

College of Mechanics and Materials

Supervisor	Supervisor Type	Major	Research Directions
Engineering Mechanics Department			
CAI XIN	Master/Doctor	Hydraulic structure engineering	Seismic application, modern design theory and method of structure of high dam structureand complex foundation, the modern model test, structure dynamics and Engineering
CHEN WEN	Master/Doctor	Engineering Mechanics	Mechanical modeling and statistical calculation of industrial design, mechanical behavior,mechanical and environmental mechanics of soft matter ;
DONG LEI TING		Civil Engineering	Heterogeneous materials of macro and micro modeling and multi-scale analysis, mechanical,aeronautical structural fracture, fatigue analysis and life prediction, solid mechanics and multifield coupling problems of high performance computing method
DU CHENG BIN	Master/Doctor	Mechanical engineering,&nbs p;hydraulic structure engineering	Seismic analysis of concrete dams; performance and failure mechanism of concretecomposite material mechanics; engineering structure vibration control
FAN HUA LIN	Master/Doctor		Dot matrix composite and mechanical, preparation and experimental study of aerospace composite structure design, preparation, application and development of composite materialstructure in the protection project, study on explosion and impact dynamics problems in Protective Engineering

GOU XIAO FAN	Master/Doctor	Theoretical and applied mechanics	The relevant mechanics, new material and structure of multi physical field coupling theory and calculation method, multi-level, cross scale theory and calculation method of superconducting levitation system, the key topics
GU SHUI TAO	Master	Geotechnical engineering	Meso mechanics, interface mechanics, finite element, the expansion of gelling strength of dam
GUO XING WEN	Master	Hydraulic structure	Engineering structure optimization design of engineering structure; numerical simulation; field monitoring and detection of engineering structures
HUANG DAN	Master	Dynamics	In the micro - and nano Mechanics and multiscale numerical simulation method is researched and applied to mechanical properties of concrete material and structure analysis, in recent years with Hohai University to carry out water conservancy characteristics of concrete meso damage and failure mechanism of hydraulic structure
HUANG WEN XIONG	Master/Doctor		The mechanical behavior of rock mechanics and engineering, to solve the problem of engineering materials and constitutive modeling, numerical analysis of hydraulic structure

JIANG QUAN		Water conservancy construction mechanics	Model test study on the prototype, the static and dynamic structure; nondestructive testing technology and safety assessment of structures; construction and operation safety monitoring technology research
JIANG DONG JU	Master	Engineering Mechanics	Engaged in the research of calculation and structure optimization design of structure analysis
JIANG YUN PENG	Master/Doctor		Non homogeneous materials micromechanics, advanced composite technology, microstructure design of lithium battery
LEI DONG	Master	Mechanics and Mechanical Engineering	Concrete meso mechanical behavior and failure mechanism; analysis of water conservancy and civil engineering structure damage; experimental solid mechanics; modern engineering mechanics testing of new technology and new products
LI YU	Master		
LU XIAO MIN	Master	Hydraulic structure engineering	Scientific research is mainly engaged in the research on mechanical analysis and stability of hydraulic structures, rock and soil engineering etc.

MAO XIAO CHEN 	Master	General mechanics and&nbs;basic professional	Structural dynamics and&nbs;control,&nbs;time-delay nonlinear&nbs;system dynamics
MEI MING RONG 	Master	Mechanical&nbs;p;hydraulic structure	By&nbs;analysis of temperature&nbs;and creep&nbs;stress of concrete structure&nbs;mechanics&nbs;properties of new type&nbs;hydraulic material&nbs;and&nbs;in engineering&nbs;calculation,&nbs;analysis and computer simulation,structure analysis
PENG XUAN MAO 	Master		The theory,&nbs;method and application&nbs;of modern computational mechanics and&nbs;computerscience and engineering;&nbs;visualization;&nbs;static and dynamic analysis,&nbs;the stability of complexfoundation&nbs;of hydraulic&nbs;structure;&nbs;computational mechanics&nbs;of municipal engineering&nbs;special structure;&nbs;analysis and calculation of&nbs;the development and application of&nbs;commercial software&nbs;of civil and hydraulic engineering
QIAN XIANG DONG 	Master	Hydraulic structure&nbs;engineering	Analysis of&nbs;dam&nbs;mechanical analysis&nbs;and safety evaluation,&nbs;structural dynamics andearthquake engineering,&nbs;structural strength and&nbs;limit
QIN ZHONG GUO 	Master	Civil engineering,&nbs;p;water conservancy project	Numerical&nbs;analysis of complex structure,&nbs;high performance;

REN QING WEN	Master/Doctor	Dynamics	Damage and safety of complex mechanical system; hydraulic structures (dam, large-scale underground cavern and high slope); analysis and safety evaluation; damage mechanics; analysis of theory and application of modern numerical method for structural damage detection;
SHAO GUO JIAN	Master/Doctor	Hydraulic structure engineering	The theory and method of analysis of underground engineering mechanics, computational mechanics; and engineering simulation, multi-scale heterogeneous mechanics modeling theory and numerical simulation; the high rock slope and large scale underground caverns stability and reinforcement measures; of high rock slope
WANG LEI	Master	Engineering Mechanics	Multi scale analysis of new functional material; deformation and mechanical behaviorsimulation, & micro and nano scale; carbon material; mechanical behavior; and application of metal materials, & twin; toughening; research and application; the failure mechanism of fracture interface materials; mechanical properties; and deformation
WANG ZE	Master/Doctor		Numerical simulation; for the environmental fluid mechanics; and turbulence

WANG SHAN SHAN	Master		The original proposed a kind of new structural damage detection theory&method -local damage factor&method,&derived the quantitative&formula representation of local damage of structure
WANG XIANG DONG	Master	Hydraulic structure engineering	Engineering fracture and damage; mechanics of composite materials;research on destruction of&nbspconcrete structure
WU QING XI	Master/Doctor	Hydraulic structure engineering	Structural reliability theory and analysis method, the reliable&nbs;stochastic finite element method and&nbs;stochastic interface stress element method of&nbspengineering structure reliability analysis,reliability analysis and&nbs;safety evaluation,&nbs;power engineering structure reliability calculation and&nbs;time-varying
XIA NING	Master	Hydraulic structure engineering	The durability of the structure
XIA XIAO ZHOU	Master	Engineering Mechanics	Calculation and Simulation of&nbspmechanical behavior,&nbs;damage of&nbspengineering materials and structures&nbs;of engineering materials
XU QING CHUN	Master	Structural mechanics	Study on the&nbspstructure optimization design

YAN XIANG GAN	Master		Nonlinear solid mechanics
YANG HAI XIA	Master	Hydraulic structure	The structure analysis and optimization design
YI DA KE	Master	Solid mechanics	Fracture mechanics&nbs;p;of micro&nbs;p;scale Mechanics&nbs;p;(non local&nbs;p;strain gradient theory)&nbs;p;theory
YIN DE SHUN	Master/Doctor	Geotechnical engineering	Mechanical&nbs;p;and engineering&nbs;p;properties of soft soil
YU TIAN TANG	Master/Doctor	Engineering Mechanics	Computational mechanics and&nbs;p;engineering simulation,&nbs;p;mechanical&nbs;p;properties and behavior of&nbs;p;engineering materials,&nbs;p;engineering&nbs;p;disaster mechanism&nbs;p;and system security,&nbs;p;rock mechanics&nbs;p;and rock engineering
ZHANG JIAN FEI	Master	Hydraulic structure&nbs;p;engineering	Engineering construction safety&nbs;p;analysis and evaluation,&nbs;p;high performance computing,modern numerical&nbs;p;analysis method and its application
ZHANG SHU JUN	Master	Environmental Engineering	Environmental fluid mechanics,&nbs;p;computational fluid dynamics
ZHANG XU MING	Master	Engineering Mechanics	Meshfree particle&nbs;p;method,&nbs;p;fluid solid coupling analysis,&nbs;p;structure&nbs;p;topology optimization design of engineering structure&nbs;p;analysis,&nbs;p;visualization software&nbs;p;development

ZHANG QING	Master/Doctor	Engineering Mechanics	Engineering structure;in catastrophic failure;mechanics and;disaster prevention and mitigation;computational solid mechanics and;engineering simulation;engineering materials,mechanical properties and;constitutive;theory,;multi physical;field coupling;effect andstructure and medium;interaction analysis
ZHAO YIN	Master	Engineering Mechanics	The research work;of high dam;failure mechanics;and safety evaluation,;computational mechanics;and engineering;simulation
ZHU WEI XUAN	Master	Engineering Mechanics	Concrete;damage and fracture

Experimental center of mechanics and materials

DU CHENG BIN	Master/Doctor	Hydraulic structure;engineering	Seismic analysis of;concrete dams;performance and;failure mechanism of concretecomposite material;mechanics;engineering structure vibration;control
JIANG QUAN	Master	The water conservancy construction;mechanics	Model test study on the;prototype,;the static and dynamic;structure;;nondestructive testing technology;and safety assessment of;structures;;construction and;operation safety monitoring;technology research
LEI DONG		Mechanics and;Mechanical Engineering	Concrete meso;mechanical behavior and;failure mechanism;analysis of water conservancyand;civil engineering structure;damage;experimental;solid mechanics;modern engineering mechanics;testing;of new technology and new;products

SONG DAN	Master	Materials science and Engineering	Large plastic deformation of ultrafine/nano crystalline alloy; preparation, ultrafine/nano crystalline alloy; corrosion and protection; corrosion/rebar corrosion; characteristics and corrosion resistance mechanism
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Materials Science and Engineering Department

CHEN JIAN QING	Master	Materials science and Engineering	The material structure and characterization of micro/nano; Surface modification and protection technology of
CHENG JIANG BO	Master	Materials processing engineering	The micro nano; self repair; theory and technology; thermal spraying; materials and technology and quality control; model; of amorphous, nano material; design and preparation of; the basic theory, design; micro and nano; ceramic; /& metal matrix composites; can be controlled synthesis and mechanism of behavior
DAI ZHONG HUA	Master	Microelectronics and solid state electronics	Ferroelectric; (antiferroelectric), piezoelectric, pyroelectric and; multiferroic; inorganic non-metallic; materials and devices
FANG YONG HAO	Master/Doctor	Material science	High performance cement-based; materials; preparation and physical; chemistry principles and concrete structure; material preparation; durability and damage mechanism; material microstructure analysis; new wall materials; and solid waste; utilization research
GUO YOU ZHI			Study on the technology of membrane separation; unconventional; water resources; and sea water desalination

HE HUI	Master	Chemistry and chemical engineering	High performance concrete admixtures and hydrophobic and oleophobic interface materials
JIANG JING HUA	Master/Doctor	Materials processing engineering	High performance metal structural materials (nano / ultrafine amorphous alloy etc.), special functional material (conductive alloy \ biological material), metal surface strengthening and toughening; and corrosion resistance etc
JIANG SHAO QUN	Master		Material surface treatment and protection technology, functional materials, metal and micro nano ceramic reinforced metal matrix composite coating material, material tribological behavior of environmental research
JIANG LIN HUA	Master/Doctor		Engineering and new materials, high performance concrete and the durability of concrete, repair, protection and reinforcement materials and technology, wall materials and energy-saving materials, engineering structure testing and
JIANG YA QING	Master/Doctor	Building materials engineering	The basic theory and application of cement based materials with high performance, relates to a high performance cement-based materials and products, concrete admixture, water and offshore new materials, wall thermal insulation and energy saving material etc

LI BAO SONG	Master	Environmental engineering, polymer chemistry and Physics	corrosion and protection; electrochemistry; polymer basic theory research; the typical environment; corrosion protection technology; method and high anticorrosion coating performance; research; functional materials; research and Application
LI GAI YE	Master	Chemical Engineering	New ceramic material preparation; and strengthening and toughening; composite coating; and corrosion; protection technology of ceramic matrix; research on application; performance of membrane material; membrane filtration; and membrane desalination
LI XING GUI	Master		Cement-based material and material mechanical behavior of concrete and the durability research; research and engineering; application of detection and evaluation; method of concrete engineering; improve and enhance the development of new materials; and Application Research on properties of cement based materials; large volume concrete temperature; crack; pre-pilot; control research and Application
LIU XIAO YAN	Master	Materials science and Engineering	The smart concrete; nano modified materials; new materials; sea water; industry and new materials
MA AI BIN	Master/Doctor		Large plastic; corrosion behavior of plastic deformation mechanisms; ultra fine grain metal deformation

SHEN MING XIA	Master/Doctor	Polymer chemistry	Polymer synthesis, modification and application of research; the micro / nano polymer composite material, fiber composite materials, special coatings
SONG DAN	Master	Materials science and Engineering	Large plastic deformation; ultrafine/nano crystalline alloy; preparation, ultrafine &/& nano crystalline alloy; corrosion and protection; corrosion/rebar corrosion; characteristics and corrosion; mechanism; search of application development.
WANG ZE HUA	Master/Doctor	Mechanics	Metal materials and protection; metal material liquid molding; technology; casting & alloy
WANG ZHU YIN	Master/Doctor	Department of chemistry, organic synthesis	Synthetic biology; nucleic acid; and protein; can & compound biological; material degradation
WU YU PING	Master/Doctor	Materials science and Engineering	Multiphase flow; corrosion & abrasion resistant materials and protection; against mechanical; anti cavitation; metal component; corrosion; abrasion and protection of marine environment; environment underground; wear-resisting; corrosion resistant material; anti material; sulfide and high temperature environment; technical; protection of antioxidant
XU JIN XIA	Master	Mechanics and materials	Durability of concrete structure; concrete structure durability; monitoring; new material application in concrete; electric; science; in the study on the durability of concrete; application

YANG DONG HUI	Master	Materials science and Engineering	The research work of ultra light metal and metal ultra-fine grained; bulk preparation; and related properties
ZHANG YAN	Master		The concrete material under complex stress; constitutive theory of; the state; material phononic crystals with; the durability of cement base material; under multi field coupling theories and; characteristics; composite wall materials/ structures; thermal mechanical properties of; temperature control of mass concrete; structure
ZHANG FENG CHEN	Master		Durability of cement-based materials; energy saving building; material; ecological building materials
ZHANG JIAN FENG	Master/Doctor		The surface of nano ceramic powder material; modification and; development of new; inorganic functional materials; etc
ZHOU ZE HUA	Master	Material science	Metal and metal matrix composite; surface technology; high performance; special structure of ceramics; special ceramics; structure function integration; etc