



Department: School of Chemical Engineering

Professional field: Chemical Engineering and Technology

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## Profile

2012: PhD, Physical Chemistry and Colloidal Science, Wageningen University, Netherlands

2008: MS (with honor), Polymer Chemistry and Physics, Nankai University, China.

2005: BS (with honor), Chemistry, Hebei Normal University, China.

2005: Diploma in Chemistry, Hebei Normal University, China.

### Academic Experience

2016-present: Associate Professor, School of Chemical Engineering, ECUST, China.

2012-2016: Postdoctoral Research, Laboratory of BioNanoTechnology, Wageningen University, Netherlands

## Research Field

1. Quantitative preparation of polyelectrolyte nanoparticles and Study on the catalytic performance of supported enzymes
2. Preparation of mesoporous silica nano catalyst with polyelectrolyte micelle as template
3. Preparation of metal coordination polyelectrolyte micelles and development of new multifunctional imaging contrast agents
4. Study on multi-component polyelectrolyte coagulation process, simulating cell structure and function

## Research results and selected published papers

1. J.B. ten Hove, J.Y. Wang, A. H. Velders\*. Dendrimer-encapsulated nanoparticle -core micelles as a modular strategy for particle-in-a-box-in-a-box nanostructures. *Nanoscale*, 9, 18619-18623 (2017)
2. J.B. ten Hove, J.Y. Wang, M.N. van Oosterom, F.W.B. van Leeuwen, A.H. Velders\*. Size-Sorting and Pattern Formation of Nanoparticle-Loaded Micellar Superstructures in Biconcave Thin Films. *ACS Nano*, 11, 11225-11231 (2017)
3. A. H. Garcia, A. H. Velders, M. A. Cohen Stuart, R. de Vries, J.W. M. van Lent, J.Y. Wang\*. Supramolecular Virus-Like Nanorods by Coassembly of a Triblock Polypeptide and Reversible Coordination Polymers. *Chem. Eur. J.* 23, 239-243 (2017)
4. J.Y. Wang, A. Groeneveld, M. Oikonomou, A. Prusova, H. Van As, J.W.M. van Lent, A.H. Velders\*. Revealing and tuning the core, structure, properties and function of polymer micelles with lanthanide-coordination complexes. *Soft Matter*, 12, 99-105 (2016)
5. M. Oikonomou, J.Y. Wang, R.R. Carvalho, A.H. Velders\*. Ternary Supramolecular Quantum Dot Networks for Selective Lectin Detection. *Nano Research*, 9 (7), 1904-1912 (2016)
6. H.E. Cingil, E.B. Boz, J.Y. Wang, M.A. Cohen Stuart, J. Sprakel. Probing Nanoscale Coassembly with Dual Mechanochromic Sensors. *Adv. Funct. Mater.* 26, 1420-1428 (2016)
7. J.Y. Wang, H.M. de Kool, A.H. Velders\*. Lanthanide-DPA Coordination Driven Micelles with Enhanced Stability and Tunable Function. *Langmuir*, 31, 12251-12259 (2015)
8. J.Y. Wang. Light scattering application in preparation of polyelectrolytes assemblies and materials. The 3rd symposium on light scattering techniques and applications, invited presentation, Shanghai, China, June 14-16 (2018)
9. J.Y. Wang. Assembly of polyelectrolytes: towards soft nanoparticles for functional materials. 7th Tsukuba Global Science Week, invited presentation, Tsukuba, Japan. September 25-27 (2017)
10. J.Y. Wang. Controlled assembly of polymers in water-towards soft nanoparticles for potential applications in biology and environment. 5. The 8th Sino-US Joint Conference of Chemical Engineering, invited presentation, Shanghai, China, October 12-16, 2015