Jinzhen Cao
Professor
Beijing Forestry University, China
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1. EDUCATION (degree, year awarded, institution, primary focus/major)

Ph.D., 2001, Beijing Forestry University, Wood Science and Technology

2. EMPLOYMENT EXPERIENCE

2001.7-2002.3 Assistant Professor, Beijing Forestry University, China;
2002.3-2003.12 Post-doc research assistant, Michigan State University, USA;
2003.12-current Professor, Beijing Forestry University, China.

3. STUDENTS MENTORED (past four years)

6 Ph.D. candidates and 5 master students graduated from 2018 to 2021, and their names and titles of thesis are listed below.

Student name	Degree	Topic of thesis	Year
Yao Peng	Ph.D.	Study on Regulating Mechanism of the Photostability of Wood Flour/polypropylene Composites	2018
Xi Guo	Ph.D.	Fabrication and Properties of Thermal Energy Storage Wood Plastic Composite	2018
Jun Jiang	Ph.D.	Properties and Mechanisms of Wood Modified by Paraffin-based Pickering Emulsions	2018
Haiying Shen	Ph.D.	Study on Mechanism of Photic Action and Improvement on Anti-weathering Properties of Thermally-modified Wood	2019
Tiantian Yang	Ph.D.	Moisture Sorption and Deformation Response Mechanisms of Furfurylated Poplar Wood to Cyclically Changing Relative Humidity	2020
Jiamin Wang	Ph.D.	Properties of Poplar Wood Modified with Furfuryl Alcohol Combined with Polyvinyl Alcohol and its Modifying Mechanism	2020
Cong Chen	Master	Preparation of Emulsified Wax/Oil Waterproofing Agent and Hydrophobic Mechanism	2018
Yiheng Huang	Master	Study on Properties of Wood Treated with Sodium Tetrafluoroborate and Quaternary Ammonium Compounds	2018
Jiaqi Xu	Master	Study on Phase Change Heat Storage Capacity and Dimensional Stability of Wood Modified by PEG-Silica Sol Combination	2020
Jinyu Chen	Master	Preparation of Linseed Oil-Based Emulsion and the Waterproofing and Moisture Resistance of Its Modified Wood	2020
Xing Xu	Master	Study on the Application of Water-borne Organic Preservatives in Thermally Modified Wood	2021

4. PRIMARY RESEARCH AREA WITH UP TO FOUR CURRENT RESEARCH PROJECTS

Primary research area: Wood Preservation and Modification
Current research projects:

① Response mechanism of decay resistance to chemical components and structural changes for thermally-modified wood

② Property optimization of furfurylated wood

5. PROFESSIONAL ACTIVITIES AND ACHIEVEMENTS (Memberships, Editorial boards, professional society leadership roles, awards, honors)

① Memberships：Member of International Research Group on Wood Protection (IRG); Member of Chinese Society of Forestry; Member of China Wood Protection Industry Association

② Editorial boards: Wood Material Science and Engineering (SCI indexed, 2017-current); China Forest Products Journal (In Chinese, 2019-2022); Journal of Forestry Engineering (In Chinese, 2019-2022); Wood Industry (In Chinese, 2020-current)

③ Professional society leadership roles:

IRG Executive Committee Member (2010-2013); IRG Communications Committee Member (2019-2022); Chair of National Innovation Alliance of Wood Preservation Technology in China (2020-current); Standing Committee Member of the Association of Wood Science, Chinese Society of Forestry (2010-current); Chief Expert in Treated Wood and Products, China Wood Protection Industry Association (2020-current)

④ Awards and Honors:

□2003 National Excellent Doctoral Thesis Award (issued by the State Council of China)

□2004 New Century Talents in China (issued by the Education Bureau of China)

2004 IRG Ron Cockcroft Award (issued by the International Research Group on Wood Protection)

□2006 Science and Technology Award for Youth in Forestry Area (issued by the Department of Forestry, China)

2013 Beijing Excellent Teacher Award (issued by Beijing Municipal Education Commission, China)

□2014 National Excellent Teacher Award (issued by the State Council of China)

2019 Outstanding People in Wood Protection Area (issued by the China Wood Protection Industry Association)

6. PUBLICATIONS (3-5 most important contributions (publications, seminars, graduates, etc.)

Wang Wang, Yiheng Huang, Jinzhen Cao*, Yuan Zhu. Penetration and distribution of paraffin wax in wood of loblolly pine and Scots pine studied by time domain NMR spectroscopy. Holzforschung, 2018, 72(2): 125-131.

Jun Jiang, Jinzhen Cao*, Wang Wang and Haiying Shen. Preparation of a synergistically stabilized oil-in-water paraffin Pickering emulsion for potential application in wood treatment, Holzforschung, 2018, 72(6): 489-497

Tiantian Yang, Jinzhen Cao*, Erni Ma. How does delignification influence the furfurylation of wood? Industrial Crops and Products, 2019, 135: 91-98.

Haiying Shen, Jiaqi Xu, Jinzhen Cao*, Jun Jiang, Shaodi Zhang, Jing Xue, Liangliang Zhang. Evolution of extractive composition in thermally modified Scots pine during artificial weathering. Holzforschung, 2019, 73(8): 747-755.

Jiaqi Xu, Tiantian Yang, Xi Guo, Jinzhen Cao*. Processing solid wood into a composite phase change material for thermal energy storage by introducing silica-stabilized polyethylene glycol, Composites Part A-Applied Science and Manufacturing, 2020, 139: 106098.