





D. Zhao

The author presented on this page has published more than 25 articles since 2000 in Angewandte Chemie, most recently: "Highly Ordered Mesoporous Tungsten Oxides with a Large Pore Size and Crystalline Framework for H<sub>2</sub>S Sensing": Y. Li, W. Luo, N. Qin, J. Dong, J. Wei, W. Li, S. Feng, J. Chen, J. Xu, A. A. Elzatahry, M. H. Es-Saheb, Y. Deng, D. Zhao, Angew. Chem. 2014, 126, 9181-9186; Angew. Chem. Int. Ed. 2014, 53, 9035 - 9040.

# Dongyuan Zhao

Date of birth: June 3, 1963

Professor, Fudan University Position: E-mail: dyzhao@fudan.edu.cn

http://www.mesogroup.fudan.edu.cn Homepage: **Education**: 1980-1984 BS, Jilin University

1987–1990 PhD supervised by Professor Guo Xiexian and Professor Xu Ruren, Dalian Institute

of Chemical Physics, Chinese Academy of Science, and Department of Chemistry, Jilin

1992-1993 Visiting scholar supervised by Professor Don G. Lee, University of Regina 1993-1994 Postdoctoral fellow supervised by Professor Daniella Goldfarb, The Weizmann

Institute of Science

1995–1996 Postdoctoral fellow supervised by Professor Larry Kevan, University of Houston 1996-1998 Postdoctoral fellow supervised by Professor Galen D. Stucky, University of

California, Santa Barbara

2000 Cheung Kong Professorship, Ministry of Education of China; Outstanding Young Scientist Awards:

Award (NSFC); 2002 Shanghai Peony Award for Natural Science; Young Scientists Award of Shanghai; 2005 DuPont Young Professor Award; 2008 TWAS (The Third World Academy of Sciences) Prize in Chemistry; IMMS (International Mesostructured Materials Association) Award; 2009 Ho Leung Ho Lee Foundation Award for Scientific and Technological Progress; 2012 E. L. Muetterties Memorial Lectureship, University of California, Berkeley; 2013 C. N. R.

Rao Award, Chemical Research Society of India

Ordered mesoporous materials based on interfacial assembly and engineering; nanomaterials **Current research** interests:

for applications in batteries, supercapacitors, and photoconversion of solar energy; ordered nanoporous materials; microporous molecular sieves; nanostructured materials for photo-

catalysis, biomedicine, and water treatment

Hobbies: Reading, playing bridge and chess, tea tasting, collecting art

## My biggest inspiration is ... nature.

My favorite time of day is ... the evening.

admire ... the achievements of Alexander Fleming.

get advice from ... everybody.

advise my students to ... be honest.

My favorite way to spend a holiday is ... to travel.

The secret of being a successful scientist is ... diligence and sound reasoning.

My science "hero" is ... Linus Pauling.

f I had one year of paid leave I would ... go traveling.

f I could be a piece of lab equipment, I would be ... a microscope.

**M**y favorite author (science) is ... F. Albert Cotton.

The natural talent I would like to be gifted with is ... wisdom.

When I was eighteen I wanted to be ... a scientist.

The biggest challenge facing scientists is ... to break through self-imposed limits.

Chemistry is fun because ... it is always changing.

Young people should study chemistry because ... it can create new materials.

Looking back over my career, I ... am lucky.

f I could do any job for a day, I would be ... a detective.

The most important future applications of my research are ... in catalysis.



### Has your approach to publishing your results changed since the start of your career?

Yes. In the early period of my career, quantities of papers and journals with high impact factor (IF) were my goals, so I chose journals according to their IF and publishing speed. Later, I started to publish my results less superficially and more systematically, therefore I prefer to choose a more suitable journal for my work. Now, I do research based on my interests and the contributions of the work to humanity and society. I submit my papers after more carefully evaluating the results. I spend more time proofreading my papers and trying to give readers more accurate scientific information. Thanks to these efforts, the acceptance rate of my papers in good-quality journals is now very high.

### What do you think the future holds for your field of research?

Our research approaches center on self-assembly and supramolecular templating, with tailoring of molecular building blocks to prepare novel materials. These materials have a variety of possible applications including catalysis, electrophotonic microdevices, and separation, and can be used even in areas such as water treatment, drug delivery, biosensors, and energy storage and conversion. Many mesoporous materials have been used in both fundamental research and the petrochemical industries. My dream is that the mesoporous materials discovered by our group in particular will be widely applied in industry, and can make a large amount of money, like zeolites Y and ZSM-5.

#### My 5 top papers:

- 1. "A Low-Concentration Hydrothermal Synthesis of Biocompatible Ordered Mesoporous Carbon Nanospheres with Tunable and Uniform Size": Y. Fang, D. Gu, Y. Zou, Z. Wu, F. Li, R. Che, Y. Deng, B. Tu, D. Zhao, Angew. Chem. 2010, 122, 8159-8163; Angew. Chem. Int. Ed. 2010, 49, 7987-7991.
  - A novel synthesis strategy for highly ordered mesoporous carbon nanospheres. This method reveals a possible alternative to "classical" methods for the construction of carbon nanostructures.
- 2. "Superparamagnetic High-Magnetization spheres with an Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> Core and Perpendicularly Aligned Mesoporous SiO2 Shell for Removal of Microcystins": Y. Deng, D. Qi, C. Deng, X. Zhang, D. Zhao, J. Am. Chem. Soc. 2008, 130, 28-29.
  - This simple and reproducible synthesis approach combines the classic Stöber method with surfactant assembly. The key feature is that the orientation of mesochannels can be controlled.
- 3. "On the Controllable Soft-Templating Approach to Mesoporous Silicates": Y. Wan, D. Zhao, Chem. Rev. **2007**, 107, 2821 – 2860.
  - This review gives a deep insight into the synthesis strategies and pathways for mesoporous silicates, as well as providing procedures that can be easily reproduced, even by people who have little experience

- in mesoporous materials. The synthesis of novel structures means that the exploration of applications in catalysis, adsorption, separation, biotechnology, optoelectronics, sensors, etc. can be expected.
- "Ordered Mesoporous Polymers and Homologous Carbon Frameworks: Amphiphilic Surfactant Templating and Direct Transformation": Y. Meng, D. Gu, F. Zhang, Y. Shi, Z. Li, C. Yu, B. Tu, D. Zhao, Angew. Chem. 2005, 117, 7215-7221; Angew. Chem. Int. Ed. **2005**, 44, 7053 – 7059.

This work extended the self-assembly method and opened a new route to the synthesis of ordered mesoporous polymers and carbon frameworks. The success of this work also gave us new ideas for designing the precursors and templates for self-assembly in the synthesis of novel mesoporous materials, especially organic materials.

"Self-adjusted synthesis of ordered stable mesoporous minerals by acid-base pairs": B. Tian, X. Liu, B. Tu, C. Yu, J. Fan, S. Xie, G. D. Stucky, D. Zhao, Nature Mater. **2003**, 2, 159-163.

This work provides a new and general route for the synthesis of highly ordered and multicomponent mesoporous materials. Importantly, it extends the area of nonsiliceous sol-gel chemistry.

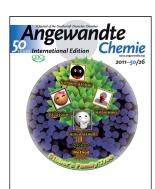
been featured on the cover of Angewandte Chemie: "Extension of The Stöber Method to the Preparation of Monodisperse Resorcinol-Formaldehyde Resin Polymer and Carbon Spheres": J. Liu, S. Z. Qiao, H. Liu, J. Chen, A. Orpe, D. Zhao, G. Q. Lu, Angew. Chem. 2011, 123,

6069-6073; Angew. Chem.

Int. Ed. 2011, 50, 5947-5951.

The work of D. Zhao has

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