

The Concept of *Vaisesik* Elements of Substance in Modern Chemico-Physics

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Vaisesika system, which derives its information from Vedas, approaches to understand the truth in a systematic way by classifying the material substance in to four categories: earth, air, fire, and water. These in conjunction with non-material substances – time, space, and ether, and a combination of material and non-material substances – mind and self, can be systematically utilized to explain operations of each and all perceived and non-perceived components of the universe. Thus *Vaisesika* provides a profound system to know and understand both perceived and non-perceived components of the universe, be they material or non-material.

In modern science, physics tackles such issues as non-perceived realities through theoretical formulations and predictions. However, even physics shies away from describing non-material related entities which may not have direct link to matter. So, energy is considered a major non-material entity in physics but it is clearly connected transformatively to matter. Powerful concepts like probability of finding atomic particles in space are directly linked to energy states as in quantum physics, as are the concepts of randomness (entropy) in thermodynamics. For understanding such concepts at the perception level, one needs to create models to understand/realize unknown in terms of known. Chemistry provides a rich system of modeling physics and metaphysics concepts, and at times can lead to understanding of complex biological phenomena and life. Chemistry relates to the study of matter, and provides molecular, atomic and subatomic bases of abstract observations of physical laws, biological phenomena and engineering design. Ancient knowledge of all inclusive universe propounded through *Vedas* is primarily in abstract form. A modern chemistry-equivalent basis of that knowledge could be helpful not only for its comprehension but also for its application to modern society. Past attempts to relate modern science to *Vedic* knowledge unfortunately has remained limited to look for references of metals, atoms, etc. in the text to somehow justify the validity of the ancient knowledge rather than *vice versa*. In this presentation, an attempt is being made to extract universal knowledge of *Vedic* tradition through chemical interpretations of the elements of substance or *dravya* of *Vaisesik* concept with examples of explaining cause of chemical toxicity, origin and evolution of life, and realization of self as the source of universe and infinity.