

BIOGRAPHICAL SKETCH – JIYU FANG

A. PROFESSIONAL PREPARATION:

Nanjing Normal University	Nanjing, China	Physics	BS	1983
Chinese Academy of Science	Beijing, China	Physics	MS	1989
Southeast University	Nanjing, China	Bioengineering	Ph.D	1992
Iowa State University	Ames, Iowa	Chemistry	Postdoctoral	1992-1994
University of California	Los Angeles	Chemistry	Postdoctoral	1994-1997

B. APPOINTMENTS:

- 2019–present: Director, Advanced Materials Processing and Analysis Center
University of Central Florida, Orlando, FL.
- 2017–2019: Interim Director, Advanced Materials Processing and Analysis Center
University of Central Florida, Orlando, FL.
- 2015–present: Associate Chair and Graduate program Director, Department of Materials
Science and Engineering
University of Central Florida, Orlando, FL.
- 2016–present: Professor, Department of Materials Science and Engineering
and Advanced Materials Processing and Analysis Center
- 2009–2016: Associate Professor, Department of Materials Science and Engineering
- 2003–2009: Associate Professor, Department of Mechanical, Materials and
Aerospace Engineering
University of Central Florida, Orlando, FL.
- 1997–2003: Researcher, Center for Biomolecular Science and Engineering
Naval Research Laboratory, Washington, DC.

C. PRODUCTS:

(i) Products Most Closely Related to the Proposed Project.

1. S. Rhodes, W. Liang, X. Wang, N. R. Reddy, J. Y. Fang, “Switching between J-Aggregate Nanoribbons and H-Aggregate Nanotubes”. *Journal of Physical Chemistry C*. **2020**, *124*, 11722.
2. N. R. Reddy, S. Rhodes, Y. Ma, J. Y. Fang, “Davydov Splitting of Cyanine Aggregates on Self-assembled Nanotubes”. *Langmuir* **2020**, *36*, 13649.
3. Q. Wang, W. Liang, L. He, D. Fan, X. Wang, J. Y. Fang, “PLA₂-Triggered Release of Drugs from Self-Assembled Lipid Tubules for Arthritis treatments”. *ACS Applied Bio Materials* **2020**, *3*, 6488.
4. N. R. Reddy, S. Rhodes, J. Y. Fang, “Colorimetric Detection of Dopamine with J-aggregate Nanotube-Integrated Hydrogel Films.” *ACS Omega*. **2020**, *5*, 18198.
5. W. Liang, W. He, N. R. Reddy, Y. Bai, L. An, J. Y. Fang, “Morphology Transformation of Supramolecular Structures in aqueous Mixtures of Two Oppositely Charged Amphiphiles. *Langmuir* **2019**, *35*, 9004
6. S. Rhodes, W. Liang, E. Shteinberg, J. Y. Fang, “Formation of Spherulitic J-Aggregate Spherulites from the Co-Assembly of Lithocholic Acid and Cyanine dye. *Journal of Physical Chemistry Letters* **2017**, *8*, 4504.

7. W. Liang, S. He, J. Y. Fang, "Self-Assembly of J-aggregate Nanotubes and Their Applications for Sensing Dopamine". *Langmuir* **2014**, *30*, 805.
8. X. Zhang, W. Liang, T. Bera, J. Y. Fang, "Longitudinal Zipping/Unzipping of Self-Assembled Organic Tubes". *Journal of Physical Chemistry B* **2011**, *115*, 14445.

(ii) Other Significant Products.

1. W. Liang, S. Rhodes, J. Zheng, X. Wang, J. Y. Fang, "Soft-Templated Synthesis of Lightweight, Elastic and Conductive Nanotube Aerogels". *ACS Applied Materials and Interfaces* **2018**, *10*, 37426.
2. J. R. Guzman-Sepulveda, J. Deng, J. Y. Fang, A. Dogariu, "Characterizing Viscoelastic Modulations in Biopolymer Hydrogels by Coherence-gated Light Scattering". *Journal of Physical Chemistry B* **2017**, *212*, 9234.
3. J. Deng, W. Liang, J. Y. Fang, "Liquid Crystal Droplet Embedded Biopolymer Hydrogel Sheets for Biosensor Applications". *ACS Applied Materials and Interfaces* **2016**, *8*, 3928.
4. J. R. Guzman-Sepulveda, J. Deng, J. Y. Fang, A. Dogariu, "In Situ Characterization of Structural Dynamics in Swelling Hydrogels". *Soft Matter* **2016**, *12*, 5986.
5. J. Deng, X. Lu, C. Constant, A. Dogariu, J. Y. Fang, "Design of β -CD-Surfactant Complex-Coated Liquid Crystal Droplets for the Detection of Cholic Acid via Competitive Host-Guest Recognition". *Chemical Communications* **2015**, *51*, 8912.
6. T. Bera, J. Deng, J. Y. Fang. "Tailoring the Surface of Liquid Crystal Droplet with Chitosan-Surfactant Complexes for the Sensitive Detection of Bile Acids in Biological Fluids". *RSC Advances* **2015**, *5*, 70097.
7. T. Bera, J. Deng, J. Y. Fang, "Protein-induced Configuration Transition of Polyelectrolyte-Modified Liquid Crystal Droplets". *Journal of Physical Chemistry B* **2014**, *118*, 4970.
8. J. Zou, T. Bera, A. Davis, W. Liang, J. Y. Fang, "Director Configuration Transition of Polyelectrolyte Encapsulated Liquid-Crystal Droplets". *Journal of Physical Chemistry B* **2011**, *115*, 8970.

D. SYNERGISTIC ACTIVITIES:

Professional Activities:

- (1) Involving development of Materials curriculum
- (2) Involving undergraduate students in research
- (3) Sponsoring female graduate students
- (4) Editor-in-Chief: Journal of Materials Science and Chemical Engineering
- (5) Editorial Board Member: International Materials Review, Advances in Chemistry, Journal of Materials Science and Applied Science and Journal of Materials Sciences and Applications.