



1

DISCOVERY

1992 (Sweden): The lightbulb moment. A profound discovery is made at Luleå University (Sweden) regarding the effects of using specialized milling on OPC. As yet, the knowledge curve is not built, but in time, the EMC effect is replicated 1000s of times — for example, to yield exotic ultra-high strength concretes.

The term "**Energetically Modified Cement**" is born...

2

POZZOLANA

1997 (Sweden): Work continues on exploring the new scientific phenomenon of EMCs. By now, the science of EMCs has been recognized by the EU's EUREKA organization — awarding its **Gold Medal** in 1996. Our knowledge curve builds rapidly as alternate feedstocks are investigated. Fly ash is a promising feedstock as our R&D already shows an ability to substitute 70% of the OPC...

3

INDUSTRIAL

2003 (U.S.A.): Breakthrough USPTO application filed. Work starts on a 'pilot' industrial plant in Texas. The plant's success sees it expand to a yearly capacity of 300,000 tonnes. We hit our goal of transforming the reactivity of fly ash to historic highs (hitting **Slag 120 grade**) while delivering reliable workflow, across all types of project work (including for TXDOT and FHWA). By 2010, more concrete has been poured than that used in the Hoover Dam...

4

VOLCANICS

2012 (Sweden & U.S.A.): Yet another breakthrough USPTO application is filed, this time covering volcanics. In California, we show 'in spec' workflow with EMC Volcanics replacing 50% of the OPC — a 'first' in Human history! Today, by further R&D, EMC Volcanics can replace 70% of the OPC for productive and reliable workflow as a **GGBFS substitute** — while our EMC Volcanics patent is now extant **in over 90 countries** around the World...

