1. INTACT: Intelligent tropical-storm-resilient system for coastal cities (**1/1/2024-31/12/2028, Project Coordinator (PC)** of RGC Theme-based Research Scheme 2023/24 (Thirteenth Round), Project No. T22-501/23-R, HK$48,293,000);
2. Postdoctoral Matching Fund Scheme 2023/24 (1st Round) (7/11/2023-6/11/2025, **Principal investigator (PI)**, The Hong Kong Polytechnic University, Postdoctoral Fellow: Dr. Zijian GUO, HK$ 365,400);
3. An optical sensing based hybrid monitoring system for railway health monitoring (**1/3/2023-28/2/2024**, **Principal investigator (PI)** of Large Equipment Fund for Central Research Units in 2022/23, Project No. 1-BC7T, The Hong Kong Polytechnic University, HK$ 2,416,088);
4. Physics-informed parameter identification of linear and nonlinear structural systems (**1/1/2023-31/12/2025, Principal investigator (PI) of RGC-GRF project No. PolyU 152308/22E, B-Q96R, HK$1,115,452)**;
5. Postdoctoral Matching Fund Scheme 2022/23 (1st Round) (9/11/2022-8/11/2024, **Principal investigator (PI)**, Project No. 1-W25D, The Hong Kong Polytechnic University, Postdoctoral Fellow: Dr. Wei Jiang, HK$ 365,400);
6. Intelligent tropical-storm-resilient system for coastal cities (**4/10/2022-3/10/2027**, **Principal investigator (PI)** of a project funded by Department of Civil and Environmental Engineering of PolyU, Project No. 1-WZ0C, The Hong Kong Polytechnic University, HK$500,000);
7. Development of a modular rail damper based on particle damping technology for controlling rail corrugation growth and broadband rolling noise in railways (**1/10/2022-31/3/2024**, **Principal investigator (PI)** of Innovation and Technology Fund (ITF) Project No. ITS/096/21, funded by the Innovation and Technology Commission of HKSAR Government, 1-ZPDF, HK$1,399,780);
8. Ground penetrating radar-based non-destructive detection and intelligent identification methods for hidden defects of tunnel structure (**1/10/2021-30/9/2025**, **Co-principal investigator (Co-PI)** of Guangdong Basic and Applied Basic Research Foundation Project No. 2021B1515130006, funded by Department of Science and Technology of Guangdong Province (GDSTC), K-ZGEL, HK$411,915);
9. A multi-property testing platform for nanomaterial-based railway track fatigue crack sensors under service conditions (**29/4/2022-30/4/2023**, **Principal investigator (PI)** of Large Equipment Fund for Central Research Units in 2021/22, Project No. 1-BC6L, The Hong Kong Polytechnic University, HK$1,300,000);
10. Postdoctoral Matching Fund Scheme 2021/22 (4th Round) (**10/8/2022-9/8/2024**, **Principal investigator (PI)**, Project No. 1-W245, The Hong Kong Polytechnic University, Postdoctoral Fellow: Dr. Changchang Wang, HK$365,400);
11. Postdoctoral Matching Fund Scheme 2021/22 (3rd Round) (**18/7/2022-17/7/2024**, **Principal investigator (PI)**, Project No. 1-W230, The Hong Kong Polytechnic University, Postdoctoral Fellow: Dr. Ziyu Tao, HK$365,400);

12. Postdoctoral Matching Fund Scheme 2021/22 (2nd Round) (**13/6/2022-12/6/2024**, **Principal investigator (PI)**, Project No. 1-W21Q, The Hong Kong Polytechnic University, Postdoctoral Fellow: Dr. E Deng, HK$365,400);
13. Investigating the rolling contact fatigue damage in railway steels (**1/3/2022-28/2/2025**, **Principal investigator (PI)** of Joint Postdoc Scheme with Non-local Institutions (2021/22), Project No. 1-YY4W, The Hong Kong Polytechnic University, Postdoctoral Fellow: Dr. Omid Hajizad, HK$578,100);
14. Postdoctoral Matching Fund Scheme 2021/22 (1st Round) (**18/9/2021-17/9/2023**, **Principal investigator (PI)**, Project No. 1-W20D, The Hong Kong Polytechnic University, Postdoctoral Fellow: Dr. Wen-Qiang Liu, HK$364,507);
15. A test platform for electromagnet-rail coupling vibration of medium-speed maglev (**15/6/2021-30/6/2022**, **Principal investigator (PI)** of Large Equipment Fund for Central Research Units in 2020/21, Project No. 1-BC5F, The Hong Kong Polytechnic University, HK$ 2,430,000);
16. Transformative tropical storm risk mitigation of high-rise building clusters in coastal cities through understanding urban aerodynamics mechanism (**1/1/2021-31/12/2025**, **Principal investigator (PI)** of FCE Project of Strategic Importance funded by FCE, Project No. ZVR6, The Hong Kong Polytechnic University, HK$200,000);
17. Fundamental theories and key technologies for intelligent operation and maintenance of high-speed railway bridges (**1/1/2020-31/12/2023**, **Co-principal investigator (Co-PI)** of Joint MOR-NSFC Key Research Program, HK$800,000 funded by NSFC, Project No. U1934209; RMB2,310,000 in total, RMB735,000 allocated to PolyU);
18. Sustainable marine infrastructure enabled by the innovative use of seawater sea-sand concrete and fibre-reinforced polymer composites – CEE 1 (**1/1/2019-31/12/2023**, **Principal investigator (PI)** of a sub-project of RGC Theme-based Research Scheme 2018/19 (Eighth Round), Project No. 3-RBCF, HK$565,206) (PhD student: Mr. Z. Lin);
19. Sustainable marine infrastructure enabled by the innovative use of seawater sea-sand concrete and fibre-reinforced polymer composites (**1/1/2019-31/12/2023**, **Co-principal investigator (Co-PI)** of RGC Theme-based Research Scheme 2018/19 (Eighth Round), Project No. T22-502/18-R, 3-RBCE, HK$52,463,000).