place in vortical granulators. The affects of different technological and structural parameters on the process of obtaining granulated products are carried out many experimental samples. Different ways of gas stream twirling were examined and its affect on the layer stability was defined.

By means of experimenting, photographing and filming a physical model of diphasic stream interaction within the limits of working cavity of the false boiling vortex layer granulator was worked out. The ways of subsequent improvement of gas-distributing units for providing of constant vortical granules motion were defined.

Using an experimental granulator we got a granulated product. Its test showed that it did not yield a similar product which was produced in a granulation tower.

The vortical layer granulator researches face a lot of problems, but experimental data of obtaining granulated products having particular properties in an involute gas stream show the expedience of introducing of such a devise into production.

ECOLOGICAL ENTREPRENEURSHIP

O.M. Mazna, PhD student

Ecological entrepreneurship (eco-preneurship in short) can be defined as "system-transforming, socially-committed environmental businesses characterized by breakthrough innovation".

Ecological entrepreneurship consists of the identification of a sustainability innovation and its implementation either through the foundation of a start-up or the radical reorientation of an existing organization's business model so as to achieve the underlying ecological or social objectives.

Von Weizsäcker in his book "Factor 4" (1997) suggests 50 case examples for doubling wealth while simultaneously cutting the overall consumption of resources by a factor 4. So the question is: "If all this is so smart, then why hasn't it already happened?" Having a technically feasible solution that creates real customer

value alone is not sufficient. Using sustainability innovations to generate market space requires entrepreneurial spirit and the existence of organizational capabilities that in turn are capable of generating, maintaining, and recombining resources into core competencies. One might presume sustainability innovations to be a recipe for automatic success, but it is not so. It is easy to find illustrative and anecdotal evidence of successful sustainability innovations. However, it would be naïve to think that these examples are representative or will automatically lead to a tidal wave of more sustainability innovations. To be fair, Von Weizsäcker is well aware of the limitations of his case examples, as he explicitly point out in the opening paragraph to the second part of his book:

"In the first part of this book we have described fifty different cases of Factor 4 improvements. The economic turnover that an implementation of these fifty examples could generate is gigantic. And yet there are hardly any stock analysts that pay attention to the efficiency revolution. There seems to be something wrong."

In his discussion of the reasons for this lack of attention Von Weizsäcker identifies market imperfections as a major reason. Among other things he suggests that an ecologically motivated tax reform should increase the cost of natural resources while decreasing the burden on labour by cutting income taxes. While it is true that regulatory change may help to drive sustainability innovations, the findings from different studies suggest that the organisational element of sustainability entrepreneurship is equally deserving of attention. As sustainability innovations move from the informal sector into mainstream markets they need to adapt their management practices. It is towards this end that the following process model for sustainability entrepreneurship can be proposed: opportunity identification → informal sector → market niche → mass market. As organizations evolve from one phase of their existence into another they need to adopt the following organizational attributes: 1) management focus, 2) leadership structure, 3) management style, 4) market focus.

ECOLOGIZATION OF THE INVESTMENT PROJECTS AS THE FACTOR OF PRESERVATION OF AN ENVIRONMENT

O.A. Karpishchenko, PhD student

The crisis condition of natural environment, resource-ecological safety are represented the largest problems of XXI century all over the world. These problems didn't bypass our country: the deep financial and economic crisis is accompanied by ecological crisis, that essentially complicates reaching stable economic increase, definition of effective model of development. Quality of natural environment and continued aggravation of ecological conditions, degradation of ecosystems and natural landscapes, exhaustion of a nature-resource potential, insufficiency of received measures on reproduction of natural riches of country are call the large concern.

Ecologization of investment projects is one of the directions of activity of the enterprises which are capable to result of improving of ecological conditions, beginning with stage of their development.

Ecologization of investment projects represents installation of the balanced relationships between natural processes and investment activity during of development and realization of the investment project because of regularities and laws of development of ecologyeconomical systems.

The modern practice of realization of a various kind of the projects has recognized, that is considerably more expedient to supplement planning and development of the projects by the analysis of effect on an environment, than to ignore this moment and to pay for ecological errors hereafter. Large part of the actual projects are potential sources of contamination, as a rule, negatively influencing on an environment. Therefore careful preliminary planning of the projects can help to minimize and even to prevent a contamination and irreversible changes in an environment. Therefore special attention is necessary to give to correlations between selection of technological process or it's development and potential capability of