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物质在各形态中的分层与边界形成机制:

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In the three-dimension materials space, the boundaries commonly exists among the materials of solid state, liquid state or gas state. For example, atmosphere is divided into troposphere and stratosphere by the clear boundary layer between both[1]; the water temperature is divided into different thermal layers along the depth of a lake by the clear boundary between water layers[2]; apparent lithologic stratification is segregated by the geological boundary between them [3].

The formation of substance boundary: the polarity of polar molecules and atoms (or the induced van der Waals force of non-polar molecules and atoms) leads to the symmetrical arrangement between positive and negative poles, which results in two kinds of effects on the magnetic moment: firstly, the symmetrical arrangement between positive and negative poles enhances the polarity/magnetic moment of the aggregated substances. The theory of magnetic materials formation is discussed in another paper [4]. The magnetic flux transmits between the positive and negative poles of the whole aggregated substances, and the middle layer between the positive and negative poles of the whole aggregated substances becomes a neutral substance boundary. Then the enhanced polarity tends to absorb more substances with polarity, aggregating into thicker layers, which further enhances the polarity of the whole substances. With accumulation, this neutral substance boundary between the positive and negative poles of the whole aggregated substances becomes the obstacle stopping the polar substances from the transmission through it, resulting in different substance layers.

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