**Research and Industry-Academia Projects**

| **Project Title** | **Funding / Commissioning Agency** | **Duration** | **Status** |
| --- | --- | --- | --- |
| R&D on Intelligent Direct-Drive Critical Equilibrium Mechanism for Disaster Relief Bridge Control Applications (NSTC 114-2221-E-167-002-MY2) | National Science and Technology Council (NSTC), Taiwan | 2025/08/01 – 2027/07/31 | Ongoing |
| Critical Equilibrium Mechanism and Intelligent Lightweight Bridge (NEMELIFT) for Urban Ecological Transportation (112-2923-E-260-001-MY4) | NSTC, Taiwan | 2023/01/01 – 2026/12/31 | Ongoing |
| Study on Suburban Space Environment Improvement and Construction Benefit Analysis (112-2410-H-167-011-) | NSTC, Taiwan | 2023/08/01 – 2024/07/31 | Completed |
| Feasibility Assessment of Combining Wild Gardens and Retention Spaces under Adaptive Design Concepts (112-2637-H-167-001-) | NSTC, Taiwan | 2023/08/01 – 2024/07/31 | Completed |
| Analysis of Urban Park Landscape Elements and Environmental Comfort Factors (110-2410-H-167-006-MY2) | NSTC, Taiwan | 2021/08/01 – 2023/07/31 | Completed |
| Assessment of Combining Street Retention Spaces with Wild Gardens as Climate Adaptation Strategy (110-2410-H-167-013-) | Ministry of Science and Technology, Taiwan | 2021/08/01 – 2022/07/31 | Completed |
| Construction of Multivariate Quality Characteristic Process Capability Analysis for Virtual Pier Control Effectiveness Evaluation (109-2221-E-167-020-) | Ministry of Science and Technology, Taiwan | 2020/08/01 – 2021/07/31 | Completed |
| Application of Critical Equilibrium Mechanism Automatic Control Technology to Enhance the Performance of High-Mobility Disaster Relief Bridges (Part II) (108-2119-M-260-002-) | Ministry of Science and Technology, Taiwan | 2018/01/01 – 2020/02/29 | Completed |
| Development of Intelligent Critical Equilibrium Control Mechanism to Enhance Building Seismic Performance (107-2221-E-167-001) | Ministry of Science and Technology, Taiwan | 2018/08/01 – 2019/09/30 | Completed |
| Evaluation of Permeable Pavement Structures Using Hollow PC Casting Techniques to Mitigate Urbanization Impacts (107-2622-H-167-001-CC3) | Ministry of Science and Technology, Taiwan | 2018/11/01 – 2019/10/31 | Completed |
| Establishment of Integrated Health Risk Expert System and Cloud Data Computation Model for Smart Environmental Monitoring IoT (107-2119-M-039-002) | Ministry of Science and Technology, Taiwan | 2018/08/01 – 2019/07/31 | Completed |
| Application of Critical Equilibrium Mechanism Automatic Control Technology to Enhance the Performance of High-Mobility Disaster Relief Bridges (Part I) (107-2119-M-260-002-) | Ministry of Science and Technology, Taiwan | 2018/01/01 – 2018/12/31 | Completed |
| Construction of Groundwater Circulation System Combined with Rooftop and Vertical Greening for Building Insulation and Thermal Efficiency (106-2221-E-167-006-) | Ministry of Science and Technology, Taiwan | 2017/08/01 – 2018/07/31 | Completed |
| Rapid Enhancement of Arcade-Type Building Seismic Resistance Using Critical Equilibrium Control Elements (105-2221-E-167-001-) | Ministry of Science and Technology, Taiwan | 2016/08/01 – 2017/09/30 | Completed |
| Development of Open-Source Personalized Health Risk Management and Cloud Computing Model (105-2119-M-039-003-) | Ministry of Science and Technology, Taiwan | 2015/08/01 – 2017/07/31 | Completed |
| Real-Time Monitoring and Rapid Surveying Techniques for Structural and Slope Disasters – Subproject: UAV-Based Digital Image Safety Assessment for Reservoir Dams and Associated Structures (III) (104-2625-M-167-001-) | Ministry of Science and Technology, Taiwan | 2015/08/01 – 2016/08/31 | Completed |
| Real-Time Monitoring and Rapid Surveying Techniques for Structural and Slope Disasters – Subproject: UAV-Based Digital Image Safety Assessment for Reservoir Dams and Associated Structures (II) (103-2625-M-167-001-) | Ministry of Science and Technology, Taiwan | 2014/08/01 – 2015/07/31 | Completed |
| Real-Time Monitoring and Rapid Surveying Techniques for Structural and Slope Disasters – Subproject: UAV-Based Digital Image Safety Assessment for Reservoir Dams and Associated Structures (I) (102-2625-M-167-001-) | NSTC, Taiwan | 2013/08/01 – 2014/09/30 | Completed |
| Integrated Safety Monitoring Techniques and Demonstration for Reservoirs and Hydropower Plants – Subproject: Digital Image Technology for Hydromechanical Damage Monitoring (III) (101-2625-M-167-001-) | NSTC, Taiwan | 2012/08/01 – 2013/07/31 | Completed |
| Integrated Energy-Saving System Combining Building Energy Efficiency and Renewable Energy Applications (Part 2/2) (101-3113-E-167-001-) | NSTC, Taiwan | 2012/01/01 – 2012/12/31 | Completed |
| Integrated Energy-Saving System Combining Building Energy Efficiency and Renewable Energy Applications (Part 1/2) (100-3113-E-167-001-) | NSTC, |  |  |