Anchorage Performance of RC

As Japanese seismic design code is becoming more strict, larger amount of reinforcement must be placed in Reinforced Concrete (RC) structures at the joint part.

Problems
- Increase the fabrication time
- Poor concrete compaction may occur

Stress condition in complex reinforcement arrangement

Numerical simulation can clarify
We aim to propose the rational design code

Analysis by 3D RBSM

Mechanics of Fiber Reinforced Concrete under Principal Stress Rotation

Robust material against the principal stress rotation is developed by focusing the shear performance.

Control of cracking direction of HPFRCC

Infrastructure Management for Municipalities in Japan

Japan faces a problem of aging of infrastructure. Especially in municipalities, lack of human resources, technology and budget are pointed out.

Rational maintenance system is required.

Indexation analysis of maintenance system

Analysis of bridge inspection data

Calculation of roundabout route

International Expansion of Infrastructure Management

Asset management cycle

Simple monitoring of damaged bridge (Myanmar)

Seminar and demonstration of inspection (Thailand, Vietnam, Cambodia etc.)

TOWARDS THE ESTABLISHMENT OF SAFER AND SUSTAINABLE URBAN SYSTEMS