**New Insights into Structure and Properties of Natural Rubber & Introduction of the Development of Taraxacum kok saghyz in China**

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**Abstract:** The structure of natural rubber (NR) is still not clear completely up to now although it has outstanding properties caused by its strain-induced crystallization (SIC) characteristic, which leads the NR never to be replaced by the synthetic isoprene rubber (IR) for the security reasons in the future for a long period of time. Some new insights will be proposed to attempt to explain the relationship between the structure and properties of natural rubber. Such as two structure models for unvulcanized and vulcanized NR/IR blends with entanglement, pseudo end-linked network and chemical bond network have been constructed to explain the difference of crystalline properties between NR and IR. In addition, an excellent example of seismic isolation bearing prepared by high damping NR composites modified by Nitrile Butadiene Rubber (NBR) and AO-80, compatibilized by epoxidized natural rubber (ENR), was presented here to expand its application range. However, the NR shortfall problem is very serious in China for its large consumption, about 5 million tons every year, which is 40% of world consumption. So developing the alternative taraxacum kok saghyz as the secondary natural rubber sources is an effective measure to make up for the NR shortage of China, which will be introduced here briefly too.

**Keywords:** Natural Rubber, Crystalline properties, Composites, Taraxacum kok saghyz in China