SACRED GEOMETRY AND ARCHITECTURE



Written, edited and illustrated by Carlos Arturo Alvarez Ponce De León

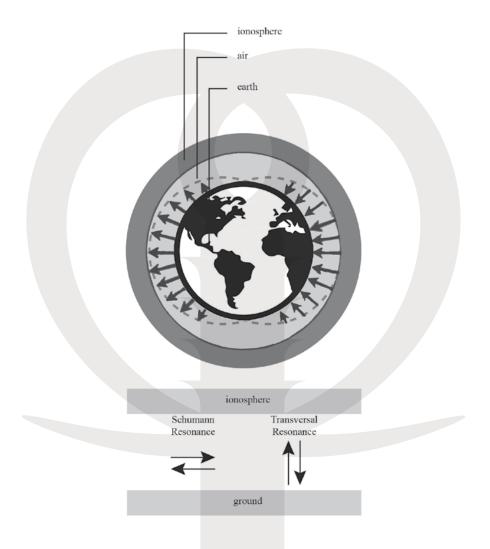
Illustrations and photos of projects and studies by
Carlos Arturo Alvarez Ponce De León
Ninón Fregoso Fregoso
Michael Rice
Jenniffer Hassey
John Stuart Reid
Dan Winter
Juan Schlosser

2

THE MESOCOSMOS AND BIOLOGICAL ARCHITECTURE.

2.19- Schumann resonance

Schumann resonance is set of extremely low waves of the Earth's electromagnetic spectrum. It is a resonance effect in the earth-airionosphere system, called a transversemagnetic wave. It vibrates on the same frequency as the brain waves of humans and of all mammals in general, approximately 7.8 Hertz. It is not an isolated wave but a set of waves that reverberate and have harmonics. The approximate fundamental frequency and its first harmonics are 14.1, 20.3, 26.4, 32.4, 39 and 45 Hertz. These waves happen because the space between the Earth's surface and the ionosphere, the electrically excited layer of the atmosphere that exists between 90 and 500 km in height, acts as a waveguide. Lightning naturally excites this cavity and influences the electric transmission networks that operate with the 60 Hz range since this is an over-tone of the resonance. The detectable overtones extend to the range of kHz.



In honor of Winfried Schumann who mathematically predicted its existence in 1952, it has been given this name. However, it was first observed by Nikola Tesla and formed the basis of his scheme for power transmission and wireless communications. The Schumann resonance is a vertical current flow between the ground and the ionosphere with+ - 1800 Amperes. The resistance of the atmosphere is 200 Ohms, its capacity is 0.25 farad, and its potential voltage varies from 200,000 to 400,000 Volts