Laboratory List

Civil and Environmental Engineering, Graduate School of Engineering Job title Name **Email Graduate School Department** Research Group Research Area **Research Interests** Numerical simulation and optimal design for structures, Topology optimization for advanced material design, Finite Civil and Environmental Structural Engineering, junjikato@civil.nagoyaelement method for material/kinematic nonlinearity and Engineering Structural Analysis Professor Junji Kato Engineering Materials, and Informatics u.ac.jp dynamics, Innovative design and manufacturing with 3D printer, Reduced order-based data science Steel bridge engineering, Maintenance of steel structures, Civil and Environmental Structural Engineering, tateishi@civil.nagoya-Kazuo Tateishi Engineering Infrastructure System Design Professor Fatigue and fracture of steel bridges, Mechanics of steel-Materials, and Informatics Engineering u.ac.jp concrete composite structures Steel structures, Fatigue and fracture of steel structures, Civil and Environmental Structural Engineering, **Associate** hanji@civil.nagoya-Repair and retrofitting technique for cracked steel members, nfrastructure System Design Γakeshi Hanji Engineering Engineering Materials, and Informatics Professor u.ac.jp Seismic assessment and rehabilitation of steel bridges, Applications of image technique to infrastructures, Welding Concrete structure, Seismic design of concrete structure, Civil and Environmental Structural Engineering, nakamura.hikaru.s7@f. Maintenance and durability of concrete structure, Nonlinear Concrete Materials and Structures Professor Hikaru Nakamura Engineering Materials, and Informatics Engineering mail.nagoya-u.ac.jp analysis of concrete structure, Nondestructive test of concrete Multi-scale mechanical modelling for cementitious materials, Mesoscale chemo-mechanical analysis for chemical Civil and Environmental deterioration and fracture of cementitious materials, Structural Engineering, t.miura@civil.nagoya-Associate Concrete Materials and Structures Γaito Miura Engineering Engineering Materials, and Informatics Professor Expansion cracking mechanism due to ASR/DEF, Reduction u.ac.jp mechanism of compressive behaviors of concrete due to cracks with different directionality and dispersibility Numerical simulation of structural dynamics, nonlinear Civil and Environmental Structural Engineering, Associate kojinishiguchi@civil.nag Koji Nishiguchi Engineering materials, and fluid-structure interaction problems, High-Steel Structures Engineering Materials, and Informatics Professor oya-u.ac.jp performance computing Stability of coastal structures, Wave deformation due to Hydraulics, Hydrology, Civil and Environmental mizutani@civil.nagoyacoastal and offshore structures and wave forces, Tsunami Engineering Coastal, and Ocean Coastal and Ocean Engineering Professor Norimi Mizutani Engineering u.ac.jp disaster and mitigation, Sediment transport and beach Engineering deformation Stability of coastal structures and their foundation considering Hydraulics, Hydrology, Civil and Environmental **Associate** nakamura.tomoaki.e9@f dynamic interaction between waves, structure motion, Coastal, and Ocean Coastal and Ocean Engineering Tomoaki Nakamura Engineering .mail.nagoya-u.ac.jp Professor Engineering sediment transport, and seabed response; Tsunami-induced Engineering topographic change Hydraulics, Hydrology, Civil and Environmental ytoda@cc.nagoya-River engineering, Fluvial hydraulics with riparian vegetation, Yuji Toda Coastal, and Ocean River Engineering Professor Engineering Engineering u.ac.jp Eco-hydraulics, Numerical modeling of river eco-system Engineering

Engineering	Civil and Environmental Engineering	Geotechnical Engineering	Geomaterials and Geotechnical Engineering	Professor	Masaki Nakano	nakano@civil.nagoya- u.ac.jp	Mechanical evaluation and quality certification for natural and artificial soil materials based on soil skeleton structure concept, Interpretation of the soil strengthening methods such as solidification, compaction etc. of various soil materials, Constitution of "sediment circulation system" considering utilization of soil materials at ordinary times as well as disaster periods
Engineering	Civil and Environmental Engineering	Geotechnical Engineering	Geomechanics	Professor	Toshihiro Noda	noda@civil.nagoya- u.ac.jp	Soil-water-air coupled finite deformation analysis of saturated/unsaturated soils taking into consideration inertial forces, Interpretation/development of the countermeasure principles of ground improvements, Seismic response analysis of natural deposited and artificial grounds, Numerical replication of natural deposited grounds
Engineering	Civil and Environmental Engineering	Geotechnical Engineering	Geo-Disaster Prevention Engineering	Associate Professor	Kentaro Nakai	nakai@civil.nagoya- u.ac.jp	Comprehension of dynamic/static behavior of various soils and their elasto-plastic description, Seismic response analysis of ground-structure interaction systems, Influence of stratum irregularity on subsurface seismic damage
Engineering	Civil and Environmental Engineering	Geotechnical Engineering	Soil Mechanics	Associate Professor	Takayuki Sakai	t-sakai@civil.nagoya- u.ac.jp	Investigation of the slaking behavior of mudstone, numerical analysis on improving the seismic performance of existing embankments, and environmentally friendly ground improvement technologies
Engineering	Civil and Environmental Engineering	Transportation, Infrastructure, and Environmental Planning	Network Systems	Professor	Toshiyuki Yamamoto	yamamoto@civil.nagoya -u.ac.jp	Vehicle ownership and use, Travel behavior analysis, Environmentally sustainable transport (EST), Intelligent transport system (ITS), Traffic safety
Engineering	Civil and Environmental Engineering	Environmental Engineering and Environmental System Engineering	Environmental and Energy Biosystems	Professor	Kiichiro Hayashi	maruhaya98@nagoya- u.jp	Environmental policy, Environmental assessment, Biodiversity and ecosystem service assessment, International environmental cooperation
Engineering	Civil and Environmental Engineering	Environmental Engineering and Environmental System Engineering	Environmental Microbiology, Microbial Ecological Engineering	Professor	Naoko Yoshida	yoshida.naoko.r0@f.mai l.nagoya-u.ac.jp	Microbial wastewater treatment, Bioremediation of groundwater contaminated with organohalide
Engineering		Land and Infrastructure Design	Land and Infrastructure Design	Professor	Takashi Tomita	tomita.takashi@nagoya- u.jp	Critical infrastructure planning and regional potential development for sustainable and resilient society, Tsunami and storm surge disaster risk reduction
Engineering	Civil and Environmental Engineering	Land and Infrastructure Design	Land and Infrastructure Design	Associate Professor	Shinichiro Nakamura	shinichiro@civil.nagoya- u.ac.jp	Climate change adaptation in developing country, Land design on river basin, Green infrastructure design
Engineering		Land and Infrastructure Design	Land and Infrastructure Design	Lecturer	Mutsumi Tashiro	mutsumi@civil.nagoya- u.ac.jp	Road design on soft ground, Traffic management, Mobility services

Civil and Environmental Engineering, Graduate School of Environmental Studies Graduate Schoo Department Job title **Email Research Group** Research Area Name **Research Interests** Environmental Transportation, Carbon Free, Safe, and Smart Traffic Engineering, Urban transport policy, Road geometric nakamura@genv.nagoy Environmental Society (Transportation Hideki Nakamura design, Traffic operation, Traffic safety, User behavior Engineering and Infrastructure, and Professor Studies a-u.ac.jp Architecture Environmental Planning Engineering) modeling, Traffic simulation model, ITS Carbon Free, Safe, and Smart Transportation, Low carbon & sustainable transport system, Environmental Environmental Society (Transport and Environmental kato@genv.nagoya-Engineering and Hirokazu Kato life cycle assessment of social stock, Resilient national & Infrastructure, and Professor Studies Environmental Planning, Strategy u.ac.jp Architecture Environmental Planning urban design, Region revitalization strategies for Local Transport Systems) Transportation planning, Travel behavior analysis, Intelligent Environmental Transportation, Environmental Professor Network Systems Tomio Miwa transport systems, Traffic assignment models and traffic Engineering and Infrastructure, and miwa@nagoya-u.jp Studies Architecture Environmental Planning simulators Traffic flow and safety analysis of vehicles and pedestrians, Environmental Transportation, Environmental Land, Urban and Mobility Design Associate Road design for multimodal transport, Traffic simulation **Engineering** and Infrastructure, and Miho Iryo iryo@nagoya-u.jp Studies (Transportation Engineering) Professor Architecture Environmental Planning development Carbon Free, Safe, and Smart Environmental Transportation, Environmental Evaluation of junction design and traffic signal control, Road zhang@genv.nagoya-Engineering and Infrastructure, and Society (Transportation Lecturer Xin Zhang user maneuver modeling, Traffic simulation Studies u.ac.jp Architecture Environmental Planning Engineering) Environmental system analysis, Resource and Energy Flow for Environmental **Environmental Engineering** Environmental System for Stock Environmental tanikawa@urban.env.na Sustainable Cities, Material Stock and Flow analysis, Weight Engineering and and Environmental System type Society (Engineering of Professor Hiroki Tanikawa of cities overtime with 4d-GIS, Socio economical metabolism, Studies goya-u.jp Architecture **Environmental Systems**) Engineering Industrial Ecology **Environmental Engineering** Electricity and hydrogen generation technology, Municipal Environmental Material and Energy Design hibino@urban.env.nago Environmental Engineering and and Environmental System (Environmental Studies of Professor Γakashi Hibino solid waste treatment, Multifunctional cementitious materials Studies ya-u.ac.jp Architecture Engineering Materials) Analysis for economic and environmental interdependency Environmental **Environmental Engineering Environmental System for Stock** among countries in the world, Evaluation of efficiency of Environmental Associate sirakawa@urban.env.na Engineering and and Environmental System type Society (Environmental Hiroaki Shirakawa **Studies** Professor goya-u.ac.jp urban environmental management, Economic evaluation of Architecture Economics, Resource Economics) Engineering environmental policy **Environmental System for Stock** Disaster prevention & preparedness in water system, Environmental Environmental Engineering type Society (Environmental and Environmental Associate hirayama.nagahisa@nag Business continuity planning & risk communication for water Engineering and and Environmental System Sanitary Engineering, Nagahisa Hirayama Studies Professor oya-u.jp utility, Redesign for water distribution system, Disaster debris Architecture Environmental Emergency Engineering management system Management) Energy consumption behavior analysis, Technological and Environmental **Environmental Engineering** Environmental Environmental System for Stock Associate shiraki@urban.env.nago economic assessment of climate change mitigation measures, Hiroto Shiraki **Engineering** and and Environmental System Professor Studies type Society (Energy System) ya-u.ac.jp Power and energy system analysis using Architecture Engineering mathematical models **Environmental Engineering** Transformation technologies for organic substances, Greener Environmental Environmental Environmental Studies of **Associate** wmt@urban.env.nagoy and Environmental System Sho-ichi Iwamatsu synthetic methodologies of artificial materials. Sustainable Engineering and Professor Studies Materials a-u.ac.jp Architecture Engineering utilization of materials Functional materials from biomass and plastic waste, Environmental **Environmental Engineering** Environmental Environmental Studies of **Associate** zinchenko@urban.env.n Environmental pollution cleaning, Nanomaterials and Engineering and and Environmental System Anatoly Zinchenko Studies Materials Professor agoya-u.ac.jp environmental nanotechnologies, Sustainable chemical Architecture Engineering processes and materials upcycling technologies **Environmental Engineering** Environmental Environmental Environmental Studies of Associate Fuel cell, Battery, Biomass Use, Machine Learning, nagao@urban.env.nago Engineering and and Environmental System NAGAO, Masahiro 💥 **Studies** Materials Professor Optimization Computation ya-u.ac.jp Architecture Engineering

NOTE: For * labs, G30 admission is not available.