

J. Marvin Herndon

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J. Marvin Herndon (born 1944) is an American interdisciplinary scientist, who earned his BA degree in physics in 1970 from the University of California, San Diego and his Ph.D. degree in nuclear chemistry in 1974 from Texas A&M University. For three years, J. Marvin Herndon was a post-doctoral assistant to Hans Suess and Harold C. Urey in geochemistry and cosmochemistry at the University of California, San Diego. He is the President of Transdyne Corporation in San Diego, California. He has been profiled in *Current Biography*, and dubbed a “maverick geophysicist” by *The Washington Post*.^{[1][2]} He is most noted for deducing the composition of the inner core of Earth as being nickel silicide, not partially crystallized nickel-iron metal.^[3] More recently, he has suggested "**georeactor**" planetocentric nuclear fission reactors as energy sources for the gas giant outer planets.^[4] as the energy source and production mechanism for the geomagnetic field^[5] and stellar ignition by nuclear fission.^[6]



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In 2005 Herndon postulated what he calls whole-earth decompression dynamics, which he describes as a unified theory combining elements of plate tectonics and Earth expansion. He suggests that Earth formed from a Jupiter-sized gas giant by catastrophic loss of its gaseous atmosphere with subsequent decompression and expansion of the rocky remnant planet resulting in *decompression cracks* at continental margins which are filled in by basalts from mid-ocean ridges.^[7]

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- J. Marvin Herndon's website NuclearPlanet.com (<http://www.NuclearPlanet.com>)
- J. Marvin Herndon's website UnderstandEarth.com (<http://www.UnderstandEarth.com>)

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