building blocks: from virus coat proteins to viral nanoparticles”, *Chem. Soc. Rev.* **2012**, 41, 6178–6194.
12. Lin, Y.; Balizan, E.; Lee, L. A.; Niu, Z.; Wang, Q.; “Self-assembly of rod-like bionanoparticles in capillary tube”, *Angew. Chem. Int. Ed.* **2010**, 49, 868-872. (Highlighted as the Frontispiece cover)
13. Su, Z.; Wang, Q.; “A hierarchical assembly process to engineer a hydrophobic core for virus like particles”, *Angew. Chem. Int. Ed.* **2010**, 49, 10048-10050.
14. Lin, Y.; Böker, A.; He, J.; Sill, K.; Xiang, H.; Abetz, C.; Li, X.; Wang, J.; Emrick, T.; Long, S.; Wang, Q.; Balazs, A.; Russell, T.P.; “Self-directed Assembly of Nanoparticle/Copolymer Mixtures”, *Nature* **2005**, 434, 55-59.

#### D. Five Synergistic Activities

1. **Honors:** The ACS Memphis Section Southern Chemist Award, **2018**; Russell Award for Research, University of South Carolina, **2017**; South Carolina ACS Outstanding Chemist Award, **2016**; Guest Professor of Tianjin University, China, **2016-2017**; Guest Professor of Guizhou University, China, **2014-2016**; AAAS Fellow, **2012**; Guest Professor of Changchun Institute of Applied Chemistry, CAS, China, **2010-2018**; USC Rising Star Award, **2010**; NSF American Competitiveness Fellow Award, 2009; South Carolina Governor’s Young Scientist Award, **2009**; CAPA Distinguished Junior Faculty Award, **2008**; NSF CAREER, **2008**; Alfred P. Sloan Research Scholar, **2008**; Camille Dreyfus Teacher Scholar Award, **2008**
2. **Editor-in-Chief:** “Biomaterials Translational” (2020-)
3. **Editorial Board Member:** “Plos One” (2018-), “Experimental Biology and Medicine” for Bionanoscience (2006-2015); “The Open Nanomedicine Journal” (2008-), “Scientifica” (2012-), “Journal of Applied Chemistry” (2013), “Chinese Chemistry Letters” (2013-), and “Current Synthetic & System Biology” (2013-)
4. Chair of the Conference Advisory Committee (**2010-**); Treasurer (**2008-2012**) and Executive Board Member of the Chinese American Professor Association for Chemistry and Chemical Biology (**2008-**); Thrust leader of the Nano-biotechnology Thrust Area at Nanocenter of USC (**2005-**)
5. **Guest Editor** for “Chemistry An Asian Journal” (2011) and the America Regional Editor for “*Letters in Organic Chemistry*” (2005 - 2006)
6. Co-Chair of symposia at ACS SERMACS meeting, October **2018**, Augusta, Georgia, “Organic chemistry tools for synthesis, biomedicine and materials science” and “The Cope Symposium in honor of M.G. Finn”; Chair of symposium at ACS SERMACS meeting, Division of Colloid and Surface Chemistry: October **2016**, Columbia, South Carolina, “Synthesis and application of biofunctional nanomaterials”; Co-Chair of Symposia at ACS National meeting, Division of Colloid and Surface Chemistry: August **2017**, Washington D. C., “Frontier of the Interface of Materials and Biology”; March **2016**, San Diego, “Frontier of the Interface of Materials and Biology”; August

**2014**, San Francisco, "Frontier of the Interface of Materials and Biology: Using Nanotechnology To Investigate Cellular and other Biological Systems"; April **2013**, New Orleans, "Frontier of the Interface of Materials and Biology: Using Nanotechnology To Investigate Cellular and other Biological Systems"; August **2009**, Washington, D.C., "Nanoparticle-Biological Cell Interactions"; August 2008, Philadelphia, "Hierarchically organized nanoparticle assemblies: Learning from biological systems"; August **2005**, Washington, D.C., "Surface Chemistry: Nanoparticles and Bionanoparticles: From Synthesis to Assembly to Materials". **Co-Chair** of the 5<sup>th</sup> "Sino-US Chemistry and Chemical Biology Symposium", Lanzhou, P. R. China, **2009**; the 6<sup>th</sup> "Sino-US Chemistry and Chemical Biology Symposium", Hangzhou, P. R. China, **2010**; the 8<sup>th</sup> "Sino-US Chemistry and Chemical Biology Symposium", Kuming, P. R. China, **2012**; the 13<sup>th</sup> "Sino-US Chemistry and Chemical Biology Symposium: Chemistry: The Central Science in Technology Innovation and Medicine", Shanghai, P. R. China, **2017**; the 15<sup>th</sup> "Sino-US Chemistry and Chemical Biology Symposium: Chemistry: Emerging Frontiers in Organic and Medicinal Chemistry", Xinxiang, Henan, P. R. China, **2019**