

Study on complex materials in the rubbing (balur) waste product

A possible way to find out natural nanoparticles from the human body

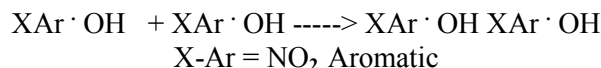
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Abstract

Membrane blood cell with ferro magnetic nano structure can make modification to nano structures to better suit their integration with biological systems. This is the developing assumption idea used in rubbing methods using HO-Acetosal. It is predicted that this HO-Acetosal will spreading out for the act of ferromagnetic following its absorption by surface of skin and reaching membrane blood cell bio-molecules bound into nano structures. After skin rubbing using HO-Acetosal followed by the sequence scavengers solution namely urea solution, the waste liquid was treated and observed. The sunrays and frozen treatments of liquid rubbing waste, definitely give different solid material character performance. The shell is observable after 3-4 hours of freezing protocols at -4, -15, -30, and -80 °C. Observation under Confocal Laser Microscope, confirmed a tubular structure of crystals developed in glass substrate. The structural characters were different as the crystal developed with different substrates. Further analysis with SDS-PAGE showed at least 8 proteins which have molecular weight ranging from 10 to 90 kDa. All of these indicate the possible existence of some chemically active materials contained in the waste which are responsible for molecular construction into complex structure. The green and blue emission fluorescence structures observable under fluorescence microscope, indicate the important of further investigations to elucidate the possible existence of new "hybrid" nano biomaterial resulted in the waste product.

In regard to biradicals which were first reported by EM Kosower 1967, reviewed by G. Zahara 1993, founding biradicals by isolation the transition products of sunray reaction X-Aromatic + H₂O₂ in tridestilate water (metal free), modified from Fenton reaction. An analog resulted transition biradicals products of HO-X cyclohexadienyl in "cage" (QDs conyugates) were also produced by isolation products of gamma irradiated X aromatic tridestilate in aqueous solutions. Compounds contained in rubbing waste shell showing biradicals signals by Electron Spin Resonance (ESR) Biradicals are interaction intermolecular of radical-radical their own molecules or atoms and providing more stable product as



Isolation of shell biradicals of waste products of gamma irradiated 3 x 10⁻⁵ M L tyrosin and 3 x 10⁻⁵ M L-Phenylalanin in tridestilate water at dose more than 60 Grey, resulted translucent shell products [Hydroxyl-X Cyclohexadienyl]_n. ESR observation showing biradicals forming shell which is not H⁺ (hydrogen radicals). When selective free radicals ·H, ·NO, H₂O₂, NO₂, ·OONO, NO₂, introduced to peptide/protein or free amino acid, resulted aggregation while their spin interacted with intermolecular in a "cage" (Quantum dots).

These ESR studies than becoming the basic idea to predict the possible role of nano-biomaterials on the protein folding and polymerization of amino acid and other compounds containing in the rubbing solution. As we confirmed that intra-peritoneal injections of the waste into mice is non toxic, and some how the injection also showing good prognosis of some tumour suffering mice, making the study is more interesting.