

Phenomenological Rules for Nuclear Metabarysis

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In previous years have been conducted on the iron multiple experiments in conditions of deformed space-time (DST) observing non-conventional reactions presence which provided as reaction products unexpected elements subsequently identified and quantified. This paper aims to order these elements in an attempt to find a method to predict their formation introducing the “angle law.”

KEYWORDS: DST Reactions, Piezo-Nuclear Reactions, Neutron Emission, Elements Classification, “Law Angle.”

1. INTRODUCTION: DST REACTIONS FEATURED

What we consider are the reactions that take place in deformed space-time, not-Minkowskian, commonly called DST reactions.¹

Their characteristic is to take place in a five-dimensions system which includes, in addition to the usual three spatial dimensions and the time one, also the energy (and its phenomenological variable the energy density both in space and in time).^{2–4}

In fact in the various experiments carried out over the last few years the system has been feeded by power continuously for a limited period of time before the occurrence of such reactions.^{5,6}

For example in the experiment with the liquid after reached the density of energy needed, the system is activated by emitting neutrons and thus showing the initiation of nuclear reactions. These reactions were maintained constant by providing the same energy input from the outside; interrupting the latter the reactions did not cease instantly, but showed a certain inertia.^{7,8}

Other features common to all experiments were carried out:

- existence of an energy threshold for the reactions,
- no gamma-ray emissions,
- emission of neutron bursts asymmetrically both in space and in time,
- change in the atomic weight.

It is also important to emphasize that the DST reactions occur starting either from nuclei naturally stable or radioactive.^{8–11}

The theory of DST reactions provides that can be produced nuclei heavier or lighter than the starting one, in conditions other than the standard reactions of fusion and fission. In this case, in fact, the reaction can be called nucleosynthesis and nucleolysis. To indicate these changes in DST conditions the general expression “*nuclear metabarysis*” was introduced.

2. ORDERING THE REACTION PRODUCTS

In an attempt to predict the products of a DST reaction, the first step is to give an order to the products of reaction of the known experiments.

It is important to stress that as the reaction products were considered only those elements whose presence and quantity was detected by at least two analytical techniques.

The reactions considered are those that occurred in the iron sonicated by ultrasound up to the conditions of space-time deformation. In different experiments were verified the four conditions set out in the first paragraph.^{12–16}

We focus on the study of the reaction products which have shown the change of the atomic weight.

The first approach was to consider the elements reaction products only with atomic number less than 24, since their concentration increases in all the samples examined.

The other assumption is to consider each element present in the form of its most abundant stable isotope in nature.

In $N-Z$ (number of neutrons N –number of protons Z) plane we considered all the straight lines connecting each nuclide to the other.

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