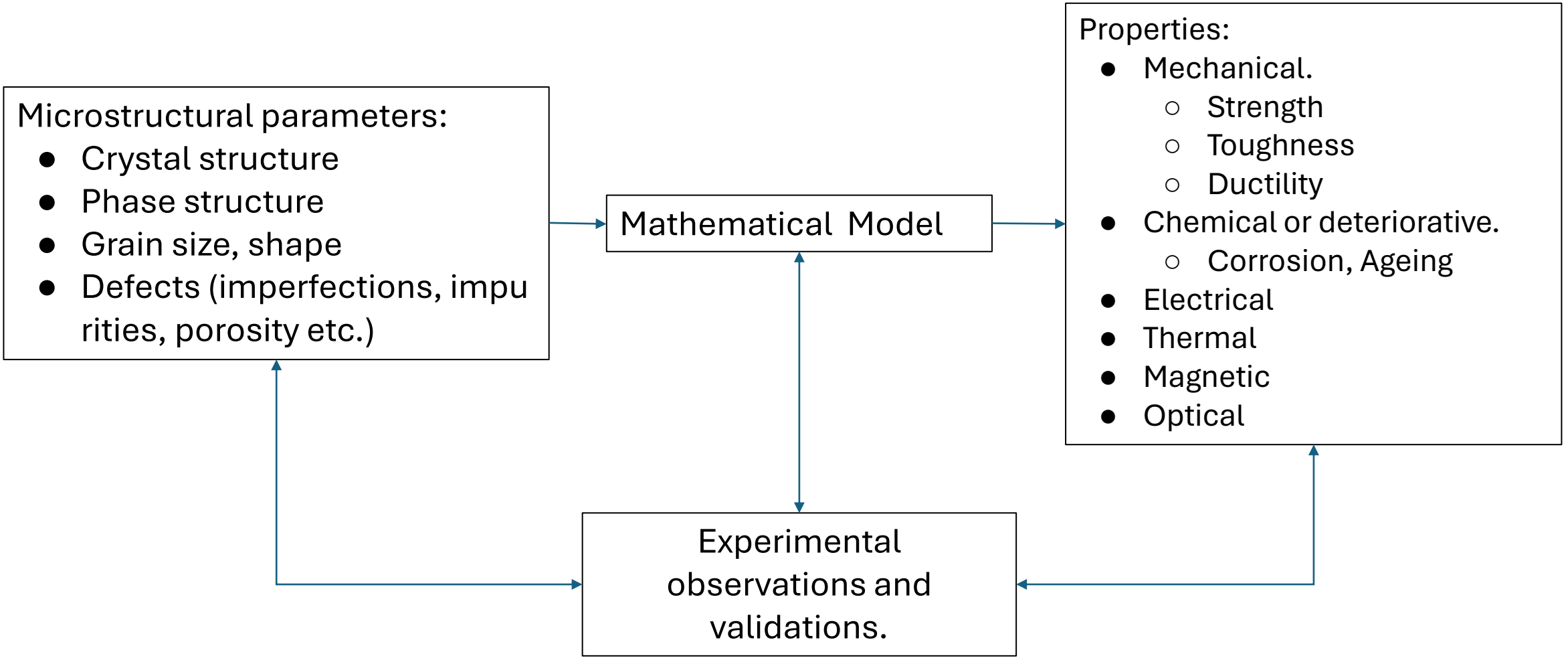
Microstructural parameters:
Crystal structure
Phase structure
Grain size, shape
Defects (imperfections, impu rities, porosity etc.)
Mathematical Model
Properties:
Mechanical.
Strength
Toughness
Ductility
Chemical or deteriorative.
Corrosion, Ageing
Electrical
Thermal
Magnetic
Optical
Experimental observations and validations.