## Grants-in-Aid for Scientific Research

- **Dosimetric study based on measurements of magnetic fields and contact currents from IH cookers**
- **Practice on advanced fluid mechanical experiments and its application to extensive engineering education for developing competent engineers**
- **NANO Technology Platform Form Established in the Average Science Laboratory**
- **Development of a WEB Application to Support Autonomous Learning in English Education**
- **Development of the reproduction system of the expert skill with the fine sensasness force control and the data storage cloud system**
- **Development of Using Big Data for Local Transport Planning**
- **Proposal of farm work inheritance manual using eye camera**
- **A study of technologies to prevent dialogue breakdown for natural conversation with communication robot**
- **Development of High brightness x-ray focusing technique using lesser plasmas**
- **Development of an Educational Tool in Radiation Shielding by Using a Mock Survey Meter and the Educational Assessment**
- **Teaching material development kit for computer network and computer algebra**
- **Utilize and Characterize human skill for Sports-coaching**
- **Development of an interaction system based on measurement of wind pressure**
- **Development of an intelligent hammer for hammering sound test**
- **Testing Gausianity of primordial gravitational waves toward understanding the inflationary Universe**
- **Evaluation on supply-demand balance of irrigation water and development of small-scale reservoir facility using terraced paddy field in The Kingdom of Bhutan**
- **A Study on English Writing Process Applying Machine Translation and the Meaning-order Approach to Pedagogical Grammar**
- **Research on the structure of female employment in engineering at minor enterprises**
- **Heart rate monitoring system attaching to finger nail: experiments in daily life environment**
- **Development of an affective monitor system for evaluating Web class students**
- **Extended theories of audio source separation based on statistical independence and various mathematical structures**
- **Design of Human-machine Cooperative Manufacturing System for Smart Factory**
- **Computational fluid dynamics analysis and wind tunnel experiment on wind farm of closely spaced vertical axis wind turbines**
- **Research on holomorphic mappings of Remann surfaces—extension and application of handles condition**
- **Possibility on the introduction of stock management system for irrigation facilities in Viet Nam**

3 another research study, Number of Research Studies 28, Total Funds 50,291,300yen

## Commissioned Research

- **Improvement of high leveling support system for agricultural production technology utilizing ICT**
- **A Collaboration Project between Mitoyo City and The National Institute of Technology, Kagawa College**
- **Daily life vital sensing using wearable sensor attaching to finger nail**
- **A Collaboration Project between Mitoyo City and The National Institute of Technology, Kagawa College(Implementation of Summer School on Artificial Intelligence)**

Number of Research Studies 4, Total Funds 12,593,167yen

## Cooperative Research with Private Sector

- **Development and evaluation of a system to manage a handwritten report**
- **Study on Cardboard Airplane**
- **Technology for preventing ice and snow accretion on LED lamps**
- **Study on the development of portable fishways for agricultural water facilities**
- **Development of a Waste Treatment Plant for Scrap of Covered Wire**
- **Study on the disaster prevention equipment of an overhead traveling crane**
- **Study on Application of an Optical Fiber Gating Device**
- **Numerical simulation on fluid flow during dc casting with electromagnetic stirring**
- **Power line inspection by using a multiprober and a robot**
- **Feasibility of industrial methane production in the subsurface environment via microbial activities**
- **Development of a tuning sensor for percussion instruments**
- **Monitoring system for electrical substation using deep learning and optical technology**
- **Launching system of a life-saving floating device for a water rescue drone**
- **On Sharing Cybersecurity Information Observed by NICET**

Research and development of the geotechnical disaster prevention’s educations for Nankai mega quake based on Kosens network in Shikoku Island

An Educational Tool Designed to Deliver a Virtual World in order to Observe Cosmic Rays on Earth

Monitoring system for elderly people by using a high-sensitivity respiration sensor

A Project for Resolving Regional Needs Using an Optical Method

15 another research studies, Number of Research Studies 33, Total Funds 11,696,000yen

## Other Competitive Funds and Grants

- **Development of portable fishways that can be attached to and removed from agricultural channels and establishment of utilization method for conservation of paddy field ecosystem**
- **Science Classes in Kodomo Miraiak Children’s Center of Takamatsu City**
- **KOSSEN network type space human resources development through ultra-small satellite development**
- **Study on the operation method of portable fishways effective for improvement in the environment of the upstream migration of Ayu fish**
- **In situ observation of floatation process by using a antitubule as an alternative to a bubble**
- **Development of a simulator for nuclear structure changes and reactions by using antisymmetrized molecular dynamics**
- **Investigation into July 2018 west Japan disaster caused by torrential rain**
- **Study on. Gas Mileage Improvement of Eco-Car by Computational Fluid Dynamics**
- **A Study on the Urban Infrastructure Development: Case Study on the Survey of Residence Selection in Takamatsu Managamachi Shopping Street**
- **Analysis from various perspectives regarding the wide-area backup from Kagawa prefecture assuming the Nankai-Trough Megathrust Earthquake**
- **Development of a Community Care System for Senior Citizens and Caregivers**
- **Development of a Gamma-Ray Source Detector Sensitive in All Directions by Using Image Processing Technology**
- **Development of Slot car teaching materials for learning the best mix of the energy**
- **Sensor Electronics / Experiments in Electronic Systems Engineering**
- **Co-creative audio sensing based on sparse signal representation with higher-order statistics control and its application to social systems**
- **Phenomena in AC GTA Welding under like Mars Atmosphere**

4 another research studies, Number of Research Studies 20, Total Funds 16,142,738yen