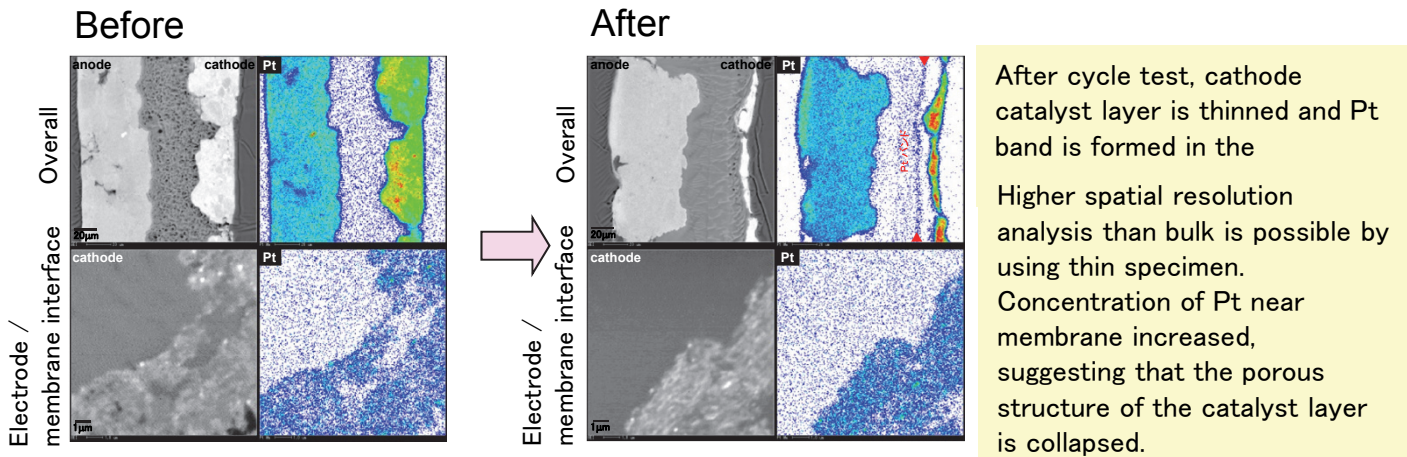


PEFC MEA degradation evaluation — Morphological observation and microanalysis —

Changes in morphology and elemental distribution of Membrane Electron Assembly (MEA) are evaluated by EPMA and TEM, before and after operation of Polymer Electrolyte Fuel Cell (PEFC). It is possible to recognize changes due to degradation of MEA, such as presence of Pt dissolved and reprecipitated in electrolyte membrane, element segregation, change of catalyst layer thickness, coarsening of catalyst particles, etc.

1. EPMA analysis before and after power generation test



2. TEM analysis before and after power generation test

