

Why Is the Ocean Salty?

we didn't know why the ocean was salty
how it got its chemistry until fairly
recently children would ask you why is
the ocean salty we'd say next question
we thought in the early days that it was
the rivers they were the obvious
culprits bringing all this stuff in but
the chemistry the world's oceans is not
equal to the chemistry of the rivers
coming into it we didn't know until in
1979 we were driving along the East
Pacific Rise and there was a black
hooker in front of us we call it a black
smoker because it looks like black smoke

but it's not it's micro crystals of minerals so we discovered when we found the black smokers that the entire volume of the world's oceans is going inside the earth and out every six to eight million years and it's taking some of the chemicals it gets from rivers and it's trading them for new chemicals and this is occurring all along the mid-ocean ridge that stretches around the planet like the seam of a baseball and there are tens of thousands of magma chambers down there and the waters get into them and that's how we get the chemistry we're all social and we didn't know