

Civil and Environmental Engineering

Department Information

- **Interim Department Chair:**
Achintya Bezbaruah, Ph.D.
- **Graduate Program Coordinator:**
Kalpana Katti, Ph.D.
- **Department Location:**
201 Civil and Industrial Engineering Bldg.
- **Department Phone:**
(701) 231-7244
- **Department Web Site:**
www.ndsu.edu/ccee/ (<http://www.ndsu.edu/ccee/>)
- **Application Deadline:**
February 15 for fall admission; September 15 for spring admission
- **Credential Offered:**
Ph.D., M.S.
- **English Proficiency Requirements:**
TOEFL iBT 71, IELTS 6; Duolingo 105

FACULTY

Achintya N. Bezbaruah, Ph.D.

University of Nebraska-Lincoln, 2002

Research Interests: Environmental Sensors, Recalcitrant and Micro Pollutants, Contaminant Fate and Transport, Small Community Water and Wastewater Treatment, Environmental Management

Xuefeng Chu, Ph.D.

University of California, Davis, 2002

Research Interests: Watershed Hydrologic and Environmental Modeling, Overland Flow and Infiltration, Integrated Modeling of Flow and Contaminant Transport

Surya Congress, Ph.D.

University of Texas at Arlington, 2018

Research Interests: Transportation Infrastructure, Design and Stabilization of Geo-Materials, Sustainable and Resilient Infrastructure Design and Monitoring, Site Characterization and Visualization Models, Slope Stabilization, Dam and Bridge Inspections, Airport Pavement Inspections, Artificial Intelligence, Image Analysis, Digital Twins, Disaster Response, Traffic Safety, and Smart City Concepts.

Ying Huang, Ph.D.

Missouri University of Science & Technology, 2012

Research Interests: Structural Health Monitoring/Smart Structures for Transportation Infrastructure, Intelligent Transportation Systems, Applications of Adaptive and Smart Materials, Finite Element Modeling and Multi-Hazard Assessment and Mitigation

Syed Md Iskander, Ph.D.

Virginia Polytechnic Institute and State University, 2019

Research Interests: Sustainable Waste Management: Food Waste Treatment, Landfill Leachate Treatment, Environmental Health: Disinfection Byproducts, Antibiotic Resistance Genes, Microplastics, Water-Energy Nexus: Desalination, Membrane Fabrication, Advanced Oxidation, Environmental Biotechnology: Anaerobic Biotechnology, Bioelectrochemical Systems

Dinesh Katti, Ph.D., P.E.

University of Arizona, 1991

Research Interests: Geotechnical Engineering, Constitutive Modeling of Geologic Materials, Expansive Soils, Multiscale Modeling, Steered Molecular Dynamics, Computational Mechanics, Nanocomposite, and Bio-nanocomposites. Computational Biophysics

Kalpana Katti, Ph.D.

(Graduate Coordinator)

University of Washington, 1996

Research Interests: Advanced Composites, Nanomaterials, Biomaterials, Biomimetics, Materials Characterization and Modeling, Analytical Electron Microscopy, and Microspectroscopy, Bone Tissue engineering

Trung B. Le, Ph.D.

University of Minnesota

Research Interests: Hydraulics, Fluid Mechanics, Numerical Methods for Fluid-Structure Interaction

Zhibin Lin, Ph.D., P.E.

University of Wisconsin, 2010

Research Interests: Advanced Materials, High-Performance, Resilient and Sustainable Bridge Systems, Structural Durability and Structural Health Monitoring in Bridges and Earthquake Engineering

Kelly Rusch, Ph.D., P.E.

Louisiana State University, 1992

Research Interests: Microbial System Design and Modeling, Biofuels and Bioproducts, Engineering Education Research, Aquaculture Engineering, and Water and Wastewater Treatment.

David R. Steward, Ph.D., P.E., PG, FASCE

University of Minnesota

Research Interests: Engineering Mathematical and Computational Methods, Groundwater Flow and Analysis, Interdisciplinary Water Resources: Water and Society

Wenjie Xia, Ph.D.

Northwestern University, 2016

Research Interests: Multiscale Modeling of Structural Materials, Polymer and Nanocomposites, Granular and Soft Matters, Bioinspired Materials, Mechanobiology, Computational Mechanics, Data-Enabled Design of Multifunctional Materials

Jiale Xu, Ph.D.

State University of New York at Buffalo, 2020

Research Interests: Wastewater and Water Treatment, Wastewater Reuse, Photochemical Processes, Electrochemical and Membrane Technologies, and Disinfection Byproducts

Mijia Yang, Ph.D., P.E.

University of Akron, 2006

China University of Mining and Technology, 1999

Research Interests: Advanced Materials, Structural Assessment, Solid Mechanics

Adjunct & Emeritus

Ravi Kiran Yellavajjala, Ph.D. P.E. (adjunct)

University of Notre Dame, 2014

Interests: Experimental and Theoretical Mechanics, Constitutive Modeling of Materials, Numerical Methods, Sensitivity Analysis of Structural Response, Forensic Failure Analysis and Advanced Visualization Techniques.

Eakalak Khan, Ph.D. (adjunct)

University of California, Los Angeles, 1997

Research Interests: Water and Wastewater Quality, Water and Wastewater Treatment, and Storm Water and Non-point Source Pollution

Denver D. Tolliver, Ph.D. (adjunct)

Virginia Polytechnic University, 1989

Research Interests: Transportation, Planning and Economics

Robert Zimmerman, Ph.D. (adjunct)

North Dakota State University, 1991

Research Interests: Water and Wastewater Treatment, Solid Waste

G. Padmanabhan, Ph.D. (emeritus)

Purdue University, 1980

Research Interests: Stochastic Hydrology, Water Resource Systems, and Hydrologic Modeling