The Iron/Nickel Cores of Ancient Stars as Leftover Catalyst

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Abstract: It is explained that the iron/nickel cores of ancient stars (mislabeled planet/exoplanet) are composed of unconsumed catalyst used in the chemical reactions required to form many chemical compounds found on rocky highly evolved stars. As well, it explains why only specific elements are found with the iron/nickel composites, it is because they are also function as catalysts, such as platinum, copper and gallium, which can be unconsumed in the process.

Iron/nickel meteorites are pieces of the core remains of long dead, smashed up astrons (young astrons are stars, old ones are planets).^{[2][3][4]} They are mostly the heavy metals iron and nickel, but also contain trace amounts of platinum, copper, rhenium, osmium, iridium and others that can resist being consumed in chemical reactions. Of course, some more resistant to being consumed than others. Given astrons are the location for the vast majority of chemical reactions in the universe, I am proposing that the chemical reactions are helped along by catalysts. These catalytic materials, iron and nickel mostly, enter the young astron (star) and spur synthesis and decomposition of various chemicals on huge scales. The left over catalytic iron/nickel then sinks into the interior due to not being consumed, thus forming the cores. This means large cores of ancient astrons are indicative of large amounts of chemical processes having occurred in the astron's past, as they are unconsumed and in vast quantities.

This also means the densities of the oldest astrons plays a part in whether they have large iron cores, and lots of rocky material. If the density of the planet is high, say about 5 gm/cm^3, then the chances of it having a large iron core are high. Since the iron core shows direct evidence of past chemical reactions having taken place in huge amounts, then we can also expect the rocky material that planet to be made out of to be just as complex as Earth's. The other elements that do not function as good elemental catalysts such as fluorine, oxygen and nitrogen should be expected to be almost non-existent in pure iron/nickel meteorites, as they would have been consumed well before any in-falling of material could occur. The only way for oxygen or other non-catalytic elemental material to fall inwards during planet formation would be if it is combined with other heavier material, and become mostly unreactive, such as silicon dioxide or olivine. Even then, the heats and pressure involved in internal deposition processes (planet formation inside the star), would possibly break apart any newly formed silicon dioxide or magnesium/iron silicates. They would remain towards the border of the collected unconsumed iron/nickel catalyst, thus forming the boundary between the inner and outer cores, and in many places mixing forming beautiful pallasites. Pallasite forms the boundary between the inner pure iron/nickel regions of the cores of dead stars where the collection of unconsumed iron/nickel catalyst took place and the outer core layers.

The largest portion of material that is catalytic (non-consumed during reactions) would be core material, and that is the majority of the first material absorbed by the star. Secondly, iron/nickel being absorbed and combining with other material to form new types of compounds such as banded iron, and other types of iron-rich sedimentary rock such as hematite and magnetite are formed. The iron ores in the crust of the Earth and all highly evolved stars were formed when they were late stage gas giants, probably about the size of Neptune, and further into ocean world stages of metamorphosis, depending on its transformation curve. Iron ore is in fact, meteoritic iron that has been broken up and chemically and physically resynthesized into minerals that take up specific crystalline structures. The incoming meteors and asteroids are broken up and recombined with the other available elements in the vicinity, forming large iron ore deposits that can be mined much further in the star's evolution, when the crust is mostly finished forming.

So in other words, banded iron is sedimentary rock, but that rock is extremely old. Now since Earth is 4.5 billion years old, and Neptune about 1.1 billion, the banded iron ore deposits should be ~3.4 billion years old. That is 1.1 billion years subtracted from 4.5 billion years. Also we can give a lower estimate for how long Earth was in a stage of metamorphosis by checking the youngest and oldest banded iron deposits. I have seen a banded iron deposit dated to about 2.1 billion years old, this means 4.5 billion subtracting 2.1 billion leaves 2.4 billion years old. When Earth was 2.4 billion years old it was still able to break up incoming iron asteroids/meteoroids and re-crystallize and combine the material, and then layer them with chert and oxides. It is much different these days, being that when iron/nickel asteroids are absorbed by the crust, the impact is too great for the material to then be chemically and physically mixed and redeposited.^[1]

[1] <u>https://vixra.org/pdf/1807.0216v1.pdf</u> Stages of Iron Absorption and Deposition in a Star
[2] <u>https://vixra.org/pdf/1704.0238v1.pdf</u> The Krypton Hypothesis

^[3] https://vixra.org/pdf/1711.0206v5.pdf The General Theory of Stellar Metamorphosis, V.5

^[4] https://vixra.org/pdf/1510.0381v1.pdf Star and Planet: Stages of Astron Evolution