

For the Physicists Nadjakov, Vavilov and Kapitsa

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Abstract. In the review over the mutual relations of Georgi Nadjakov, Sergey Vavilov, and Pyotr Kapitsa by the Stalin's epoch and until Khrushchov are described long range of unknown facts and details with interest for the history of physics.

Keywords: Georgi Nadjakov, Sergey Vavilov, Pyotr Kapitsa

Detailed information for the relations between Georgi Nadjakov (1896 – 1981) and Sergey Vavilov (1891 – 1951) does not exist in the mass media. That is a cornerstone, as these are the creators of Bulgaria as a contemporary atomic energy giant and an object of a big marvelous jealousy all over Europe. We will follow that direction of his contribution carefully. Georgi Nadjakov has had countless personal meetings with Pyotr Kapitsa (1894 – 1984) and only two very formal meetings with Sergey Vavilov. Nevertheless, those two Soviet physicists, Kapitsa and Vavilov, played a central and substantial role for Nadjakov's and for overall Bulgarian energy program.

Sergey Vavilov is a key person who provided the main support for the Bulgarian atomic start. Bulgarian physicists, all engineering staff, leading government and financial persons, and finally all European Community need to know the role of Sergey Vavilov. The exceptional economic effect with growing volumes is the essential starting point. Sergey Vavilov was the strategist for all Soviet Union's defense decisions, but also he was the active factor to all peace initiatives. All this complicate competency and responsibility he carried out as the President of the Academy of Sciences of the USSR. The leader of science in any government system in all ages is the responsible one for whole country development.

The most remarkable thing about Nadjakov and Kapitsa was that they as famous physicists stood against war applications of the uranium. On the other hand, Sergey Vavilov was scientific head of the first Stalin's atom bomb created and exploded in 1948. One of the Stalin's awards was given to him exactly after that experimental explosion for his leadership over all. Of course, Nadjakov has his own contributions for the production of that bomb in USSR, but later he became one of the active opponents of its using against humanity.

The contributions of the physicist Georgi Nadjakov put us in the position to give him all the due respect: financial, moral, ethical, and academic, and still to be permanently in debt. For the person holding such knowledge and making such a contribution our debt is to build a mausoleum of the dignity of the creator of the gift to all of us. Sergey Vavilov is the representative of the Committee of the Defense of USSR for all period of the Second World War, the Great Fatherland War for Soviet Union. Over him is only Stalin. The second edition of Great Soviet Encyclopedia contains all these facts [1]. Stalin was with marshal epaulette. He promoted himself generalissimo later, while Sergey Vavilov stays with very small epaulette as lieutenant or major by the time of the First World War. We have very poor data over his relationship with Stalin. We are in the dark, knowing the last result only. The tragic end of the President of the Soviet Academy of Sciences is the answer. I am

definitely sure that the darkness will become cleared in full one day. My idea is only to acquaint those ones here and now. Tragedy linked up with Stalin is one direction. The creative contribution of Sergey Vavilov and Nadjakov is the other direction. That is of our special Bulgarian interest. I have possibility to debate the exceptional contribution of Sergey Vavilov for USSR and world knowledge using no documents. I will try to reach the bridge joints as motives of the brother's ties with his older brother, the geneticist Nikolai Vavilov (1887 – 1943). The same model of his personality formation is very important also now, because the genetic models of the similarity stay unique with the brothers, with the twins. All is very visible and precisely remarkable for the Vavilov brothers. That identity is not studied in full. My research attention goes in those directions too. We do not have other example in the history of science similar to the Vavilov brothers. In all my previous investigations with that model, I had no chance to find another case like the phenomenon of Vavilov brothers. There is no similar precedent in the past. Vavilov brothers are unique.

Nadjakov is that one who participated first in the French, in the German and late in the Soviet experimental programs regarding to the energetics of the super heavy elements that have military and human projections. He joined the Hitler's project for German atom bomb and the Stalin's next realization. Nevertheless, Nadjakov very strongly engaged himself in the peace activities extremely important now for the all humanity of the world. For his gifts in the pre-war Germany, Nadjakov was elected a corresponding member of the Göttingen Academy of Science in 1940. Ten years after the success of the atomic bomb project of Stalin (1948), higher position was given to Georgi Nadjakov: a foreign member of the Academy of Science of Soviet Union (1958). That is high but real and worthy estimation for him. Let us go back again to Sergey Vavilov. Engineer Mikhail Kalashnikov (born 1919) invented his super automatic rifle, the Kalashnikov machine gun (AK 47) in 1947 [2]. It was produced by super strong steel. The marvelous number of produced guns looks impossible many years after the invention. All Soviet military factories were destroyed by the war but a decade later, it was possible to go in millionaire copying. It is very essential that exceptional qualities of that weapon were personally affiliated to Sergey Vavilov in 1947. The same is valid also for the both tanks T-34 and the big heavy Soviet tank, and the rocket system Katyusha. Hearsay for many spying contributions giving the technology for the atom bomb production by USA, Germany, and Japan definitely must have arrived by fantastic ways over the desk of Sergey Vavilov for comprehensive study. We must search for all facts in those directions there in his office archive. It was his job to direct for additional evaluations by the other nuclear specialists all similar subjects to all apparatuses of all Soviet Academy but the first fingers that touched it were only his, S. Vavilov's. The conditions around Kapitsa are very different. Kapitsa stayed "under key" by the will of Stalin because of fears that Soviet secrets could leak to England where Kapitsa had many friends. Stalin staged here later in August 1942 a specific theatrical play for Sir Winston Churchill (1874 – 1965), which he described in 7th volume of his memoirs.

Other basic direction of leaders, strategic, academic and technology signature that must give to Sergey Vavilov is the total support of the developing the rocket technology. At the

beginning, it has only military application. However, on the Soviet military constructors' brain belongs great engineering solution opened way to the Universe. It starts with development of the rocket shooting system Katyusha and long number additional series of that kind. It goes to great modern spacecrafts. The career of Sergey Korolev succeeded by the period before the self-sacrifice of Sergey Vavilov and definitely must find doubtless interrelations between the both. At the year of the death of Sergey Vavilov in the beginning of 1951, Sergey Korolev was 45 years old – the age for constructive creation of novelty. At that time, Korolev was a secret scientist. The improving of Soviet aviation develops during the presidency of Sergey Vavilov. The reactive and the turbo-reactive fight fighters and the heavy-duty airplanes, the supersonic aircrafts and the helicopters acrobats are set for development by military constructors in his presidential period. The projects for military submarines for defense the water borders of USSR also that time belong to Sergey Vavilov. All pointed very actively no doubt loaded with enormous work for Sergey Vavilov. Nevertheless, stay obvious his editing duty regarding all profile for the drawing up the second edition of the Big Soviet Encyclopedia. That is a fact for the first six books. At the same time, he is a head-member of long number of special magazines and library over physics, optics, theoretical physics, engineering physics, biophysics, and biochemistry and many other additional scientific literature and series. All complications around his responsibility over the duty with the Great Soviet Encyclopedia however, deserve very special attention and detailed review. That side of his scientific occupations of Sergey Vavilov also was never discussed and never become under any attention as for Russian and any foreign historian, science reviewer or politic describer.

I have known the particular fact, as the President of the Academy of Sciences at the Soviet Union shot himself in protest against Stalin dictatorship and in great respect to his brother – Nikolai Vavilov. He founded role of genetics in Soviet science and on all value of the agricultural knowledge all together, – one all Russian giant who dominate all world values. Two brothers to be presidents of the two biggest and different academies happen only in the history of Soviet Union. Sergey Vavilov was the President of the Academy of Sciences in the USSR. Nikolai Vavilov was member and President of the All-Union Geographical Society (1931 – 1940).

The remarkable high evaluation of Nadjakov for Sergey Vavilov is visible with the review over the bibliography of the Soviet physicist. Sergey Vavilov shot himself in his office in the Academy as wrote letter of the reason but even now that letter stay under secrecy. However, not only that his suicide also is not known even between the scientists in Moscow as fact. That is happen early in the morning of 25 January 1951. That suicide stays as protest against the terror and the agnosticism of Stalin. Georgi Nadjakov very fast only two weeks later organizes meeting in memory for Sergey Vavilov in Bulgarian Academy of Science. But not only that he do not reconcile himself, he did not satisfies only with one act of respect and suffering for his honored for the knowledge colleague. In big respect for Sergey Vavilov Nadjakov dedicate a special volume, the first one of the News of the Bulgarian Academy – series physics where can be seen the big contributions by the Soviet

physicist for knowledge by all Bulgarian scientists. However, even that did not satisfy Nadjakov with that his high evaluation over Sergey Vavilov. On 17 and 18 of October, at the same deadly 1951 year for his Soviet colleague, he organized a special two-day academic session for marking of the exceptional contribution of Sergey Vavilov both for the USSR, and for the Bulgarian physics. If we read all four reports of Nadjakov in the professional evaluation for the Soviet physicist make bright impression the high professional opinion for non-jealousy attitude for colleague, to who express respect for the knowledge with that he enriched his science the physics. Nadjakov deeply stay with that side of high appraising. But also with that chain of respect Nadjakov did not pleased himself and did not stops his activities. In his jubilee volume for his social actions, printed 1958 he resumed in single chapter all dizzy role for the physics for his Soviet Union. Nadjakov generalizes: “*The theory for explanation of the physiology of the light belongs to Sergey Vavilov*” or explained by Nadjakov’s level – “*Sergey Vavilov developed the picture of mechanics of light*”. Here I do not want to stops over all small points in the analysis by Nadjakov of the marvels of his colleague. All is very precise and with strong academic power. I can only decide that for the both we have enormousness of the talent. In addition, Nadjakov stay very precise, accurate clear, and correct with all outlining of that oversized toward the knowledge with Sergey Vavilov. I definitely put borders of the meanings between the notion science and knowledge. In the knowledge, consist only positive of new described secrets. In the notion, science very often has elements of delusions toward the knowledge joined with speculations acrobatics and ignorance. Frequently, ignorant people corrupt the science with remarkable aggressiveness directed to rejection of the knowledge. The growth of the civilization memorizes many similar periods as that one. With his own case Sergey Vavilov gave himself as self-sacrifice as evaluation of similar period of stupidity, after which are followed many different lessons. Those lessons are not yet studied. Georgi Nadjakov renders himself in very strange and difficult position in the duty to present levels of the truth regarding the self-sacrifice of physicist Vavilov. All levels of censorship of those years in the past epoch of Stalinism did not gave permit him even to touch the beginning of the reality. However, describing only the permitted professionalism of that scientist, Nadjakov gives evaluation for that “*slippery*” period. Obviously, here exists amazing tragedy for which Nadjakov did not have any simple right to open or to discuss. In our conversations with Georgi Nadjakov, we discussed also that deep imperativeness secrecy over which we continue to stay in debt. Let again transfer our view over Sergey Vavilov. I become in contact with all researchers that study the life, the tragedy and the science actions of his older brother. The geneticist Nikolai Vavilov was recognized as most remarkable in the science and alone Sergey Vavilov recognize him as higher than him. All that tragedy is unique evidence in that direction. In the family circle, Nikolai Vavilov studied also physics and he has in full competency with the level of his brother over all directions of the knowledge. I have similar conclusions by my correspondences with Semen Reznik, Mark Popovskii, Japanese Hitoshi Kihara (1893 – 1986), German geneticist Arnold Sheibe. I have private meetings with Alexandra Prokofieva – Belgovskaya, Georgii Baldish, Anaida Atabekova, Sergey

Diachenko – movie maker who realized the movie “*The star of Vavilov*”, Ali Bakhteev, and Yuri Nikolaevich Vavilov the survived son of the geneticist Nikolai Vavilov. The other son Oleg Nikolaevich Vavilov was killed on time by the will of Stalin.

As a surprise, Yuri N. Vavilov followed the way of his uncle but not of his fathers' way. Yuri was born in 1929. When he was on the age to be university student in 1948 the science of genetics in USSR was rejected. One of all questions that manage excellently Yuri was all clearance over his father. My own connection with Yuri Vavilov starts at the time of my University study. In addition, all with the most specialists over the philosophy of science those have connected over everything with the geneticist Vavilov. Already over 4 decades are all our mutual contacts. However, the details around the motives of the heroic protest against the arrogance of Stalin against the Soviet scientists, and all Soviet people of that great country were possible to reach me with our correspondence with the writer the lonely researcher Mark Popovskii. After my arriving in USA, I found last moments in his life. In 1977 or 1978, he emigrated in USA and there, he published several books [3]. Nevertheless, over the powers that forced Sergey Vavilov to ask and investigate alive or dead the body of his brother I saw in other book by Mark Popovskii. That book was not published, and it was sent to me as typewriting by him in 1977 and finished decade in advance – 1968. I am collecting however facts by other witnesses adding many logical reasons. Mark Popovskii never published his research about Nikolai Vavilov. He traced in the manuscript with perfect details how the head editor of Great Soviet Encyclopedia personally holded him to prepare biographical article for his brother. It was permanently important me to know precisely the date of the death of his brother. In addition, forced for all stay very important not only that – but by himself to clarify all prison period and the last moments with the real cause of his death. Also where is buried the body of his brother Nikolai, name with world importance. He needed to see some prisoners who know his brother, and to investigate all his time as a prisoner and all that he experienced in the prison for his last four years. All people in Stalin's prisons, as Nikolai Vavilov were arrested on 6 August 1940. He suspected without real reason until 25 January 1943 – the last day of the prisoner, martyr and hero treated as criminal. Tragedy of the Vavilov brothers become with classical parameters of heroism. It is evidently, as Sergey Vavilov chooses not accidentally that day for his own life terminating and exceptional as value with merits and great value existence. Life of marvelous intellect who gave own victim's value regarding his brother all known and big scientist. Similar brotherly mutuality is possible to demonstrate with enviable pride by similar statement with choice of the day for that mutuality toward the non-being after large manifestation and big contrast life as have the both brothers. With the unique of that case, all intellectual spaces are loaded with new costs not reached by all past before that freezing reality.

Censorship regarding the article of Nikolai Vavilov was forced against Sergey Vavilov. That article was not allowed publishing. Sergey Vavilov was the head editor but he did not have the right to take decisions by himself. Control of Stalin stayed over him. The name of the geneticist Nikolai Vavilov was not mentioned even once in all 50 volumes of the second edition of the Soviet encyclopedia [1]. However, Nikolai Vavilov was an author of several

articles in the first edition of the same encyclopedia and he was member of the editing staff. With the event with the last word with the censorship of Stalin, stay as crucial main moment as Sergey Vavilov does not have any possibility for protest. Here exist only the own instance. Also in the bio data for Sergey Vavilov, I do not find any data as he has a brother also scientist, and nothing about the family.

It exist some difference between facts. Mark Popovskii offered death certificate for Nikolai Vavilov – dated on 25 January 1943. The reason was “*general weakness and dystrophy*” [3, p. 216]. Mark Popovskii announced in other place, his investigation about the visit of Sergey Vavilov in the prison of Saratov where were the last days of his brother Nikolai – January 1943 and Sergey finished his life exactly on the same day. The two Stalin awards on his lapel open for him the way to the truth for the last days and the circumstances over all that Sergey cleared all with the tragedy with his great brother. There is the brotherly confederate, commensurability, duty, compassion, deepness of relations, big brotherly responsibility, and value of academism, all feelings with duty regarding brother. Mutuality and consensus are the powers that bring the president of the Academy of Science of Soviet Union to have all pictures in the prison how the ex-President of the Soviet Academy for Lenin Agricultural Sciences, Nikolai Vavilov, died. Sergey Vavilov as brother and president of more Academy of Sciences of USSR stayed in the full duty to have all the truth. It definitely was regarding other academicians.

I do not have correct details over what was happen in that visit of Sergey. I can logically coordinate the facts and all circumstances to generalize and outline the picture of the inquiry performed by Sergey Vavilov in the prison of Saratov. I imagine all that staff of officers and all security guards in that prison as participants in the same and the witnesses of the death of the geneticist Vavilov between them. On the top of it, among all them has to be also that single one whose dog has killed that great prisoner. Here comes my duty to add some other facts.

The death rate between the prisoners stay very big and the dead bodies of them have composed in big open trenches many body altogether. By that reason, the body of the geneticist Nikolai Vavilov was impossible to identify. Years ago, the magazine “*Paraleli*” publication of the Bulgarian Telegraph Agency was the most interesting between the Bulgarian presses. The head editor was Stephan Prodev, the one actual and able journalist. I have perfect respect to him. That time I was a director of the youth House in Blagoevgrad and it was my idea we all together to have several meetings in Blagoevgrad and in all district area also. At that time, the journalists were hired by very special way. I gave a speech about the social and the cultural and the political duty of that youth House as we were with activity in all district area under the Young Communist League program. My work as a manager and technical assistant to the political activity was under the supervision of the district Committee of the Communist Party. The magazine, “*Paraleli*” as I already mentioned had big authority and was preferred by all for reading. It is not difficult to remember about that interesting period in June of 1978 when I published an article in that magazine about our activity. At that time, many questions were directed to me as a director and were given to

my professionalism. I satisfied them as describe as I do some research projects with wide profile of interest and attention. Over my desk were big stack of papers, letters, clippings, cuttings, photography books and many was received from Soviet Union, USA, Germany, Japan with facts over the genetics, about the happen with Nikolai Vavilov and for the seven years research period of the Bulgarian geneticist Doncho Kostov in the Academy managed by Vavilov. My special moment forced one of the journalists by the group with Prodev to advice me as to touch the Vavilov subject will be dangerous for me. “*I react immediately – Why?*” In addition, to me has given answer. Those journalists receive professional training in Moscow under that Soviet journalist who at the time of the death of the geneticist Nikolai Vavilov has position in the convoy who forced Vavilov to go in his last provision expedition. All activities of Nikolai Vavilov as researcher and collector of seeds by all-important plants for cultivation and with economical interests have known in the world news. Realizing his programs Vavilov traveled all the continents and executed very non-believable activity for about 10 years.

At the time of his prison stay in Saratov the agronomist Vavilov did not stay without ideas and realized potato production around the fields of the prison. He used all prisoners and the administration for big initiative for food production at the summer time. The activity of Nikolai Vavilov was all organizing around the prison in the fields around as plantation with potatoes, which was the main food for the prisoners, for the administration of the prison and for the families of the prison officers. At the morning of 25 January 1943 all Saratov’ production was covered with snow and ice. It was a freeze winter. Yet by the early autumn Vavilov organized all potato production to be collected in special ditches inside with freezing protection and covered with boards, grass and soil in about 5 meters in the land. At each time when they needed to load the storage in the prison, they went in special convoy for all potatoes, which were transported in bags, loading by the range of prisoners. Every time the constructor and scientist Vavilov led that lane. He also knew the statement of any ditch and the quantity inside. Every time he was the first of front of the column. That column is in about 100 prisoners and about 50 guards with dogs on chain. If some prisoner tried to run, to escape before shooting was realizing the dogs. The dogs attack the throat and the blood stay charming. One dog attacks the legs for throwing down the running one, the other one bite the neck.

Very often exist reality as some prisoner in the snowing and ice slippery steps had tripping and that bad chance was accepting as attempt to escape and run and the dogs were realizing to take a portion prisoners blood. By that technology one prisoner less on the table for food, stay preferable. In his four years as a prisoner, Vavilov was watching by that way many death prisoners. Zeki was the Russian jargon for them. Prisoners used shawls by fat leather to save the life in the slippery way. In the day of his death, say my speaker from “*Paraleli*”, the fat skin shawl was stolen and the geneticist went in his last expedition without that his last chance. In his way he fell, the dogs realized it, and the picture in 25 of January was never documented in the way of the truth. After that to be sure it is death, the

body of the dead person took shot and probably stood long time in the winter field. The hands of all other were busy but someone took the Vavilov's potato bag.

In the opinion of Nikolai Vavilov, he evaluated the alive human. The person was able to produce food for another hundred people. The dead person could not eat the prisoner's can of soup was the savings by him. To be possible for the next summer to produce bigger quantity of food Vavilov needed more people to survive through the summer. However, the guarding people in the prison had other philosophy. If someone died, for the living ones there was really more food on the table. That was why the guards supported the dying idea and reality conversely of the human logic.

At his analyses, Georgi Nadjakov did not forget the important meaning of the book by Sergey Vavilov for the British physicist Isaac Newton printed on the top of most terrible military for USSR – 1943 year. There was something important here. At 1951 Nadjakov, did not have the possibility to know the details over that book for Newton. That book was translated into English and published in Germany the same year of the death of Sergey – 1951. That was a basic and deeply fundamental review over that first physicist and evidently, Sergey worked over Newton decades before.

August 1942 after request by Stalin to the King of Great Britain George VI and to the American President Franklin Roosevelt (1882 – 1945) in Moscow came the representative as of GB and USA at the same time Winston Churchill. Stalin asked Western powered to open, as soon as possible, the war front against Adolf Hitler (1889 – 1945). By the published data, it was very possible Sergey Vavilov was a member of the team of Stalin, which took part in conversations with the British premier. In the quality as the most competent one over all military technology, full war readiness in all directions all weapons, defense, attacks, all conditions of all military directions was mandatory Sergey Vavilov to stay by the right side of Stalin. Winston Churchill did not mention at his memories about the people around Stalin. That time most important was the singing the “*Great alliance*” against Hitler's Germany. In addition, most remarkable was the fact as Stalin as brainless one gives for nothing the technology of manufacturing the rockets to Winston Churchill as naïve and arrogant treachery. That was the model of Stalin's cretinism. That time the big secrecy was the rocket system Katyusha. In that side as witness and partner I accept as Sergey Vavilov have to do, some own opinion and we do not know any point over that story with the treason by Stalin. Sergey Vavilov evidently created his position in the British affairs in other different way from Stalin. This was in very academic manner with his book over the great English founder of his science. Probably for that reason for less than six months after Churchill's visit in Kremlin, the book was printed in 1943, and translated in English later on. I can finish that review with the hope to have spark to continue that interest as in Moscow and in Sofia, by other researchers who armed with the responsibility over the truth and the values in the time and they to offer most precise and accurate answer over the declared at the beginning “*non-documented evidences*”. However, Georgi Nadjakov with all his knowledge, competency as participant and witness over many processes based over his own high professionalism to become active initiator for the correct evaluation of the President of the Soviet Academy of

Sciences and my central attention stay here. We do not have deeply clearness over all connected with Nadjakov but all stay very essential and actual. With similar study, many other white spots will be painted for knowledge and processes in the periods in the past and for his leading role with the creative construction of the science with perspective technologies. It is my duty to clarify as the contributions of the educated and the able people are that who realized the developing of the civilization. Some of them become victims. Financial results of that colossal energetic complex realized by Nadjakov offer big dividends up to now. That must work on benefit to the science. We have to mention the right of inheriting of his family members in that reality to be partners and to have voice and percentage by all his economical effect as result. I do not know government institutions to invite the daughter of Georgi Nadjakov to have duty to respect the authors' rights and to save the inheritance rights of her father.

My attempt a post stamp for the electrical energy and all contributions of Georgi Nadjakov to be printed was unsuccessful. One post stamp as stay in use over a decade is possible to offer credit for many other scientific projects to have financing and much other direction of the knowledge science and capability. However, the main contribution as resulted success is real. The energy obtain, as moneymaker must give big quantity of sources for bred to the Bulgarian Academy of Science. For my big astonishment, no one understands that unique statement with the merits of Nadjakov.

My private role over the research regarding the exceptional place of the physicist Georgi Nadjakov is very nothing. In one of our meetings he gave me his two jubilee volumes with autographic righting where is readable – “*To Iskren Azmanov from Blagoevgrad for good memory – date 24 October 1978*” and his signature. On the photography handled to me, he writes again by his hands – “*To Iskren Azmanov with thanks and wish to see him scientist*” – 24 October 1978. My impressions by Georgi Nadjakov, which roots is coming by the old Gorna Djumaya, now named Blagoevgrad, are deep respect toward his creativity as a great contributor to the science and the social life. I am greatly satisfied with some even very small but also did speak for the popularity and his prestige of that eminent erudite.

The physicist Kapitsa realizes big collaboration with the Serbian scientists in Belgrade in 1966 and he visited personally the Adriatic seaside and at that period have possibility to evaluate many advantages there with comparisons toward Italians goods. That time, September 1966, Kapitsa visited Tito and he was elected as a member of the Serbian Academy of Sciences and Arts in Belgrade in 1971. He was awarded with the decoration “*Yugoslav flag*” with bends in 1967 for his great contribution for the Yugoslavs nuclear energy program. Pyotr Kapitsa also did important jobs for the history of science and he was awarded because of this in 1971. At the same time, he was also elected as a member of the International Academy of History of Science in Paris. In Belgrade Kapitsa have a friendship with Pavle Savich by the *Institute of Nuclear Physics*. Here is correctly to mention that the boss of Yugoslavia – Yosip Bross Tito and Kapitza have together Jewish roots. Kapitsa was also awarded the Nobel Prize in physics (1978). I can express my regret as Nadjakov never

met understanding by the governors through the past years and that Kapitsa could not be his guest in Sofia.

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