

establishing of special Department of 'Darwinism' for propagation of 'lysenkoism' in VU.

Third, changes in botanical research methodology – this was done by introducing Michurins' hybridization and selection methods. Despite all this, Lysenko's theoretical concepts have not been widely developed.

#### References:

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### UKRAINIAN NATURAL SCIENTIST AND ECONOMIST S. PODOLINSKY: HIS PART IN THE FORMATION OF THE NOOSPHERE CONCEPT

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In 1880 Sergei Podolinsky published in the journal "Slovo" his article "Human Work and Its Relation to the Distribution of Energy" [1]. Engels described the S.Podolinsky's conclusions as a "real discovery". According to V. Vernadsky, S. Podolinsky was "a forgotten scientific innovator"[2]. Podolinsky finished Physics and Mathematics faculty of Kiev University in 1871, and then - Medical faculty in Wroclaw. After some time he moved to London, then - to Vienna and finally - to Geneva. Abroad he had been actively involved in the activities of Russian and Ukrainian revolutionary emigration, including correspondence with Engels.

Podolinsky studied the role of human work in the development of society. He believed that people in the early stages of their development, gained energy from plants and animal products, converting it into mechanical work. Going from hunting and gathering to settled agriculture and the subsequent creation of increasingly sophisticated devices and mechanisms to assist labor, humanity accumulated additional energy, which led to an increase

in efficiency of over 100%. Humans had the ability to advance but also to decline as there were countries that had been rich but had declined due to mistakes in their economic management.

Podolinsky was the first who laid the foundation for environmental and energy concepts and this allows us to consider him as a predecessor of V.I. Vernadsky and I.R. Prigogine [3].

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3. Prigogine I., Stengers I. Order out of chaos. Man's new dialogue with nature. — London: Heinemann, 1984. — 432 p.

### **M. HELD'S KEY OF PHYSIOLOGY (1653) AND THE GYMNASIUM ILLUSTRUM OF KĖDAINIAI**

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Matthaeo Held's work is closely associated with Duke Jonušas Radvila (1612–1655) who was voivode of Vilnius (city warlord)), field hetman of Lithuania, patron of Evangelical Reformers of the Grand Duchy of Lithuania, and whose 400th anniversary of birth we celebrate this year. The work by the title of *Physiologiae clavis, septem res naturales dictas, praestrim corporis humani, reserans, quales sunt, elementa, temperamenta, partis solidae, humores, spiritus, facultates, et actiones, eo fine adornata, ut in quibus sanitas nostra consistat, clarum fiat* / authore Matthaeo Heldio, philos. et medic. Doct. was published at the printing house of Gymnasium Illustum of Kėdainiai by the printer Joachim George Rhet. The printing house was established for the publishing of Lithuanian books and literature for Calvinist schools, and the documents of the Radvila family [1]. In 1625, in Kėdainiai, at the initiative of Duke Kristupas Radvila, a Calvinist school for Lithuanian, Samogitian