

unknown

Sperm binding/fusion

Messenger activation (NAADP)

Biphenol A/DDE

IP3 (opening of  $\text{Ca}^{++}$  channels)

Calcium  $^{2+}$  release

unknown

Cortical granule exocytosis

Membrane hardening

**Block of Polyspermy !**

PCBs

Initiation of protein synthesis

Dioxines

Inactivation of MAP kinase

PAHs

Cell cycle initiation

seconds

minutes