

Joint Institute for Nuclear Research

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**Fourth International Conference, Dedicated to
N. W. Timofeeff-Ressovsky and His Scientific School
«MODERN PROBLEMS OF GENETICS, RADIOBIOLOGY,
RADIOECOLOGY, AND EVOLUTION»**

Fourth Readings after V. I. Korogodin & V. I. Shevchenko

**IUR Advanced Research Workshop
«RADIOECOLOGY MEETS RADIOBIOLOGY:
A REAPPRAISAL OF BASIC MECHANISMS OF RADIATION»**

St. Petersburg, 2-6 June 2015

ABSTRACTS

PAPERS BY YOUNG SCIENTISTS

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E. A. Timofeeva-Ressovskaya and N. W. Timofeeff-Ressovsky
(passport pictures). 1927



The day of graduation from high school.
A. Reformatsky and N. Timofeeff-Ressovsky
(on the right). 1918



N. W. Timofeeff-Ressovsky. Germany, 1940



At a conference. Bolshoe Miassovo, 1959



The last lecture of N. W. Timofeeff-Ressovsky
“Problems of biological evolution.” MSU, 1973

ABSTRACTS & PAPERS
about
N.W. Timofeeff-Ressovsky

TIMOFÉEFF-RESSOVSKY'S SCIENTIFIC NETWORK IN THE 1920s-1940s AND THE DAWN OF THE EVOLUTIONARY SYNTHESIS

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Ernst Mayr already pointed to important developments in Germany towards an Evolutionary Synthesis from the 1920s onwards: „Simultaneously, there was a parallel synthesis in Germany, led by Timoféeff-Ressovsky, a student of Chetverikov“(Mayr 1997: 193)

We here show that the efforts towards a Synthesis in Germany began surprisingly early, i.e., in the 1920s in a scientific network that is widely unnoticed by Historians of Science. Centre of the network is, as said by Mayr, Nikolai W. Timoféeff-Ressovsky who was employed by Oskar Vogt in 1925. Vogt, at that time head of the “Kaiser-Wilhelm-Institut-für-Hirnforschung”, had extensive contacts to the Russian scientific community and had been looking for young geneticists to do entomological variation studies. Timoféeff-Ressovsky rapidly established himself in the scientific community of Berlin and cultivated contacts to the most important scientists of the time. Timoféeff-Ressovsky introduced a highly interdisciplinary “Genetical Colloquium” bringing together biologists and physicists of various sub-disciplines discussing topics of genetics, molecular biology, and evolution. An outcome of these colloquia was a series of monographs called “Problems of theoretical and applied genetics and its adjacent areas” by several authors. Preannouncements in the books tell us that there have been further volumes in planning; however, the publication was stopped by World War II. Topics of the planned volumes were, e.g., *Mutation and its importance for selective breeding* (Hans Stubbe), *Genetics of Natural Selection* (Nikolai Timoféeff-Ressovsky), *Geographical and Individual variability* (William F. Reinig), *Genetics and Animal Systematics* (William F. Reinig & Nikolai Timoféeff-Ressovsky), *Genetical interpretation of paleontological facts* (Otto Heinrich Schindewolf). Given the fact that those preannouncements are from 1937 – the publication year of Dobzhanskys *Genetics and the Origin of Species* and five years ahead of Mayrs *Systematics and the Origin of Species* – these plans seems remarkably ahead of their time.

Furthermore the participants of Timoféeff-Ressovsky’s colloquia intended to establish a “Central Department for experimental and biogeographical evolutionary research”– actually, the first and only attempt to institutionalize the Evolutionary Synthesis. Unfortunately, those plans got terminated by the outbreak of World War II. Hence we can not only speak of a parallel synthesis as postulated by Mayr, but it might be that the dawn of the Synthesis was even earlier than in Anglo-American scientific communities, and that Berlin’s scientific infrastructure at that time was an optimal breeding ground for such an interdisciplinary endeavor.