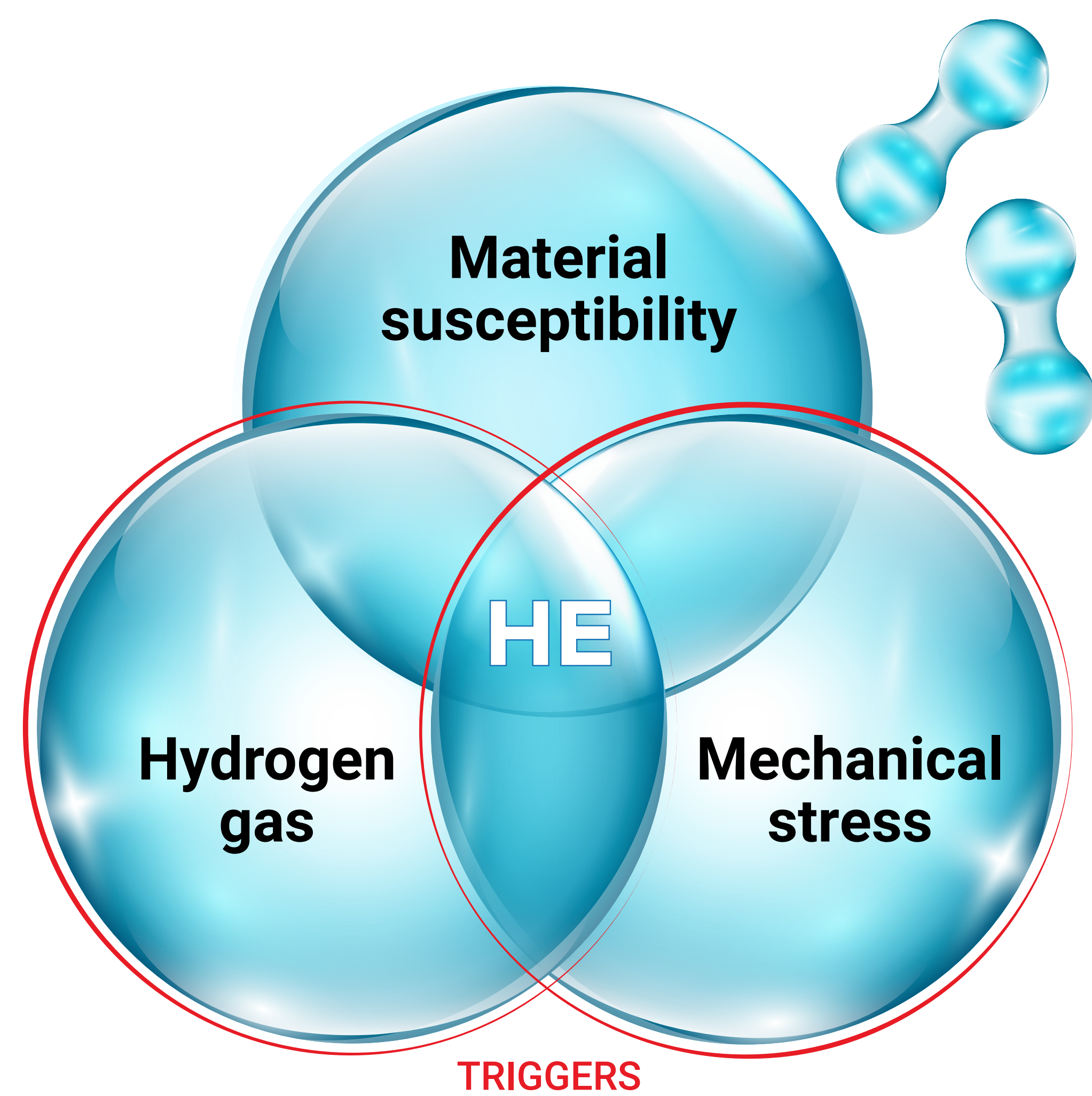
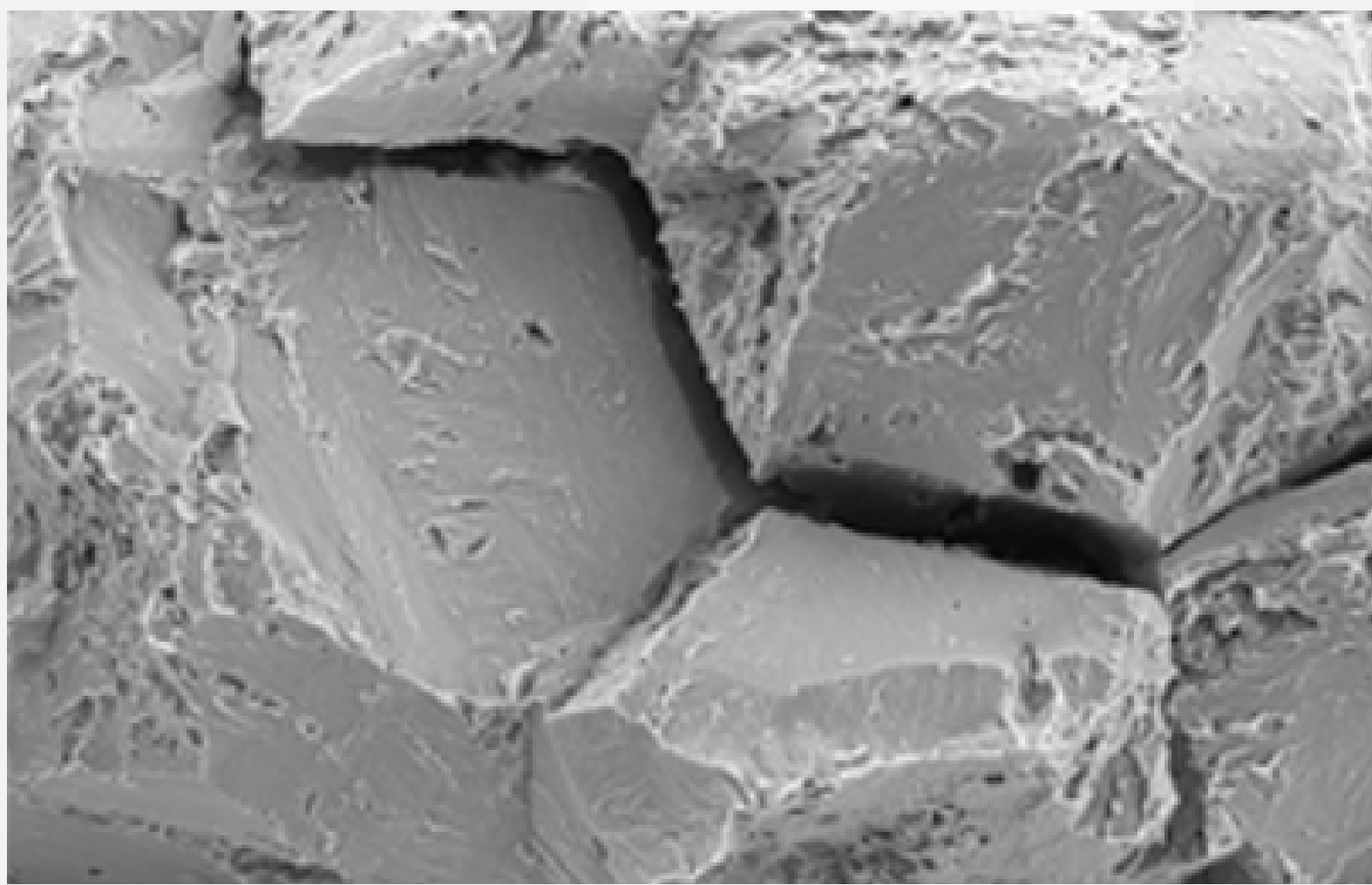


Choose right metals for hydrogen gas applications

- ▶ Hydrogen gas may cause premature failure in metals due to hydrogen embrittlement (HE).
- ▶ Some metals are more sensitive than others.
- ▶ Different applications require different metals.



Hydrogen embrittlement can occur when a susceptible material is exposed to hydrogen gas and mechanical stress. The gas pressure or residual stresses may be sufficient.

FACTORS AFFECTING HYDROGEN EMBRITTLEMENT

- ▶ Gas pressure
- ▶ Gas composition
- ▶ Exposure time
- ▶ Temperature
- ▶ Type of metal
- ▶ Surface conditions
- ▶ Deformation
- ▶ Welded parts

