

Research

◇ Grants-in-Aid for Scientific Research

A feasibility study on introduction of stock-management system to irrigation facilities in Vietnam
Audio Augmented Reality and Extension of Audio Communication Ability Based on Small Data Machine Learning Theory
Elucidation of the effect of adding trace amounts of oxygen in decomposition of polymers using hydrogen radicals
Study on a fishway design suitable for the upstream migration for reproduction of the endangered loach (*Parabotia curtus*) in paddy field areas
Identification of missing data mechanisms peculiar to software development data
Development of a Bunraku Robot which can be Operated by One Person
Development of Zero Liquid and Waste Discharge Treatment for Dye Factory Wastewater by Biological and Coagulation Process.
Development of high durable reinforcing method of old embankment for heavy rainfall and earthquake
Estimation of the quantitative effect of sea cultivation aimed at disappearance of nutritional insufficiency at shallow water area
A Study of children mobility from the perspective of Children Independent Mobility (CIM) and traffic safety
Development of Co-operative Robot for Flexible Manufacturing System Satisfying both High-productivity and Safety
Experimental study for the general use of silicate-based surface penetrants
Comprehensive research on the application of microsatellite to bachelor's degree education and the development of its evaluation method
A Study on the Creation of Novel Expressions under Wartime Censorship : Focusing on Osamu Dazai
Moduli of representations and related topics (4)
Research on High-reliable Cooperative Operation for Multiple-Mobile-Robot System using Blockchain and Distributed learning
Research on BMI operation screen that can control autonomous wheelchair more freely
A generalization of the Monge-Ampere equation to almost complex geometry and its new potential applications
Computing an arbitrary singular value of a large tensor sum
Mathematical Deepening of Audio Source Separation Based on Independence and Amplitude/Phase Modeling and Development of Multimodal Hearing-Aid system
Fundamental study of continuous blood pressure measurement using a wearable sensor attached to nail surface
Research to realize a practical satellite development curriculum using a general-purpose satellite model starting from high school students
Investigation of optimum arrangement of small-vertical-axis-wind-turbine clusters with interaction between the pairs and trios of turbines
Formation of double roughness structures on surface of polymer blend film using atmospheric pressure low temperature plasma
Application to Smart Machining Systems using Compression of Skill Data for Inheritance of Excellent Technician's Skills
Development of a portable fishway system suitable for the upstream migration of salmon and trout
Semiconductor device foundry achieved at a nanotech platform established on an average science lab.
Interview dialogue system for augmenting awareness opportunity
Evaluation of astrophysical fusion reaction rates using a microscopic nuclear model
Basic study on recycling method of ITO transparent conductive substrate using pulsed arc discharge
14 another research study, Number of Research Studies 44, Total Funds 50,036,000Yen

◇ Commissioned Research

A Collaboration Project between Mitoyo City and The National Institute of Technology, Kagawa College
Installation test of a portable fishway for the upstream migration of *Oncorhynchus keta* and *Oncorhynchus gorbuscha*
1 another research study, Number of Research Studies 3, Total Funds 2,129,400Yen

◇ Cooperative Research with Private Sector

Development of High-Performance Lead-Acid Batteries
Extraction Technology of Metal from Abandoned Coated Wires
Formation of fine structure by atmospheric pressure plasma and examination of oil and water repellency
Feasibility of industrial methane production in the subsurface environment via microbial activities
On Share Cyber Security Information
The development of the convenient device system for water use and disaster mitigation including lowering the water level in the small and middle scale irrigation ponds
Research on image processing techniques using deep learning
Research on improving the accuracy of various sensors using AI
Study of Fluorine Treatment Technology
Study on development of wireless river monitoring system
Study on durability life prediction method of cable conductor/shield wire for moving parts.
Development of RFID antenna at 920MHz band
A Study on Anomaly Detection by Image Classification Algorithm in Thermal Power Plants
The basic study on various conditions which influenced by damaged small earth dams
The study on crash performances test of precast concrete bollard foundation comparing the basic coding type and the improved one
16 another research studies, Number of Research Studies 31, Total Funds 7,251,000Yen

◇ Other Competitive Funds and Grants

Wearable sensors without skin-contact: development of the sensor element to detect micro-strain of fingernails
Development of a portable fishway system applicable to weirs
Disaster prevention of houses near the pond's dike and visualization by AI technology
Application of environmentally friendly polymer decomposition technology using H₂/O₂ mixed gas to chemical recycling technology
Construction of the environment of upstream migration for the endangered loach (*Parabotia curtus*) using a portable fishway
A seismic performances of the bollard with precast concrete footing which is collided by car
Development of technology to realize a highly profitable cultivation system in horticulture facilities
Wide-band AC Servo System Based on Discrete-state Feedback Considering Control Delay of PWM Inverter
Development of Low Constraint Support Mechanism Using of McKibben Type Artificial Rubber Muscle Capable of Hand-pulling Motion
8 another research studies, Number of Research Studies 13, Total Funds 18,174,000 Yen