

Abstract

research in the field of nanotechnology and alternative energy

The research project in the field of nanotechnology and alternative energy focusing on the creation and examination of nanostructured composite materials which release internal energy without the process of combustion.

The research title

Creation and examination of nanostructured composite materials which provide release of internal energy during electromagnetic and mechanical interactions

Purpose and aim of the research

The development of the technology to create generators based on obtaining internal energy of the matter under influence of electromagnetic fields of extremely steep gradient as well as development of composite nanomaterial elements, which provide abnormal release of internal energy during mechanical interactions.

The special feature of the process is that the release of bonding energy of electron shells of atoms in electromagnetic fields of extremely steep gradient occurs without waste of energy on ionisation or thermal losses.

We suggest to further investigate the following processes within this project:

- The influence of electromagnetic fields of steep gradients on the substance.
- The breakdown of outer energy levels of the atom – ionisation explosion due to interruption of the phase compensation of the atom and lowering of the potential barrier.
- Packing of atom's electron orbits and the increase of intensity of the electric and magnetic fields which will exceed the stability of these orbits.
- The increase of the probability of K-capture of electron by the atom's nucleus.
- Generation of radio emission and release of internal energy of the substance.

Expected outcomes of the research

We expect to achieve the following results:

– The new technology of creation of 3D nanostructured composite materials will be developed, which provide abnormal release of internal energy as a result of electromagnetic interaction.

– The model of energy converter with the use of multichannel nanograting will be

developed and inspected, which provide base for creation of autonomous heat and electricity generators.

–The technology for creation of constructive parts made of nanostructured composite materials will be developed, which provide abnormal release of energy during mechanical interactions.

The above technology could be applied in various areas including creation of new engines for vehicles, creation of heat generators for the industrial sector, the use in mining area as well as during mine exploration and drilling procedures.

Research director,

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