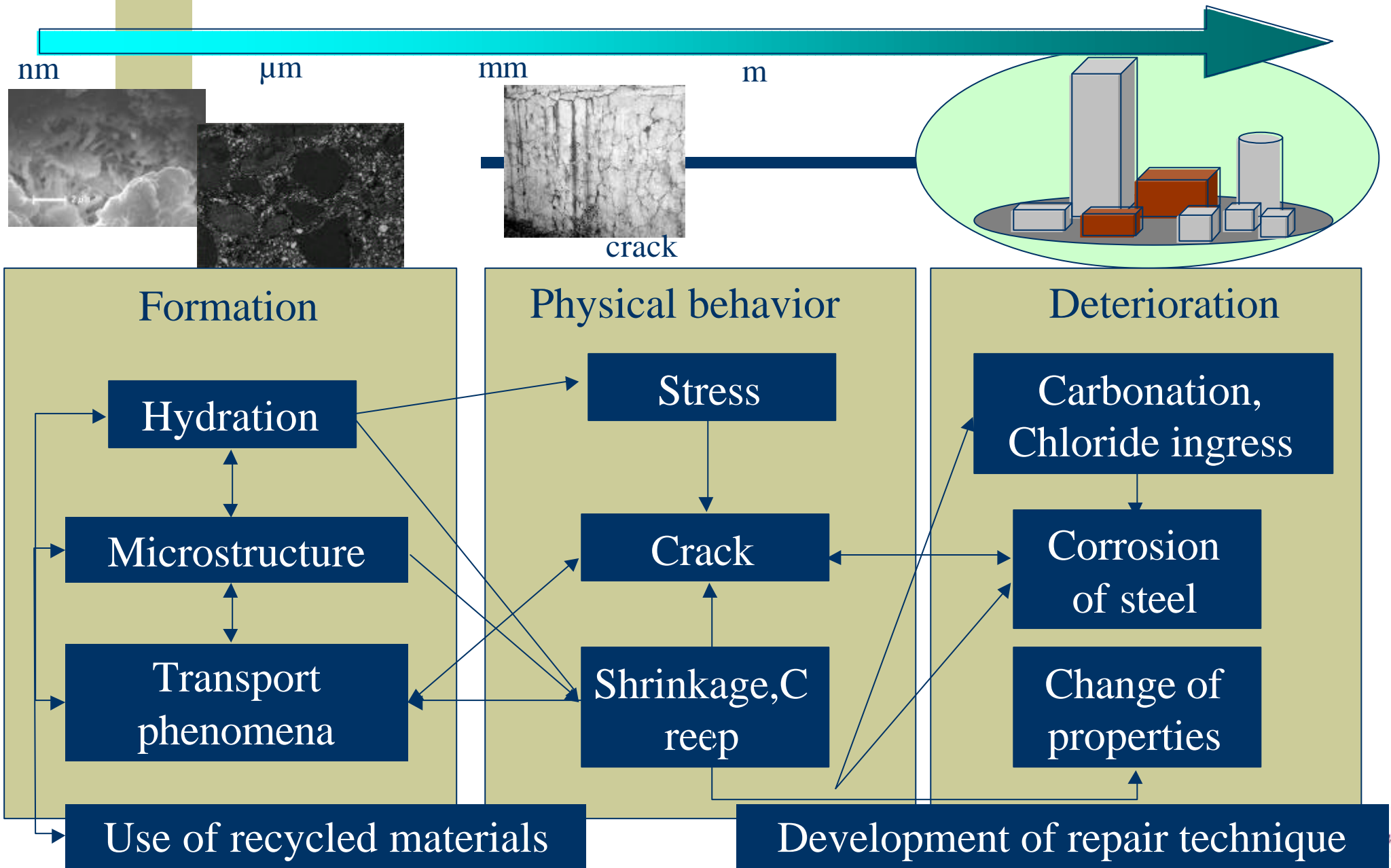


Develop the prediction models for structural performance during service life through construction material deterioration models from viewpoint of microstructure

Hokkaido University

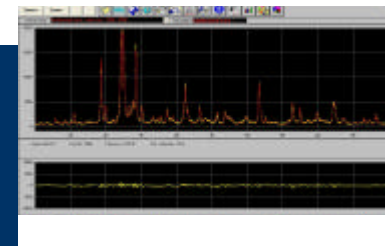
Kiyofumi Kurumisawa

# Prediction models for structural performance during service life



Develop the prediction models for structural performance during service life through construction material deterioration models from viewpoint of microstructure

Microstructure (Rietveld analysis, BEI etc)



Deterioration mechanism

(Chloride penetration, Autogeneous shrinkage etc)

Utilization of Recycled aggregate(Closed system)

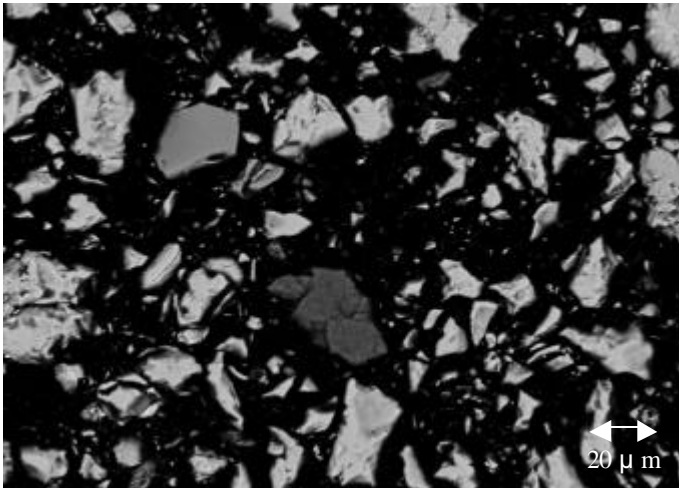
Utilization of waste materials for concrete

(Fly ash, BFS, recycled powder etc)

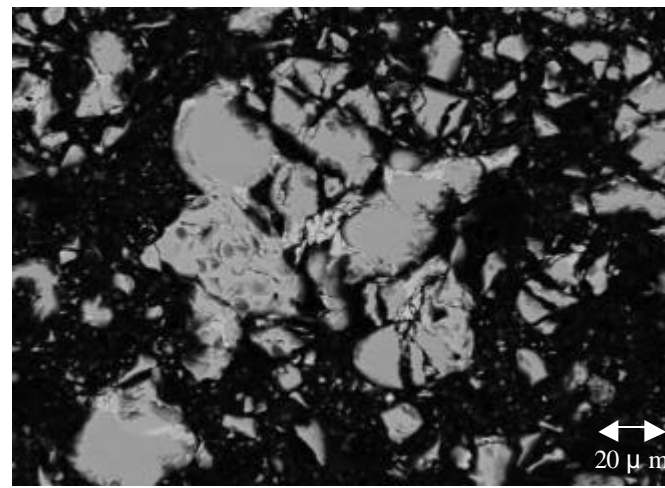


# BEI of cement particle

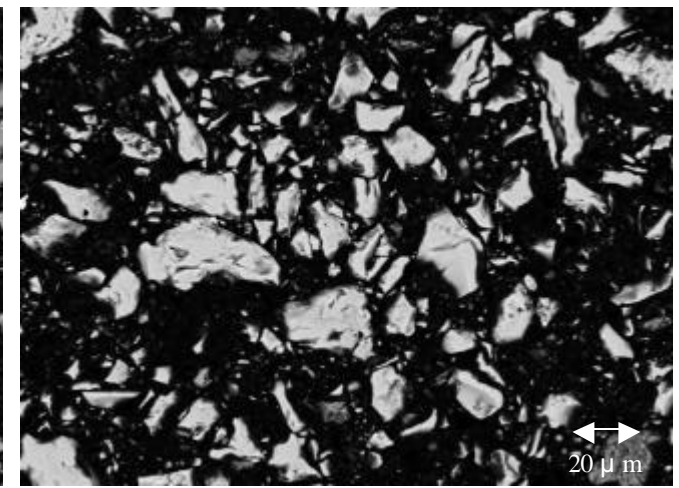
OPC



LHC



RHC



Ferrite > Alite > Belite > Aluminate > Gypsum > Periclase > Epoxy resin