

Selective coating

Executive Summary

Project Subject: Selective coating based on aluminum

Entrepreneur: Dr. A. Shlepchenko

Industry: Solar energy

Project Status: Pre-seed

Business Description: Solar energy is considered to be one of the main sources of energy in future when the natural resources of oil, gas and coals are consumed. A number of research groups and industrial communities all over the world are working on the development of technologies for utilization of solar energy.

Product Description: The research group under the supervision of Dr. Shlepchenko is engaged in development of technology of aluminum deposition in low vacuum that produces black coatings with one of the best combination of absorption and reflection coefficients of solar radiation on the Earth surface for construction of high-efficient solar energy collectors.

The main advantages of the proposed technology are its environmentally friendliness, high stability of structure and properties of coatings, and longer life of black coatings, that secures cheaper solar energy for a customer.

The realization of the proposed project in collaboration with consultants from Ukraine will be a very good investment for the international solar energy collector community. Black aluminum coatings with advanced properties have wide market in many countries around the world including the USA where vast territories in south and west have the perfect solar illumination conditions for application of solar energy thermal collectors.