Details of Technology

Name of Technology	Synthesis of organic/inorganic nanocomposites and their application to polymers	Chemistry
Name/Post/Faculty	Hidetoshi Hirahara / Associate professor / Department of Frontier Materials and Functional Engineering, Graduate School of Engineering	
Key words	nanocomposite, inorganic layer compound, rubber, plastic, composite formation, XPS	

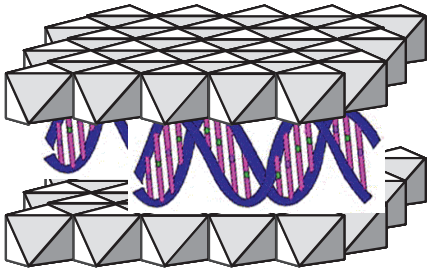
What kind of technology is this?

Outline

Additive to rubber
Capable to improve shelf stability

Study on the synthesis of organic/inorganic nanocomposites by intercalating multifunctional organic compounds into the gaps between layers of inorganic layer compounds and the composite formation between the synthesized nanocomposite materials and rubber or plastics

Retaining of functional organic compounds by LDH



Vitamins, medicinal components, amino acids, peptides, sugars, nucleotides, DNA, antibacterial agent, ultraviolet absorber, rubber cross-linking agent

What are its applications?

By compounding cross-linking agent/inorganic layer compound composite with rubber, the workability of rubber improves.
With this technology, the cross-linking property of rubber will improve, which leads to the improvement of its shelf stability and productivity.

Demand in rubber processing supplier is expected.

Related patents	
Related materials	

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