

The 2002 Report on Dmitry A. Kuznetsov is in two Parts:
Part I: The imaginary scientist. (A biography of Kuznetsov up to 2001.)
Part II: The Kuznetsov dossier. (The evidence of scientific fraud in papers from 1989 to 2000.)
The original Report was published in Italian in 2002.

Part II

The Kuznetsov dossier

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Notes marked with asterisk have been added in 2012.

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Foreword

I present the results of an inquiry I have conducted about presumed cases of fraud in experimental reports published by the biochemist Dmitry A. Kuznetsov. It shall always be understood that when speaking of a possible fraud, we refer only to what is defined as "scientific fraud", i.e. a behavior that, save for exceptions, is not liable to criminal prosecution. (1)

(1) A typical example of scientific fraud is just what we are considering: the publication of experimental data which are false or fictitious. This behavior is professionally unethical for a scientist but is unlikely to violate any articles of the penal code. Who is guilty of scientific fraud risks in terms of his career as a researcher, but shall not appear in court.

This dossier is divided into three sections which deal respectively with a paper of 1989, a group of papers of 1994-96 and a paper of 2000.

For the first section, the fraud had already been discovered by Dan Larhammar; I added some details. For the second and the third sections, the evidence is here presented for the first time, although, as we shall see, for an episode (Protvino, §2.1.3) a fraud had been foreshadowed, but not openly expressed, by Timothy Jull and colleagues in 1996. All the information, unless mentioned otherwise, was collected by means of correspondence exchanged between late 2000 and early 2002 (for the most part, within the first months of 2001). The names of all the persons who have collaborated are indicated.

The signs of fraud are based on evidence of a negative type, i.e. on the non-existence, for example, of certain scientific journals, or persons or institutions. Of course it is difficult to provide a negative evidence. I did my best in order to achieve a reasonable level of evidence, but we have to consider that, before reaching a final judgment, we need to hear what Kuznetsov has to say in his defense.

In 2000, for a short period, I was in correspondence by letter with Kuznetsov. When I began to tell him my first suspicions and to ask for explanations, he did not reply. He never replied to the letters I continued to send over a few months, as I discovered new clues. I hope that he will emerge

from silence, and of course this magazine will host his replies if any.

The allegations made here are very serious, such that, if proven true, they would jeopardize the possible continuation of a scientific career for Kuznetsov. We do not fear to cause him any unjustified damage. In fact, if the allegations are unfounded, it will be very easy for him to clear himself. He can always provide an explanation and it will be sufficient for him, for example, to produce photocopies of the front page of certain papers, or to give the (full) addresses of certain people or certain institutions, so that their existence can be verified.

The papers of 1994-96 are signed by two other authors, Andrey A. Ivanov and Pavel R. Veletsky. I could not get in touch with them. The first name in all articles is always Kuznetsov and then in the following text, for simplicity, I refer only to him but it is understood that the other authors share any responsibility.

In addition to evidence of fraud, I have considered, for each of the three sections, the data provided by Kuznetsov for his affiliation, for to financiers and for the advisers. Here also there are false or ambiguous data.

I then tried to figure out how he was able to have such papers published in scientific journals of primary level. Apart from a couple of cases, I could not shed light on the background of the publishing history, which as a rule is covered by confidentiality

I have examined only a fraction of the papers which have been published by Kuznetsov. He has had two careers as a scientist, first as a biologist, specializing in neurotoxicology, then as an expert in archaeological chemistry, specializing in ancient textiles. As a biologist, he has published some thirty research papers in English in qualified journals as well as many others in Russian. Only one of these papers is here considered (in the first section), and it is the only one that stands out for its claim to bring evidence in favor of creationism. As archaeological chemist, he has published ten research papers in English, all of them considered here (in the second and third section).

Kuznetsov has also been active in two fields, so to speak, of unconventional science, first as a creationist and then, only to a certain extent, as a sindonologist ("sindonology" is a pseudoscience that tries to demonstrate the authenticity of the Shroud of Turin as the burial linen of Christ). I have not considered his publications in the journals of the creationists nor the few things that appeared in those of the sindonologists. According to his curriculum (2000), he has also taken interest in the philosophy of science and has published at least three books in Russian on various topics. I have no idea of how many of his publications are reliable and how many are fraudulent. However, when a scientist is guilty of cases of fraud as serious as those presented here (if proved), his entire work might better be considered as suspect.

Section One: The missing library

§1.0 The paper under examination is:

[[1] D.A. Kuznetsov: "In vitro studies of interactions between frequent and

unique mRNAs and cytoplasmic factors from brain tissue of several species of wild timber voles of northern Eurasia, *Clethrionomys glareolus*, *Clethrionomys frater* and *Clethrionomys gapperi*: A new criticism to a modern molecular-genetic concept of biological evolution". *International Journal of Neuroscience*, 49 (1989), 43-59.

The paper describes a complicated and, I would say, somewhat confused experiment of molecular biology on the brain cells of voles (small mice). It attempts to demonstrate that in the cells there is a mechanism of selective inhibition of protein synthesis, capable of blocking the expression of those genes that have undergone even a small mutation. Since the mutations in the genetic material are at the basis of the evolutionary process in a Darwinian sense, the presumed result might be interpreted in a manner favorable to the creationist theses.

§1.1. Evidence of scientific fraud

Several times in the course of the article, Kuznetsov says to have followed experimental procedures which he does not describe and for which he refers to publications listed in the bibliography. In fact it is usual for an author not to spend space to describe procedures for which he can refer to the literature already published. But here Kuznetsov refer to non-existent publications: there are not the papers and sometimes there are not the authors and not even the journals. Therefore it may be doubted that he has performed experimental procedures according to methods described in publications that do not exist. Many other entries in the bibliography, although not essential for the execution of the work, are anyhow invented.

The bibliography lists 65 references. Most of them refer to journal papers. I checked if the magazines and articles are present on PubMed, a large electronic archive of medical and biological literature (available online).

Out of a total of 53 journals cited in the bibliography, only eight are present in PubMed. The other 45 are absent. Of course, PubMed does not list all of the journals in the biomedical field that are published in the world, but it has thousands of them, and all the most important. The absence of 45 journals out of 53 is difficult to explain..

Among these 45 missing journals, there are 11 that were already reported in 1994-95 (eight by Dan Larhammar and three by Paul Nelson), (2) and Kuznetsov has never provided any proof of their existence nor has spent a word in his defense. (3)

(2) Of the role of Larhammar we have told in Part I, §2. As for Nelson, he published a note in a creationist magazine, *Bible-Science News*, 33 (1995), 15-16. Nelson writes me that at the time his attempts to get in contact with Kuznetsov for an explanation were fruitless. As with other creationists and as with Larhammar, the Russian was nowhere to be found.

(3) Kuznetsov should have been quite interested to defend himself, because as a result of the scandal he ended his career as a creationist. The creationist organizations dropped him when the news of the fake bibliography was spread by the

skeptics organizations. We have already seen in Part I that Larhammar published an article in the *Skeptical Inquirer* in 1995 ("Severe flaws in the scientific study criticizing evolution", Vol 19, No. 2). In the same year, the journal of the Australian skeptics, *The Skeptic*, published two articles on the matter (Ken Smith, "Creationist's chicanery Exposed", Vol 15, n. 1. Steve Roberts, "The Strange mind of Dr Kouznetov", Vol 15, n. 3). In America there were skeptics, like James Lippard or Richard Trott, who wrote of it in their websites. (Lippard informs me that criticism also appeared in publications of the National Center for Science Education, which I have not seen.)

In the articles by Roberts and Smith, we read that the Australian skeptics had already targeted Kuznetsov in 1991, when he went to Australia for a well-publicized lecture tour on creationism. It was then discovered that in his curriculum he stated that he was on the Editorial Board of three journals, two of which were not found to exist (the third one was the *International Journal of Neuroscience*).

As to the eight journals which do exist, there are three for which the papers (four in number) are correctly indicated, or nearly so. For a journal I could not control, because the date of publication of the paper was too far back in time. For four journals (five articles) there is no correspondence between the numbering of the volume as indicated by Kuznetsov and the actual numbering for the respective years of publication. For one paper, there is no indication of the journal.

The remaining nine references are not to journal papers but to books (or volumes of conference proceedings), Also most of them do not seem to exist. In some cases we remain puzzled by the strange titles of the books.

It can be concluded that, for the most part, the publications listed in the bibliography do not exist. (3*)

(3*) Today (2012) the control of the bibliography is easier because lately many papers, also from several years back, have been put online and most journals have a searchable archive on their website with the contents of the old volumes. Therefore it is possible to search directly with Google and Google Scholar. I have repeated a check of the bibliography of this paper [1]. The result is that out of 65 references, I have found only 6 which surely do exist. Other 12 seem to not exist but I cannot be sure because, even if the titles are always given by Kuznetsov in English (and the Russian names are transcribed in Latin alphabet), for these papers the original titles might be in other languages, especially in Russian, and a control is difficult. In other two case I think I have identified the papers but Kuznetsov has given some wrong data (in one case the name of the journal, the volume and the year are wrong; in the other case the title of the paper is similar but somewhat changed and the initials of two authors are wrong).

When inventing the titles of articles or books (which most of them should be in English in the original), Kuznetsov sometimes chose strange expressions, and he also made errors of grammar (as Larhammar had already noted). In particular, he repeats several times the same error in using the indefinite article. In the Russian language there are no articles and perhaps Kuznetsov had difficulty in making a proper use of the articles in English. He thinks that the indefinite article, "a", can serve both the singular and the plural (as the definite article "the"). So in the bibliography he repeats errors like the following:

- "regulatory funcions of an untranscribed DNA sites"
- "purification of a highly immunogenic sites"

- "purification of a highly immunogenic Fab-sites from the specific antibodies to a ribonucleic antigens"
 - "dimensions in a presumable types"
 - "most part of a frequently distributed DNA sites"
 - "genome activity in a main taxonomic groups of the modern mammals: a general regulatories"
- and so on.

§1.2. *Affiliation*

For most of the papers he published in that period (late 1980s) as a biologist, Kuznetsov gives the affiliation to the "Moscow City Station for Sanitation and Epidemiology" (we may use "City Station" for short). In the paper [1] we are considering, he gives a different affiliation: "Comparative Biochemistry Group, DELFISON Division Laboratories, Inc., Moscow Central Narcological Hospital" with its street address.

I have written to this hospital. Its director, Yury Shuliak, says that the hospital had tested a "Delfison" method as part of a program for the treatment of alcoholism that was active between 1986 and 1990. He adds that there is no documentation of a presence of Kuznetsov as a member of the hospital staff in the past nor today. Needless to say, the subject-matter of paper [1] has nothing to do with the treatment of alcoholism.

It should be noted that, in a footnote at the bottom of the first page of [1], Kuznetsov indicates that the requests of reprints should be sent to his private home address. (3**)

(3**) I cannot exclude that Kuznetsov had a brief and temporary collaboration with this Narcological Hospital and that after more than ten years the director could not find a documentation. However in that period, 1989-1990, Kuznetsov gave a strange succession of affiliations. In a 1989 paper that was published in the same issue of the journal immediately before paper [1], Kuznetsov gives two affiliations, to the City Station as usual in the previous few years, and to the Narcological Hospital (without mention of "Delfison"). Then in 1990 he introduces two new affiliations, both in Moscow. One is "Laboratory of Biochemistry and Cell Biology, Medinvest Joint Venture". The other is "LaserInvest Ltd., MCU-Plus Joint Venture". Searching the Internet, I have not found any trace of these "Joint Ventures", at least with the English words. In the detailed curriculum that Kuznetsov sent me in 2000 there is no mention of Medinvest or LaserInvest.

In a curriculum he distributed among creationists, ca. 1990, Kuznetsov wrote:
 «Current Occupation: one of directors of LASERINVEST Inc., research company which is joint venture between Russian, Indian, and UK cosmetological research companies (head of biochemical lab in Moscow). Also, head of Division of Science of The Protestant Christian Publishers, Inc., Moscow, USSR.»

§1.3 *Financers*

The names of the financers are quite unusual for a scientific work. At the end of the footnote on the first page, Kuznetsov writes: (4) (5)

«I am especially, deeply and sincerely grateful to the Moscow Baptist Church and the Slavic Gospel Association, IL, for supporting most of our research program. In part, I am gratefully indebted to Dr. Henry Morris and Mr. Eugene Grosman for concrete participation in supporting our program.»

(4) At the time, there already was a Baptist church in Moscow (with American ministers). The Slavic Gospel Association, which had been founded in America in the 1930s by a Russian emigre, was devoted to the evangelization of Russia and other Slavic countries. At the Slavic Gospel Association they printed the Bible, translated into Russian and other local languages, and distributed it by millions of copies. In 1983 they printed in ten thousand copies the first Russian translation of a creationist book (by Henry Morris). It was the reading of this book that caused the "conversion" of Kuznetsov to creationism (or so he said).

(5) Henry M. Morris has been deemed "the father of modern creationism". He devotes himself to it since almost half a century. (5*) He founded the Institute for Creation Research, of which today he is President Emeritus. He earned a Ph.D. in hydraulic engineering, which helped him to invent a new peculiar branch of hydrodynamics, that is the study of how the flow of the waters of the Biblical Flood modeled the surface of the Earth as we see it. He wrote some fifty books and countless articles.

Eugene Grossman (or Grosman) is a Russian who, even before Kuznetsov, made his own choice and became a Baptist and a creationist. He emigrated to America where he was active in the creationist circles and in particular worked for the Slavic Gospel Association. It was he who in 1983 translated into Russian the book by Morris that converted Kuznetsov. In recent years, Grossman has returned permanently to Russia.

(5*) Henry Morris (1918-2006) has since died. You may read obituaries for example here:

[http://community.seattletimes.nwsourc.com/archive/?](http://community.seattletimes.nwsourc.com/archive/?date=20060305&slug=morrisobit05)

[date=20060305&slug=morrisobit05](http://community.seattletimes.nwsourc.com/archive/?date=20060305&slug=morrisobit05)

http://www.utsandiego.com/uniontrib/20060301/news_1m1morris.html

§1.4 *Advisers*

In the same footnote Kuznetsov writes:

«The Author is greatly obligated to Prof. Leonid Korochkin (USSR Academy of Sciences Institute for Developmental Biology) and Prof. Kirill Gladilin (USSR Academy of Sciences Institute of Biochemistry) for their helpful remarks and participation in the discussion of the data; I am extremely grateful to Prof. Dr. S. Weinstein (NeuroCommunication Research Laboratories, Inc., CT) for his kind interest to my work and useful criticisms.»

Leonid I. Korochkin is a biologist and for his illustrious academic career is the most prominent among the members of the creationist association that was founded by Kuznetsov in Moscow. (5**) I do not know if also the other name, Kirill Gladilin, was of the group.

(5**) Leonid I. Korochkin (1935-2006) has since died. From the scarce information I have, it is not clear how much he was involved with creationism. He wrote about the Christian religion and the Bible and expressed some criticisms towards aspects of Darwinism, but it seems that certainly he was not an outspoken "Young Earth Creationist". However he was among the speakers (at least) in the second Moscow International Symposium on Creation Science in May, 1994, where Kuznetsov himself was a speaker.

Kuznetsov thanks also Sidney Weinstein, the editor of the journal. Perhaps today Weinstein would prefer not having been mentioned.

§1.5 *Publishing*

The qualified scientific journals, as is known, adopt strict criteria for publication and adhere to so-called "peer review": each paper must have the approval of (at least) two referees chosen by the Editor of the journal for their expertise in the specific subject. A paper like this one by Kuznetsov, when examined with competence (as was done by Larhammar) would hardly get the approval of a reviewer. But Kuznetsov could do without the refereeing procedure: in practice, he acted himself in the role of editor. Indeed Sidney Weinstein, the Editor-in-Chief of the *International Journal of Neuroscience*, had known Kuznetsov and been positively impressed, so much that he appointed him as a member of the Editorial Board of the journal. Weinstein explains in a letter to me:

«As for how such nonsense got through the reviewing process of the *IJN*, I must sadly tell you that we have had two other instances of plagiarism during the decades of my tenure as Editor-in-Chief on the journal. (...) In my more than fifty years of experience in science I have learned that we are not entirely immune from such sociopathy. We must therefore continue to be vigilant, and I am grateful to Professor Larhammar for discovering this fraud and exposing it. Kuznetsov had been very highly recommended by professors in the USA, who were quite familiar with his former, presumably valid, scientific work and publications, and he was therefore appointed to the board. Our policy has been to allow board members to secure only one other reviewer in addition to themselves, to review any paper they submit. Apparently, Kuznetsov either found one of his nonscientist "creationist" colleagues, unknown to us, or merely avoided getting another reviewer. He was dismissed immediately from the *IJN* as soon as we learned of his malfeasance.»

How could the young Kuznetsov, just over thirty years of age, lacking an academic position and without a prestigious career, deserve to be appointed to the Editorial Board? Now Weinstein, as we have seen, justifies himself by saying that certain American professors, whom he does not name, had spoken so well of his work as a toxicologist. This may be true. Perhaps one should also consider the possibility that Weinstein, to some extent, had been the victim of what seems to be an outstanding talent of Kuznetsov: his captivating ability to gain the confidence of other persons. (6)

(6) It was Weinstein who opened the doors of America to Kuznetsov (it was around 1988, but I do know the exact date). I quote from a 2001 letter of Weinstein to "Atheologian", the pseudonym of a Russian correspondent we shall meet again. The letter has been published by Atheologian. Weinstein writes:
«[...] we had been corresponding while he was in the USSR about scientific matters in the *IJN* and he told me that he could not go to the USA unless he was invited by a scientist to visit his lab. So, I invited him and picked him up at JFK airport and he stayed at my house for some seven weeks. I took him to my lab, and brought him to the Baptist Church where he contacted the minister and was invited for dinner, etc. He told me he was a Baptist. I also put him in contact with a scientist at Valhalla (part of NY Medical College) who did research on neurotoxicology, and he got along quite well with them. I also got him in contact with some officials of the Catholic Church and he conducted some research on dating the Shrine [Shroud] of Turin for them. I also helped him get a checking account at the bank in Ridgefield, Connecticut where he kept the money provided to him by the church. He did often visit my lab in Danbury, Connecticut and became acquainted with my staff.»
Weinstein and Kuznetsov remained in contact for a few years, it is not known how long. Weinstein writes me that he does not remember the exact dates, as can be understood. In a letter he has written, he refers to the fact that Kuznetsov explained him his work on the dating of the Shroud and showed him articles with the discussions that had ensued. This had to be not earlier than the end of 1993, close to the epoch of the intervention of Larhammar.

One might think that perhaps Weinstein had sympathy for creationism, which would explain a preferential treatment to Kuznetsov. In fact it seems that Weinstein was not connected to any creationists circles. He was later made a Knight of Malta (and therefore signs with a "Sir" before his name and adds the initials "O.S.J.". Order of St. John). This is not the most famous "Sovereign Military Order of Malta" based in Rome at the Vatican, but another similar Order, probably based in England. It does not seem that this Order has anything to do with creationism.

If Sir Sidney had been too lenient towards Kuznetsov, he has then redeemed himself when in 2001, as we have seen in Part I (§6), has perhaps contributed to mess up the collaboration of Kuznetsov with the Russian Secret Service. (6*)

(6*) Sidney Weinstein (1922-2010) has since died.

Kuznetsov published a total of nine papers in the *International Journal of Neuroscience* between 1987 and 1990. I do not know how many of these were published while he was on the Editorial Board. The paper [1] is the sixth in the series, so at least three others papers were published after he had been appointed to the Board. It may be noted that in his curriculum (2000) (7) Kuznetsov omits to include in the bibliography the last five papers in the series, all those which appeared in 1989 and 1990. These five papers amount to a total of 130 pages. Perhaps it would be interesting to examine the other four papers of this group. (7*)

(7) This is the curriculum that Kuznetsov himself kindly sent me in 2000. He sent a photocopy of a file printed from the computer, with the addition of some handwritten notes, for a total of ten pages. The printed text is updated to the end of 1998 or to 1999. The handwritten additions were added at the time of sending me in October 2000. The bibliography contains 57 references (36 in English and 21 in Russian) from

1978 to 2000.

(7*) I have recently found that the bibliographies (not the full texts) of these papers are freely available on the Internet (by searching in <http://informahealthcare.com/journal/nes>). These four papers count a total of 345 references (including possible repetitions). It will take some time to check all of them but I have already found a number of wrong references.

Section Two: The invisible palaces

§2.0 The papers of 1994-1996 are nine in all, but they amount to only three experimental works because Kuznetsov has repeatedly published the same results in different journals. Everything contained in the nine papers is present, for example, in the following three:

[2a] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky: "Analysis of cellulose chemical modification: a potentially promising technique for characterizing cellulose archaeological textiles". *Journal of Archaeological Science*, 23 (1996), 23-34.

[3a] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky: "Effects of fires and biofractionation of carbon isotopes on results of radiocarbon dating of old textiles: The Shroud of Turin". *Journal of Archaeological Science*, 23 (1996), 109-121.

[4a] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky, V.L. Charsky, O.S. Beklemishev: "A laboratory model for studies on environment-dependent chemical modifications in textile cellulose". *New Journal of Chemistry*, 19 (1995), 1285-1289.

Two further versions of [2a] are:

[2b] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky: "Detection of alkylated cellulose derivatives in several archaeological linen textile samples by capillary electrophoresis/mass spectrometry". *Analytical Chemistry*, 66 (1994), 4359-4365.

[2c] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky: "Analysis of cellulose chemical modification: a potentially promising technique for characterizing archaeological textiles". In Orna, M.V., ed., *Archaeological Chemistry*, American Chemical Society Symposium Series, 1996, 254-268.

In [2b] a final section (with the experiment on the textile samples from Samarkand) is lacking.

The other two versions of [3a] are:

[3b] D.A. Kouznetsov, A. Ivanov: Chambéry fire of 1532 as the unique event in the "chemical history" of the Shroud of Turin: An experimental approach to the radiocarbon dating correction". *Acta Archaeologica Academiae Scientiarum Hungaricae*, 48 (1996), 261-279.

[3c] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky: "A re-evaluation of the radiocarbon date of the Shroud of Turin based on biofractionation of carbon isotopes and a fire-simulating model". In Orna, M.V., ed., *Archaeological Chemistry*, ACS Symp. Series, 1996, 229-247.

The paper [3c] is somewhat shortened but presents the same results.

Moreover there is a paper [3d] which is a brief preliminary note that was then incorporated in the other three papers [3abc]:

[3d] D.A. Kouznetsov, A.A. Ivanov: "Near-IR spectrophotometric technique for fast identification of carboxycellulose in linen fibres: A preliminary report". *Textile Research Journal*, 65 (1995), 236-240.

We may ignore [3d] because within its contents there is not the evidence of fraud which has been found for the other papers.

Lastly, [4a] has an equivalent in:

[4b] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky, V.L. Charsky, O.S. Beklemishev: "A laboratory model for studying environmentally dependent chemical modifications in textile cellulose". *Textile Research Journal*, 66 (1996), 111-114.

All papers are experimental works, mainly devoted to the study of chemical alterations in the cellulose of linen textiles. In [2abc] a modification (alkylation) is studied which intervenes by aging. Papers [3abc] report, among other things, the experiment which made the sindonologists happy: an old linen sample of the epoch of Christ, was placed in an oven for a short time to simulate the fire in which the Shroud was involved in 1532. It was carbon dated before and after the cooking and the linen appeared rejuvenated by a dozen centuries as a consequence of heating. That is, there would have been a significant alteration in the isotopic composition of the carbon atoms contained in the cellulose (an unlikely outcome). In [4ab] we find still an alteration (equally unlikely) of the isotopic composition of carbon, this time due to the action of microorganisms present in the atmosphere. The work in [4ab] is carried out in parallel in two different geographical areas, at great distance, to compare the effects of a different flora of microorganisms (the hypothesis is also advanced that studies like this one might permit to determine the geographical area in which an ancient textile has spent a long time, with possible implications, even if not explicitly stated, for history the Shroud).

Only the papers [3abc] make direct reference to the problem of the dating of the Shroud of Turin. All papers, however, fit into a general perspective in which the studies on the Shroud might be included.

§2.1 *Evidence of scientific fraud*

In papers [2abc], the work as described was carried out on samples of ancient textiles from certain museums. It turns out that these museums do not exist.

In [4ab], one half of the work was performed at an institute in southern Russia. It turns out that the institute does not exist.

In [3abc] and [4ab] measurements on carbon isotopes were carried out in a Russian institution that does not seem to exist, and employing a method that does not seem to be in use in any laboratory in Russia.

In order to verify the existence of museums and institutions, I sent letters to many people in Russia and other former Soviet republics. My correspondence was only in English, and this may explain why many letters have gone unanswered. However I have found numerous correspondents who have provided useful information.

The evidence I have collected is expounded in the following sections.

§2.1.1 *The museums*

In [2abc] Kuznetsov describes experiments conducted on ancient linen textiles, ranging in age from the 13th century BC to 1600 AD. There were two experiments. The first experiment compares the results for eight textile samples. Apart from a Palestinian linen that is not here considered, (8) the other seven samples were provided by five museums in Russia and Ukraine. A second experiment (described in [2ac], not [2b]) compares seven samples, all supplied by a museum in Samarkand, Uzbekistan. For each museum, Kuznetsov specifies the name (always only in English) and the city, but not the full address (with the name of the street). Moreover he indicates the name of an official of the museum (curator, deputy director, etc..) whom he thanks for having supplied the samples.

(8) This is a linen of the epoch of Christ from an Israeli museum. Kuznetsov says he has received it from an Italian sindonologist, Mario Moroni. In fact Mr. Moroni has confirmed to me that he had supplied the textile. It is doubtful, however, if Kuznetsov has used it for this experiment which is a comparison with other seven textiles that do not seem to exist. Moroni says he has dispatched the sample from Italy on January 4, 1994. The manuscript of the papers [2ab] were received at the journals (in America) not long afterwards ([2b] was received on March 7). This is also the linen which Kuznetsov says to have used for the experiments of the fire simulation in papers [3abc]. Moroni has not told me what was the weight of the sample.

I have tried to verify the existence of these six museums. It should be considered that there may be uncertainties in identifying a museum from only the English denomination, since there is a margin of ambiguity in the translation from Russian or other local languages. But Kuznetsov also provides name and surname of an official for each museum, and in addition, for each sample, he indicates the geographical area of origin, the estimated age and the code with which it is designated in the catalogue of the museum. This should be enough to resolve any uncertainty.

We see the results town by town.

Moscow. I have sent letters to many people in the field of museums or archaeological institutions. Only a few have responded, and none of them knows the names of the museums or persons as quoted by Kuznetsov. I thank Evgenij Chernykh, Elena Godina, Valery Golikov, Natalia Shishlina, Denis Zhuravlev, Leonid Yablonskiy, all from Moscow, and Yuri Berezkin e Nikolai Bokovenko from St. Petersburg.

One of the museums indicated by Kuznetsov is the "Russian National Historical Museum" (with Ivan Kappel as deputy curator). There is in Moscow, on the Red Square, a State Historical Museum with a similar name. Two of the correspondents, Zhuravlev and Shishlina, are archaeologists at this museum and they write me that in the museum there is not,(and there has not been) an Ivan Kappel.

Kuznetsov says he used two samples from this historical museum, one Egyptian and one Coptic, of very old age, one of them as old as the 13th century BC. Dr. Shishlina is curator of the collection of ancient textiles of the State Historical Museum. She says that they do not have the textiles indicated by Kuznetsov. She believes that there is only one other museum in Moscow, which has similar finds, the Pushkin Museum of Arts. She phoned to the curator of the Egyptian textile collection at the Pushkin Museum, who said that she had never given textile samples to Kuznetsov.

Natalia Shishlina has also provided an important information, which is equivalent to a "confession" by Kuznetsov. In fact she contacted Kuznetsov himself, spoke with him on the phone and questioned him about my accusations. This happened when Shishlina had received my first letter, containing the details of the samples as indicated by Kuznetsov (age, area of origin, cataloging code), but did not possess a copy of any of the three papers [2abc]. Kuznetsov denied having ever used these samples as described in my letter. Then Shishlina wrote me asking to send her a photocopy of one of the papers, in order to see who was telling the truth. After receiving the copy, and noting that the paper actually contained the description that I had reported to her, she realized that Kuznetsov had lied to her.

Moreover Kuznetsov confusedly tried to exonerate himself, mentioning to Shishlina the name of an Italian professor of chemistry, Luigi Campanella (of the University La Sapienza of Rome), and saying that he (Campanella) had taken samples in 1992. According to the information I have, Professor Campanella has been in contact with Kuznetsov, but knew him only after the publication of these experiments, with which he had nothing to do. It is true that he visited Kuznetsov in Moscow and was introduced by him at some museums, but this happened only in 1997. (8*)

(8*) From publications by Campanella in more recent years, it turns out that indeed it is true that Kuznetsov supplied him with samples of ancient textiles and wood, but the origin of the samples, whether from a museum or otherwise, is not specified.

Kuznetsov's reaction to the call of Shishlina is revealing: it was a worried attempt to save his credibility with the staff of the museum. In recent years, trying to rebuild a career as a specialist in archaeological chemistry, Kuznetsov had made contact with some experts in the museums of Moscow, and now he

might fear to lose their confidence. When he was confronted with the allegations contained in my letter, it was in his interest to defend himself and to say where he had found the samples, if indeed he had had them. Instead, he resorted to hardly credible justifications, by denying having had the textile samples or by invoking the name of an Italian chemist. Thus he showed that he found himself in serious embarrassment.

As to the other museum in Moscow, indicated by Kuznetsov as "State Institute of Textile Museum" (with curator Oleg Krutov), there is not a museum of that exact name, but there is a Moscow Textile Academy, also known as University, which perhaps in the past might also have been called Institute. It is a school of textile technology that inside it has also a small museum. I wrote to this Academy asking if they have ever had an Oleg Krutov as curator. I did not receive a reply.

Vladimir. It is a city east of Moscow. Kuznetsov says he had a sample from Olga Nenasheva, Deputy Director of the "Museum of Slavic Applied Art" in Vladimir. The main museum of the area is the Vladimir-Suzdal State Museum-Reserve. Its deputy director, N. Morozov, writes me that there is no museum of that name in Vladimir, nor has there ever been. There they do not know the name of Olga Nenasheva. In their museum the catalog codes indicated by Kuznetsov are not used, and they have never given textile samples to anybody.

I thank also Ron Pope, President of Serendipity-Russia.

Simferopol. For the two Ukrainian museums, in Simferopol and in Ternopil, I could hardly obtain any collaboration from local archaeologists. In particular, there was no reply to numerous letters that I sent to several persons in the Institute of Archaeology of the Academy of Sciences in Kiev, to the departments of some universities, to directors of museums. In contrast, as we shall see, I had an unexpected cooperation from travel agencies.

Simferopol is the capital of Crimea. Kuznetsov says he obtained a textile sample from Sergey Bychkov, Deputy Director of the "Crimean State Archaeological Museum".

As I did not get responses from Ukraine, I tried to contact Ukrainian scholars who had moved abroad. I received the first answers from America. Inna Potekhina, an archaeologist that had been at the aforementioned Institute of Kiev, Ksenya Kiebusinski of the Ukrainian Research Institute at Harvard University and Maria Shust, Director of the Ukrainian Museum in New York, are not aware of the existence of a museum with that name in Simferopol and do not know the name of Sergey Bychkov (they also gave similar answers for Ternopil).

According to information I received from America, in Simferopol there is only one major museum which includes also a section for archaeology. It is the Crimean Regional Museum, also known as Crimean Museum of Regional Ethnography or Crimean Ethnographical Museum (in Ukraine many official denominations have been changed from the Russian to the Ukrainian language, after the recent transition to independence, and there may be some variety in the names). I wrote to the Director of this museum, thinking that he would be the right person for telling me if in Simferopol there is a museum as indicated

by Kuznetsov, or if his own museum can be identified with it. I wrote to him by ordinary mail, since he does not seem to have an email address. I received no reply.

Being unable to get information from the scholars, I tried to contact the local travel agencies. At the very least, they have an email address and understand English. I have found that the Ukrainian travel agents are as kind and helpful as archaeologists are inaccessible. Of course, a travel agent is not the most authoritative source for archaeology information, but information they did provided.

A travel agent in Simferopol, Eugene Snezhkin, reported that he knew an archaeologist, Valery Sidorenko, who is scientific secretary of the Crimea section of the Institute of Oriental Studies of the National Academy. He had spoken to him and Sidorenko had said that there is not (and there has never been) Kuznetsov's museum in Simferopol, nor has he ever heard the name Bychkov as director of any museum in Crimea.

Snezhkin gave me also the address of a friend of his, Michael Nikolaenko, who is not an archaeologist but works for the computer services in a large museum and archaeological site near Sevastopol, always in the Crimea, where his mother is assistant to the director. Nikolaenko wrote me that there they do not know the names I was looking for.

I was even luckier with another travel agent of Simferopol, Gennady Rut, who is a friend just of the director of the already mentioned Regional Ethnography museum of Simferopol, Andrey Malgin, i.e. of the person from whom I expected an answer by ordinary mail. Rut phoned Malgin and Malgin confirmed to him that there never had been a Crimean State Archaeological Museum in the city and that he had never heard of Bychkov. I told Rut that for me it was preferable to have a statement written by the Director himself. He informed the Director who promised that he would write me, that is that he would answer my new letter which I had sent in the meantime.

Meanwhile, another travel agent, this time in Kiev, Larissa Riazantseva, told a travel agency of Simferopol to collect information. Her colleague Julia Gaideeva said there was not the museum I was looking for, and was able herself to contact the Ethnographic Museum, where she was told that they had received my letter and would soon answer me.

As time passed with no response, I asked Rut to solicit at the museum. Rut was so kind that, in order to gain time, he said me to send a letter by email to him and he printed it and personally brought it to Malgin. Malgin promised he would answer me, but he has not yet answered, despite still another letter that I sent him.

Although I would have preferred to get more direct confirmations, it appears certain that Kuznetsov's museum is not known in Crimea.

I think that the scarce responsiveness of Ukrainian archaeologists can be explained by their unfamiliarity with the English language, and it is my fault if I did not use other languages. I later received two more letters. Peter Ivanenko, director of the State Reserve of History and Culture, an institution of Kerch (still in Crimea), answered writing in good Italian. Tatiana Krupa, an archaeologist at the University of Kharkov and an expert on ancient textiles, prefers to write in French or even in broken Italian rather than in English. Needless to say, they too do not know the names mentioned by Kuznetsov. (9)

(9) The name of Tatiana Krupa was indicated to me by another Tatiana, the daughter of Larissa Riazantseva, with a fresh doctorate in Literature. She had been asked by her mother to inquire about the most appropriate contacts. She provided the addresses of archaeologists specializing in the field of ancient textiles. I was surprised at the kindness of these travel agencies, who knew that I would not pay any money for their services. For those planning a trip to Ukraine, let me recommend the names of the agencies of the two most helpful correspondents: the "Gate to Crimea" (Simferopol) of Gennady Rut and the "Ukrointour" (Kiev) of Larissa Riazantseva.

Ternopil. The other Ukrainian museum would be in Ternopil, a city in Galicia. Historically, this area was not part of Ukraine. Over the last century, it has been a territory of the Hapsburg empire, then of Poland, then, after the German occupation, of the Soviet Union, lastly of Ukraine after its independence in 1991. Therefore the inhabitants, mostly native speakers of Polish, had to learn German, Russian and Ukrainian languages, but perhaps had no time for learning English. This might be the explanation for the fact that I was not able to get any response from Ternopil.

Kuznetsov says he received a textile sample from Ignat Tyshko, curator of the "West Ukrainian Museum of Ethnography and Archaeology". I have had some news only from the already mentioned informants in America and from some travel agencies in Kiev (I thank Irene Trantina, Alexander Gordinsky, Irina Antoshevskaya, Olga Borisenko, in addition to the aforementioned Riazantseva). Apparently, in Ternopil, apart from a gallery of paintings, there is only one museum, or archive, the Ternopil Historical-Ethnographic Museum (also known as the Ternopil Regional Museum).

Even if it seems that in Ternopil there is not a museum with the exact name provided by Kuznetsov, however the variability of names, with the uncertainty of the translations from Ukrainian to Russian to English, would leave the possibility that this Regional Museum is the one we are looking for. Of course, the director of this museum is the best person for knowing if there they have ever given textiles to Kuznetsov, and if they have had a Mr. Tyshko as curator. I have twice written to the director without receiving an answer. Hoping to find in Ternopil someone kind enough to manage to get information, I tried also to write to the municipal office, to the only high school, a polytechnic, and to a local Rotary Club, but always in vain. Eventually, after a couple of attempts with people at the university of neighboring Lviv, I gave up.

It seems to me that even so there is sufficient evidence for doubting that Kuznetsov did the experiment. In fact he says that he used the sample of Ternopil in a comparison with all other tissues discussed so far.

Samarkand. For the second experiment [2ac], Kuznetsov uses seven samples which he states to have received from the "Middle-Asian Museum of Ethnography and Anthropology" of Samarkand, Uzbekistan, naming a Kamil-Djan Youldashev as curator. The samples would come from excavations in the ancient city of Bukhara. (10)

(10) In a previous report at a conference of sindonologists in Rome in 1993 (which I have not taken into consideration for the present inquiry), Kuznetsov says he has experimented with an ancient textile, also from Bukhara, given to him by the "Middle

Asian Ethnographical Museum" of Tashkent, the capital of Uzbekistan. In the subsequent papers, he has used a similar name and has moved the museum to Samarkand.

Rahim Kayumov, Deputy Director General for scientific affairs at the Samarkand State Amalgamated Reserve-Museum of History, Architecture and Arts, writes me specifying that his office is responsible for all museums in the province of Samarkand. He states that the museum I was looking for does not exist and that there is no Youldashev in the museums of Samarkand.

Boris Marshak, curator of the Oriental Section of the State Hermitage Museum in St. Petersburg, has long been the director of the excavations at Pianjikent, an important site not far from Samarkand, and is an authority on the archaeology of the area. I sent him a copy of Kuznetsov's paper and also his answer has been definite. There is not the museum indicated by Kuznetsov, and there is not a collection of textiles excavated in Bukhara with the characteristics mentioned by him. As for two samples Kuznetsov says that in 1989 they were radiocarbon dated by a "Soviet Committee on Asian Studies," Dr. Marshak also specifies that he is not aware of the existence of such an institution.

I also thank: Nataliya Covalyova of the Museum of the History and Culture of Uzbekistan, Samarkand; Renata Holod of the University of Pennsylvania, Philadelphia; Monika Shepherd of the Forum for Central Asian Studies, Harvard University; Akram Khabibullaev, Tashkent; Dan Waugh of the University of Washington. As can be seen, I had also written to people outside of Uzbekistan, chosen for their competence on the archaeological excavations of the area. None of them knows the names given by Kuznetsov. I also thank Madhu Ghose, Circle of Inner Asian Art in London, and Maurizio Tosi, director of the Italian archaeological mission in Samarkand

We have completed the search for the museums. Next we consider the other two investigations relative to scientific institutions of Krasnodar and Protvino.

§2.1.2 *The Institute of Krasnodar*

In the papers [4ab] the authors are five, instead of the usual three. The work is a comparison of experiments conducted in two different geographic areas (in order to compare the supposed effects of the different flora of microorganisms). The usual three authors worked in Moscow, while the two added names were working in the same weeks in Krasnodar in Southern Russia near the Black Sea. The latter two are given as affiliated to the "Krasnodar Center for Environmental Studies, University of Rostov-on-Don, Krasnodar-2". Doubting that this Center exists at all, I tried to verify.

The address lacks the indication of the street. Krasnodar is not a small city (with over 700,000 inhabitants). This Center for Environmental Studies is not famous enough to allow the postman to reach it without the name of the street. I sent two letters to the authors, Vyacheslav L. Charsky and Oleg S. Beklemishev, addressing as indicated by Kuznetsov, but the letters were sent back with the statement "addressee unknown". (Nor did I find any trace of the Center on the Internet, but it has to be considered that I do not read the pages

in Cyrillic.).

The Center is designated as an institution of the University of Rostov, a city which is about 250 km from Krasnodar. This is not a reason for suspicion because that University might have branch centers in Krasnodar, and in fact it has at least a couple of them.

I wrote to the two journals that published the two versions [4ab] of this paper. Denise Parent, executive editor of the *New Journal of Chemistry*, and Ludwig Rebenfeld, editor of the *Textile Research Journal*, answered that they do not have the full address of the institution of Krasnodar and that their correspondence took place only with Kuznetsov, not with the other authors.

To learn more, I began, of course, by writing to the University of Rostov. (10*) There they should know what are the branch institutions of the university in Krasnodar, and should also know if the two names of the authors are listed in their staff. I had no response to the two letters I had sent. I then tried to collect from the Internet the addresses of institutions and associations throughout the area which had to do with environmental problems. After sending many letters, I did not receive any answers that could be useful.

(10*) The Rostov State University has now changed its denomination to "Southern Federal University".

Having then found that the Rostov University has a branch institution in Krasnodar with a somewhat similar name, the Biosphere Research Institute, based at the Kuban State University of Technology, I wrote to this university. Olga Musikhina answered that the names of the two authors, Charsky and Beklemishev, were not among the employees of the University nor of the Institute. She added that there they have done some search and can say that there are no State Centers with that denomination in Krasnodar.

Without a source of information in Rostov, however, this was not enough to exclude the existence of the Center. Then I had the help of Odile Eisenstein, a chemical researcher at the University of Montpellier, France. Eisenstein had been the Editor-in-Chief of the *New Journal of Chemistry* at the time of publication of the paper, and now she wished to collaborate in order to verify a possible fraud by Kuznetsov. Through high-level contacts in the scientific world, she reached Vladimir Minkin, professor at the Rostov University, director of a large chemical laboratory and a member of the Academy of Sciences

Minkin was quick in investigating. To begin he called Vladimir Alexeenko, the director of that Biosphere Research Institute in Krasnodar, who did not know the names of the two alleged authors, Charsky and Beklemishev. Then Minkin spoke with the Deputy Rector of the University of Rostov, A. Ushak, who assured him that there is no branch of the university called Krasnodar Center for Environmental Studies. In addition, Ushak inquired among several professors in the Department of Geology (from which an environmental research institute should depend), and no one knew the names. Then Minkin phoned to Professor Vladimir Babeshko, Rector of the main university in Krasnodar, the Kuban State University, and Babeshko did not know the names of the Centre or of the two authors.

Thus all sources, from Rostov as well as from Krasnodar, agree in giving a negative answer. I especially thank Odile Eisenstein and Vladimir Minkin, without whose help it would have been difficult for me to deal with this case.

§2.1.3 *The AMS laboratory in Protvino*

Five papers [3abc, 4ab] present results that are based, as stated, on measurements of the proportions of the carbon isotopes, conducted by the method known as AMS (accelerator mass spectrometry). This is an advanced method, used in particular for radiocarbon dating, which has advantages over the traditional method, especially when dating very small samples. The AMS method, which came into use around 1980, requires a quite expensive equipment and highly specialized procedures. There are relatively few laboratories in the world which are equipped with AMS (three of them were chosen in 1988 for the dating of the Shroud of Turin).

Surely Kuznetsov could not say to have the AMS available in his laboratory, and states that the measurements were conducted at Protvino (a city not far from Moscow), in the "Center for Radiochemical Studies", an institution of the Russian Academy of Sciences (RAS). (10**) He thanks, as executors of the measurements, a Dr Ivan B. Shevardin for papers [4ab] and a Dr. Sergey Bakhroushin for papers [3ac]. (11)

(10**) Indeed in 1993, at a conference of sindonologists in Rome, Kuznetsov stated that he had carbon dated a textile measuring the ratio $^{14}\text{C}/^{12}\text{C}$ with a mass spectrometer in his own laboratory. In his report, as printed in the Proceedings of the conference (which I did not take into account in 2002), Kuznetsov specifies the code of the model of instrument he used. He says he used an "MI-1201 mass spectrometer". This is a conventional, ordinary mass spectrometer, lacking the big accelerator of the AMS method. With this type of spectrometer it is possible to measure the ratio $^{13}\text{C}/^{12}\text{C}$ but certainly it is not possible to quantify the infinitesimal amount of the isotope 14. Therefore Kuznetsov could not have performed the experiment he described in 1993. Subsequently Kuznetsov must have realized that he could not say to have measured the ^{14}C amount with an ordinary mass spectrometer and in the papers we are now considering he states that the AMS method was used. But he could not mention any one of the few, well-known AMS laboratories in America or Western Europe and had recourse to a phantom laboratory in Protvino.

(11) Kuznetsov indicates these names in a confused manner. In [3a] he mentions the name of Bakhroushin and of the Center of Protvino. In [3c] he mentions Protvino but not the name of the Center and mentions the name of Bakhroushin along with other names in the Acknowledgements section, without specifying that he worked with AMS. In [3b] he does not cite anything, neither the city nor the institution nor the man.

Also in [4a] and [4b] the two citations, equal to each other, of Shevardin and of the institution of Protvino, with reference to AMS, appear only in the Acknowledgements section. In the main text of both papers it is simply told, in one line, that the AMS has been used to measure the isotopic composition, without specifying how and where, and inserting a bibliographic reference to another paper by Kuznetsov, [2a], where carbon dating or AMS are not mentioned at all. I quote from both [4a] and [4b]: «We then measured the contents of ^{13}C and ^{14}C isotopes in the textile samples by AMS analysis [8]», where reference [8] is just to paper [2a]. Reading only the text, then, without giving attention to the final Acknowledgements, one gets the impression that the AMS measurements were conducted by the authors themselves, according to a method described by them in another paper.

I doubted that the measurements had ever been conducted (the results as

stated in all papers would be very strange indeed). Given the propensity of Kuznetsov to invent non-existent institutions and persons, I have tried to verify.

This part of the investigation has not been easy. Protvino is a kind of "citadel of science" with many laboratories and scientific institutions. At least in the days of the Soviet regime, there were also researches with military applications which were protected by secrecy. The most important institution is the large Institute for High Energy Physics (IHEP). Yuri Ryabov, scientific secretary of IHEP, writes me that he knows nothing of the Center mentioned by Kuznetsov and that the names of the two persons are unknown to him. Three scientists working at IHEP, Sergei Denisov, A.K. Likhoded and Pavel A.Semenov, whom I contacted separately, have all answered excluding that in Protvino there is a Center for Radiochemical Studies.

Another institution, in Protvino or in nearby Serpukhov, is the Branch of the Institute of Nuclear Physics. It has a good website with a list of the personnel and a description of the activities. The names mentioned by Kuznetsov are not present and the AMS is not indicated among the activities.

Then I sought information from other radiocarbon laboratories in Russia. It should be noted that such laboratories are not many and their scientists are known to each other and may be in contact. So, if there were a laboratory for radiocarbon dating in Protvino (with AMS or with the more common traditional method of the counting of radioactive decays), the colleagues at other laboratories should be aware.

On the website of the journal *Radiocarbon* there is an updated list of all the qualified radiocarbon dating laboratories operating in the world, with indicated if they have AMS. For Russia there are some laboratories with the old method, but no one with AMS. I wrote to three of those laboratories and got similar answers: Natalia Zaretskaia (Geological Institute, RAS, Moscow), Olga Chichagova (Institute of Geography, RAS, Moscow), and Ganna Zaitseva (Institute of the History of Material Culture, RAS, St. Petersburg) confirm that in Russia there are not any laboratories with AMS, even today (2001), much less could there be some years ago. It should be noted that for the scientists working in the field of radiocarbon dating, the fact of not having the AMS available is a serious drawback (the method is superior, or indispensable, when it comes to dating very small samples). So if they do not know of the existence of AMS in Russia, we can safely believe that it does not exist, at least not as availability for performing carbon dating.

Ganna Zaitseva writes:

«Of course, the AMS technique is not used in Russia and I think that it will not be in use in the near future. Only the scintillation technique is used in our country as well as in the former Soviet Republics.» And she provides a list of the not many radiocarbon laboratories in Russia and other Republics (no one in Protvino). She adds that «considering the financial situation of scientific research, I assume that new laboratories will not be created within a short time.»

So it seems that even today it is impossible to use the AMS method in Russia, whether in Protvino or anywhere else. We cannot imagine how

Kuznetsov could have it available in 1994.

Then I wrote to some other institutions of RAS (the Russian Academy of Sciences).

Irina Titkova (Research Council on charged particle accelerators) writes that she was involved in preparing a list of accelerators, but does not know the institution mentioned by Kuznetsov.

Dmitrij Koshkarev (Moscow Institute for Theoretical and Experimental Physics) leads a section on the design of accelerators for heavy ions, and writes that he is not aware of an AMS laboratory in Protvino or elsewhere in Russia.

Marina Frontasyeva heads a department of the Frank Laboratory of Neutron Physics in Dubna and is herself unaware of AMS laboratories.

In addition, Anatoly V. Lozhkin, of the Quaternary Geology and Geochronology Laboratory in Magadan, says that he sends his samples to America for AMS dating. And the aforementioned Natalia Shishlina, of the museum in Moscow, says that for her work in archaeology she needs dating samples but in Russia it is not possible to use the AMS method.

Lastly, L. M. Kovrizhnykh, of the General Physics Institute, RAS, Moscow, again answers negatively to my questions and does not know the Protvino Center nor the names of the two persons mentioned by Kuznetsov.

I also thank Valeria Rozenberg, a chemical researcher in Moscow, who (at the invitation of Odile Eisenstein) had begun searching for information.

Out of Russia, already in 1996 the three leaders of the AMS laboratory in Tucson, Arizona, Timothy Jull, Douglas Donahue and Paul Damon, while publishing a work of criticism to Kuznetsov (see below, §2,5), wrote that the Protvino laboratory «is new and not generally known to Russian scientists or the international AMS community». (12) I have written to Jull, who has confirmed that not even during the following years they became aware of the existence of such a laboratory in Protvino.

(12) A. J. T. Jull, D. J. Donahue, P. E. Damon: "Factors that affect the apparent radiocarbon age of textiles". In Orna, M.V., ed., *Archaeological Chemistry*, ACS Symp. Series, 1996, 248-53.

Then it seems that we can conclude that there is not in Protvino the laboratory indicated by Kuznetsov. However we cannot reach an absolute certainty because, forcing the imagination, one might suppose that in Protvino there is an AMS laboratory, within military structures, covered by strict secrecy, so as to remain unknown to the other radiocarbon laboratories and to scientists and archaeologists in Russia and abroad. But then Kuznetsov would be very lucky, and very well introduced, for having at his disposal (for an use as little strategic as the dating of textiles) a laboratory that is top secret and inaccessible to archaeologists and other scientists in Russia.

Here we end this chapter on the evidence of fraud in the papers of 1994-96. We have compiled a list of six museums, two scientific institutions and ten persons that are untraceable. Although it is difficult to prove a negative, it would be very strange if all these institutions and people exist but none was found after much searching. Kuznetsov knows that if our suspicions are unfounded, he can prove it immediately by providing all the (full) addresses. (13)

(13) It may be added that in the bibliography of [4ab] at no. 6 there is a suspect reference to a paper by Kuznetsov himself, with three other authors, in a volume of Proceedings of a Symposium held in Prague in 1993. The publisher of the book is indicated as University of Prague Press. There is not a publisher in Prague with this exact name. The university publications are designated as Charles University Press or Karolinum Press. I wrote to this publisher and they replied that the Proceedings of that conference were published by another publishing house in Prague, Academia, as a supplement to the journal *Folia Microbiologica*. I wrote to Academia and to the editorial office of the journal, without response. However, the journal is present in the database of PubMed and there are not listed supplements in 1993 or subsequent years. Moreover, the names of the three co-authors of the paper and of the editor of the volume do not appear in PubMed. References to the volume or to the conference are not to be found on the Internet. Neither the paper nor the participation in the conference are mentioned in the detailed curriculum that Kuznetsov sent me in 2000.

§2.2 Affiliation

These papers of 1994-96 have the following affiliation to a Moscow laboratory: "E.A. Sedov Biopolymer Research Laboratories, Inc., 4/9 Graftsky Pereulok" (ie Graftsky Avenue). (14) I have not yet been able to solve the mystery of the real nature of this laboratory. One would think that it does not exist at all and is another invention of Kuznetsov. But there has been somebody who has visited it. Guy Berthault writes me of having been there twice (there are photographs where Berthault is together with Kuznetsov and Ivanov in a laboratory). In addition, a chemist at a University of Rome, the already mentioned Professor Luigi Campanella, told me that he did visit Kuznetsov in Moscow, in 1997, and found a normally equipped laboratory with several people who worked there.

(14) In the two papers [4ab], those with five authors, the address is not complete, ie there is not the name of the street. Perhaps Kuznetsov thought that, if he gave the street name for the address in Moscow, he had to give it also for the address in Krasnodar. It was this detail that aroused my first suspicion about the real existence of the institution of Krasnodar.

There are not, in the chemical literature, any other papers with the Sedov affiliation, besides the nine papers with which we are dealing.

In his curriculum (2000) Kuznetsov says that the Sedov laboratory was founded in 1992. Writing a letter to me in 2000, he said that the laboratory had been closed in 1998 (at the time of his imprisonment in America), but for his letters he was still using an elegantly headed letter-paper of the laboratory, in English, from which we derive the following data. The Director of the laboratory was Kuznetsov himself, while Andrey Ivanov was the Associate Director. A Mrs. N.A. Marina was indicated as "Finances/C.E.O." (that is, Chief Executive Officer). At the bottom of the letter-paper there is printed a list of a staff with seven other researchers, a total of nine. Eight of these are indicated with a PhD. With such a staff, this should be a rather large lab. To perform all the experiments described in the papers, the laboratory should also have modern equipment and instruments that are quite expensive.

The heading of the paper shows not one but three addresses (all in Moscow). The first is indicated as "Head Office" and coincides with the home address of Kuznetsov at the time. The second, "Finances", presumably is the

address of Mrs. Marina. The third address, referred to as "Main Research", that is, I suppose, the main place where research is carried out, is precisely at the number 4/9 of Grafsky avenue in Moscow.

Only recently, when the investigation was nearly completed, a correspondent from Russia, who uses the pseudonym "Atheologian", pointed out to me that at the same address in Moscow, at 4/9 of Grafsky Avenue, there is that City Station for Sanitation and Epidemiology where Kuznetsov had worked in the 1980s. Of course, the activities of the Station have nothing to do with the chemistry of ancient linen textiles. [15] I wrote to the Station asking what they know of a Sedov laboratory, but had no answer.

(15) In the 1980s Kuznetsov published a number of papers, mainly of toxicology, with the affiliation of this "Moscow City Station for Sanitation and Epidemiology". (Today it is also cited with a name that can be translated as "Moscow State Center for Sanitary and Epidemiological Supervision"). Its function is to exercise a control, for example, on the hygiene of water, food and workplaces, to monitor the possible spread of epidemics, to carry out bureaucratic duties with regard to health issues. Such Stations are scattered in cities throughout the Russian Federation. In the Soviet era, as it seems, the network of Stations was used by the central political power, ie the Communist Party, to exercise a control on doctors, hospitals and the health care apparatus. (15*)

(15*) Today (2012) the website of the Station is <http://www.mossanexpert.ru/>. Its present denomination can be translated as "Moscow Center for Hygiene and Epidemiology". The address is always the same at 4/9 Grafsky per. The Center employs about 900 physicians or specialists.

"Atheologian" does not live in Moscow, but has asked a Moscow friend of his, Mikhail Eliseikin, to do some investigation. Eliseikin went to the City Station looking for information. He met with some reticence. He had it confirmed that Andrey Ivanov had been working at the Station in a laboratory of physical chemistry but could not learn if a laboratory with the name Sedov had really been operative and what was the role of Kuznetsov.

Pending further information, the most likely hypothesis seems to be the following. Kuznetsov had worked at the station in the 1980s and of course knew some of the staff. As to Ivanov, maybe he was still working there in the 1990s, at the time of the publication of these papers. At any rate, in the 1990s Kuznetsov and Ivanov might have had access to the rooms of the City Station and possibly they had the availability of some space and of the use of some instruments, in case they have ever really done an experiment on linen textiles. In this hypothesis, one can imagine that if a visitor came from abroad to visit (without knowing the Russian language), Kuznetsov and Ivanov led him into a room inside the City Station and let him believe that it was the Sedov laboratory of which they were the Directors. It is not excluded that, formally, a Sedov laboratory had really been registered as a private company, because this would serve to receive funds and to issue receipts.

I also wondered about the identity of that E.A. Sedov after whom the laboratory is named. I had a clue because in the bibliography of Kuznetsov's curriculum (2000) there is a 1993 book, in Russian, with just Sedov and Kuznetsov as authors. The title is strange: "The Word and the Meaning: Linguistical approach to the biomolecular research" (Logos Publ., Moscow, 230

pages). Logos Publications is one of the publishers (operated by Americans) of Christian propaganda with which Kuznetsov collaborated in the early 1990s.

Searching the Internet, I think I have identified this author as Evgeni A. Sedov (1929-1993), an original character who is defined as an engineer, inventor, expert in cybernetics and computers, novelist, poet, etc. I do not know much about him, but I found news of his son Alexander, a biologist. I have written him but he did not answer. (15**)

(15**) Searching the Internet again in 2012, I have found that Sedov was an active member of the Creationist Association that had been founded by Kuznetsov in Moscow. I have also found that Sedov and Kuznetsov are the authors of another book (in Russian): "In the beginning was the Word ..." (Christian Society, 'The Bible for All', St. Petersburg, 1994, 78 pages). The full text of this booklet is available on the web. I translate (with Google) from the Foreword:

«The main goal of the nature of science is the harmony between the Bible and scientific knowledge.

«Dr. D. Kuznetsov, associate professor in the Institute for Creation Research, San Diego, USA, is the author of 22 scientific papers on the basis of anti-evolutionism and Christian apologetics, published from 1988 in Russia, USA, Australia and Western Europe.

«We offer you a new work of Russian scientists who share the concept of the supernatural creation of life, as well as of the entire material world.»

§2.3 *Financers*

In the Acknowledgments of seven papers ([2abc] and [3abcd]) the authors thank Guy Berthault, the rich Frenchman we met in Part I, §3: «This work was supported by Guy Berthault Foundation, Meulan, France.» In the same papers there is also credit to the Italian sindonologist Mario Moroni for having supplied a sample of an ancient linen textile from Israel. [16]

(16) Perhaps Moroni also gave money in addition to the textile sample, as can be seen from a passage from an article (which I have cited also in Part I, §3) in a sindonology magazine:

«The enormous interest and enthusiasm aroused by the Moscow scientist testify the great value of his researches, conducted with seriousness and scientific rigor, and published last January by the prestigious *Journal of Archaeological Science*. We must be very grateful to Guy Berthault, the French geologist who introduced Kuznetsov to sindonology studies and has funded most of his experiments, and Mario Moroni, who provided valuable [textile] samples and a substantial financial support for their analyses.» "(Maurizio De Bortoli and Emanuela Marinelli, "Dmitri Kouznetsov in Italia", *Collegamento pro Sindone*, March-April 1996, p. 49-53).

In two papers [4ab] two sources of funding are mentioned. One is the Fourth World Foundation, about which I have no precise information (there may be several foundations with a similar name). The other is the Turin Shroud Center of Colorado, which is led by John Jackson, a well-known American sindonologist, together with his wife Rebecca

§2.4 Advisers

Apart from a mention of Marie Claire van Oosterwyck-Gastuche in the papers [3] for having had the original idea of the fire simulation experiment, and apart from minor credits, there are three names that are thanked in all the nine papers ([2], [3], [4]). One is Alan Adler (1931-2000), the well-known sindonologist of Danbury, Connecticut, who, as we know, was a friend of Kuznetsov.

The second one is Witold Brostow, a Polish-born American scientist, who has a distinguished career in the field of physical-chemistry and leads a laboratory at the University of North Texas, Denton. I wrote him for confirmation. He did not deny having seen at least some of the manuscripts before publication, although he played down his role: a check of the English style or little more. I have not found any evidence linking Brostow to the fields of sindonology or creationism.

The third one is Alexander Volkov, a physicist of the University of Moscow. I have not been able to get in touch with him.

§2.5 Publishing

Six of the papers were published in four major journals that adopt the peer review process. This implies that two referees have reviewed the paper and that, on the basis of their evaluation, the Editor has decided to publish. (When we refer to an "Editor", it should be understood that he may be one of several persons in that role, not just the "chief" Editor). (17)

(17) For major journals, besides the Editor-in-Chief there are some Associate Editors and a larger number of members of the Editorial Board. According to the situations, and depending on the practice adopted in each journal, there may be a rather large number of persons, one of whom each time assumes the main role in the decision to publish a paper or not.

These are four high-level journals. *Analytical Chemistry* is one of the best known journals in the chemical field and is published by the American Chemical Society (ACS). *New Journal of Chemistry* is published by the French National Research Council. *Journal of Archaeological Science*, published by a major private company (Academic Press), is one of the best qualified journals in its area (the application of scientific techniques in archaeology, for example for dating or chemical analysis of finds). *Textile Research Journal* is published by a leading textile research Institute based in Princeton.

Kuznetsov succeeded in publishing, all at a time, six papers in these journals. It is a feat that would be not easy to achieve even for a researcher with all the requisites: a valid (and honest) content of the papers, a brilliant curriculum in the past career and the affiliation to a prestigious institution. Kuznetsov presented papers which, in the cases when they have been examined, have shown serious shortcomings (apart from the suspicions of fraud). Moreover, he had not a career in the field of the chemistry or the dating of ancient textiles. His previous work had been in different fields (including creationism) and it was better for him to keep it hidden to avoid being

identified as the author of the fraud of the 1989 paper. And his institution, the Sedov laboratory, was totally unknown.

I can not exclude that, by chance, all the referees for these papers, even if chosen only for their competence, have spoken favorably. But I would tentatively suggest that, to some extent, Kuznetsov has availed of a special treatment, at least for some of the publications, or of fortunate circumstances. I have no idea of what was, in each case, the course of events that led to the publication: the procedure is covered by confidentiality and, in particular, the names of the reviewers are kept secret as a rule, therefore it would be useless to inquire at the journals for learning why the papers were accepted for publication. We can only speculate about the possible facilitations of which Kuznetsov might have taken advantage.

A first hypothesis is that Kuznetsov put pressure on the Editors (or the persons in this role) so that they accepted a paper even if the ratings of the referees were negative

A second hypothesis, in particular for the papers [3abc] which refer directly to the Shroud of Turin, is that the Editors chose the referees among the presumed experts in that special field, thus choosing some sindonologists who gave a positive judgment.

A third hypothesis, perhaps the most probable, is that Kuznetsov has influenced the choice of the referees in order to select them among the sindonologists or among his friends. I would say that this was not difficult to achieve, because in many journals the authors are permitted themselves to suggest the names of the possible referees when they submit a paper. It may be that this practice is not commendable (you need to trust the honesty of the authors), but perhaps it was adopted to overcome the difficulties for the Editors in finding each time the suitable referees. (18) I suppose that Kuznetsov would not miss this opportunity if he has the occasion.

(18) Inserting the words "Suggested referees" in a search engine of the Internet, I obtained a large number of pages of instructions to authors from the websites of scientific journals. There are journals which not only permit, but explicitly ask the authors to give the names of the suggested referees. Sometimes the number of the suggested names is not specified, other times a definite number is required, usually between three and five. The *Journal of Archaeological Science* in his instructions to the authors requires the names of five suggested referees. The *New Journal of Chemistry* allows that the authors suggest the names without indicating the number. It may be assumed that, once this has become a common practice, also other journals, even if they do not explicitly state it in the instructions, permit the author to suggest the names of the referees.

We now consider the two reports [2c, 3c] that Kuznetsov presented at the Symposium in Anaheim, California, in April 1995 and were printed in the volume of the Proceedings the following year. It is one of the series of conference organized by the American Chemical Society (ACS). Here we know something more, thanks to information I received from three participants: Mary Virginia Orna, who chaired the conference and also edited the publication of the Proceedings, and Marian Hyman and Timothy Jull who played a role with their criticisms of the work of Kuznetsov. (19)

(19) M.V. Orna is active in research on the border between chemistry and art history. She is an Ursuline nun and teaches at the College of New Rochelle (New York State), a Catholic university. M. Hyman is a researcher in archaeological chemistry at Texas A & M University. We already know A.J.T. Jull, a senior researcher at the University of Arizona AMS Laboratory in Tucson.

When at the conference Kuznetsov presented the report [3c] on the dating of the Shroud, with the experiment on the fire simulation, Jull got up immediately from the audience expressing a sharp dissent and asking to intervene. Orna agreed, although he was not scheduled to talk. Jull explained his criticism and Kuznetsov, according to Orna, ably defended himself. This created a lively discussion that made the session anything but boring. When Kuznetsov presented his other report [2c], no objections were born at the time.

In the following weeks there was the peer review process that was necessary for the publication of the reports in the Proceedings volume (not for the mere participation in the conference). Orna writes me that the referees expressed very favourably on the paper [3c]. The names of those referees have not been divulged. (20) Since there had been the intervention of Jull, Orna decided to publish [3c] but together with a critical note by Jull himself. The note appeared in the volume, after the paper by Kuznetsov, and was also signed by Professors Douglas Donahue and Paul Damon, the directors of the Tucson laboratory. (12) A similar note (21) by the same authors had already been sent in January, 1995 to the *Journal of Archaeological Science*, which had accepted for publication the version [3a] of the Kuznetsov paper, and appeared a year later, in January, 1996, together with [3a] (and also [2a]) in the same issue of the journal.

(20) The conference was also attended by Alan Adler, a sindonologist and a friend of Kuznetsov. Also Adler had a report on the Shroud published in the Proceedings volume. I should not be surprised if he had a role in favour of Kuznetsov. He died in 2000 and I could not contact him.

(21) A. J. T. Jull, D. J. Donahue, P. E. Damon: "Factors Affecting the Apparent Radiocarbon Age of Textiles". *Journal of Archaeological Science*, 23 (1996), 157-160.

The paper by Jull et al contains a number of severe and circumstantial criticisms which conclusively invalidate the work of Kuznetsov. Behind the polite tone with which, diplomatically, scientists express themselves in their discussions, we read between the lines that such an experiment could not have been performed with those results as stated by Kuznetsov.

For the other paper [2c], the response of one of the referees was negative. For once, we can know the name of the referee, Marian Hyman. Already at the time, she had publicly expressed her criticisms. As she has now explained in a letter to me, she communicated three objections to Orna. First, she realized that substantially the work had already been published by the same authors in another journal, *Analytical Chemistry* (this being paper [2b]), and for her this was a sufficient reason for not publishing it again. (The third version [2a] was still in press). (22) Second, Hyman realized that whole paragraphs and one graphic were taken, identical, from already published papers by other authors. The papers were cited in the bibliography, but the sentences were not enclosed in inverted commas and did not appear as

citations. (23) The third criticism of Hyman was the most relevant: in her opinion, as she writes me, «The problem was that the work of Kuznetsov was not real». Her impression was that the experiments described in the manuscript had not really been performed with those results. Congratulations to Hyman for the diagnosis, that the present investigation seems to confirm. (23*)

(22) The "multiple publication" is deprecated in scientific circles. In theory it might also be liable to legal consequences. Indeed an author, when his paper is published, as a rule must sign a transfer of rights to the publisher of the journal. If later another journal publishes the same paper, it is responsible of copyright infringement. Kuznetsov for these papers has systematically exploited multiple publication. He sent the papers in pairs, simultaneously, as seen from the dates of receipt at the journals. The papers [2b] and [2a] were received on 7 and 14 March 1994, while [4b] and [4a] were received on 30 September and 5 October 1994. Each of the two journals, each time, accepted a paper without knowing that simultaneously a twin paper was going to be published. The journal that came out as second, became liable for copyright infringement. A year later, in April 1995, participating in the conference in California, Kuznetsov again presented the same two papers, when he knew that they had already been accepted (and one had already been printed) by other journals. In the various versions, besides presenting the same methods and the same data for the results, Kuznetsov uses for long passages even the same words, while small differences are probably due to the work of revision and correction of the English language that was conducted independently by the journals' offices. (22*)

(22*) I add a passage from a letter to me (December 2000) of Dénes Gabler, the Editor of the Hungarian journal which published [3b]:
«We are not responsible for republishing of text of Kouznetsov D.A. And Ivanov A.A., which otherwise can not be quite identical with any other, because we have corrected their English paper. They did not inform us, that they would publish the same paper also in another journal. In this case we would not have published it, and we would not have spent money for correcting their text. On the basis of the publications issued in the same year, 1996, it is clear for us, that they sent the same or a little modified manuscript to several journals. No comment.»

(23) Also the twin paper already published in *Analytical Chemistry* included the passages that had been copied. Hyman communicated it to the editor of that journal, who later published a short note (vol. 68, 1996, p. 1071), signed by Kuznetsov and colleagues, where they apologized because 17 paragraphs had been inserted without the quotation marks. As it were, they had not copied part of the text, they simply had forgotten to add the quotation marks!

(23*) Hyman also wrote in her letter to me: «It was my belief that none of the work detailed in the manuscript or the *Anal. Chem.* article had actually been done, instead both were total fabrications.»

Orna, when informed by Hyman, questioned Kuznetsov about the fact that his paper had already been published in *Analytical Chemistry*. He pointed out that in the manuscript there was one more section, and this is true. The added section contained the experiment with the linens of Samarkand, but at the time there was already in press the third version of the paper with the same data, including Samarkand.

With such a judgment, Orna decided nonetheless for the publication. Writing to me today, she says she sincerely regrets having made the choice of

publishing the two papers by Kuznetsov. Moreover she says that the editing work was very laborious because the texts presented by Kuznetsov were poorly written, both for the bad English and because the meaning was difficult to understand. She had to work hard in revising them, so much that someone told her, jokingly, that she was entitled to add her name among the authors. At least, this was useful in part for saving the appearances, since at the end the sentences were not entirely identical to those of the other versions of the papers.

Nobody, neither Orna nor Jull nor Hyman, was then aware that Kuznetsov had been guilty of the scandal of the creationist paper of 1989. They have learned it only now from my letters.

Lastly we consider the publication of [3b] in the Hungarian journal, *Acta Archaeologica Academiae Scientiarum Hungaricae*. This is a journal that deals with traditional archaeology rather than innovative scientific methods. With a paper like this, full of technical data, perhaps in Budapest they were not up to the task. The Editor Dénes Gabler writes me:

«As we are not specialists of chemistry, in 1994 we gave this paper for control to a Hungarian expert, who confirmed that this experimental approach was an important contribution to the dating of the Shroud of Turin, and that the results had not been published by anybody else.»

We do not know the name of that expert, but we can suppose that he was someone with sympathies for the Shroud. Gabler added that he knew nothing of the past career of Kuznetsov and had learned only from my letter that the paper had been published two more times in other journals. He did not even know that the other two versions had been accompanied by the critical note by Jull.

Section Three: Irish ghosts

§3.0 The paper under examination is:

[5] D.A. Kouznetsov, "Biochemical methods in cultural heritage conservation studies: An Alkylation enzyme, S-adenosylmethionine transmethylase." *Studies in Conservation*, 45 (2000) 117-26.

It is an experimental report. The author describes a method, entirely new and until now unexplored, which, he believes, could serve both for dating ancient textiles or other finds containing cellulose, and for better preservation. The new dating method would be important because it would permit to date a textile sample without having to destroy it.

The method consists in this. Kuznetsov prepares a particular enzyme, extracting it from a microorganism, and applies its action to the ancient fabric. The enzyme frees certain chemical groups that in the course of time had been associated with the glucose molecules of cellulose. The greater the age of the

textile, the greater is the amount of these chemical groups. The enzyme permits to measure this amount and therefore provides a dating.

The journal *Studies in Conservation* is published by the International Institute for Conservation of Historic and Artistic Works, London.

§3.1 *Evidence of scientific fraud*

Kuznetsov says he has worked on four textile samples from ancient tombs in Ireland. He mentions the names of the persons who gave him the samples and specifies the localities of the tombs. He also specifies the names of three of the buried persons. I have tried to check his statements through correspondence with experts in Ireland. According to the information I have received, Kuznetsov has never been in possession of those textile samples. Since all the experiments were conducted, as he says, on those four samples, one should conclude that the experiments have not been performed and that Kuznetsov has made up the whole account. The evidence I have collected is presented in the following sections.

§3.1.1 *The samples*

The Irish textile samples are so described in the paper (p. 118):

Textile Samples

Light gray (non-dyed), clean-looking and well-preserved small portions of different linen burials (10-12g) were acquired, after being historically and stylistically dated, from the following sources:

Sample #1

A.D. 640, burial: Scanlan Mor, ruler of Ossory; excavated in Ballyknockane site at County Limerick, Ireland; donated by the Irish Heritage Foundation, Lanesboro, Ireland.

Sample #2

A.D. 680-720, burial: unidentified monk; excavated at the necropolis site of St Domanagart monastery, Slive Donard at Mourne Mountains, Ireland; donated by the Irish Heritage Foundation, Lanesboro, Ireland.

Sample #3

A.D. 1110-1135, burial: Liam Doughan, Lord Gillemore; excavated at the Castlegarde site near Pallasgreen, County Limerick, Ireland; donated by Sir Arthur Luttrell, Clogheen, Ireland.

Sample #4

A.D. 1585, burial: Garrett Og Fitzgerald, the eleventh Earl of Kildare; St Brigid's cathedral, Kildare, Ireland; donated by Prof. Sean Laoghaire, Westmeath College of Arts, Westmeath, Ireland.

As can be seen, there are the names of three donors (including an institution). I have tried to check if they really exist. (Of course, I started with a search on the Internet and the telephone directory, to no avail). There are also the names of the personages who were buried in three graves. I tried to verify if the graves exist, if they have been opened and examined, if textile samples had been removed from them. I collected information from many correspondents in Ireland, to whom I had written choosing them among experts in archaeology and local history.

§3.1.2 *The donors*

Irish Heritage Foundation. Lanesboro is a small town in the county of Longford. The term Heritage indicates that this alleged Foundation takes care of local history, genealogy, preservation of archives or monuments. Two experts of local history, J. P. Kilcline and Vincent Byrne, do not know any Foundation with that name. I then wrote to the County Longford Historical Society, and Seamus Mulvey has confirmed that the Foundation does not exist.

Sir Arthur Luttrell. Clogheen is a small village in the county of Tipperary. Edmund O'Riordan has been living in Clogheen for fifty years and has compiled a history of the place. He does not know a Sir Arthur Luttrell and is sure he would have heard of him if he lived in the area.

Prof. Sean Laoghaire. His address is indicated by Kuznetsov as Westmeath College of Arts, Westmeath, Ireland. Westmeath is the name of a county, but not of a city. Often the Irish counties have the same name of the main city, but not in this case. I have tried to ascertain whether, in any locality in Ireland, there is a Westmeath College of Arts. I asked offices or persons, starting from the central administrations in Dublin which should be aware of the existence of schools of art. No one has ever heard about this College. I thank the following correspondents: Gerardette Bailey, Pauline Delaney, Brian Harten, Ann Howley, Sharon McGrane, Gerry O'Sullivan, Sarah Ryan.

§3.1.3 *The burials*

Scanlan Mor, chief of Ossory. Ossory was one of several small kingdoms into which Ireland was divided at the time. The *Annals of the Four Masters*, an important source of information for the ancient Irish history, report for the year 640: «Scanlan Mor, son of Ceannfaeladh, chief of Osraighe [Ossory], died.» This is almost all that is known about the personage. Scanlan Mor, ie Scanlan "the Great", was a chief or a leader, a sort of tribal king. Relatively little is known about this era of Irish history, and the discovery of the tomb of a king would be of great interest. No one among the scholars whom I have consulted, knows of the existence of a grave of Scanlan Mor. If there were a tomb, it would be hard to imagine that a fabric contained in it was found "well-preserved". If a textile sample was recovered, it is hard to imagine that the members of a Foundation of Lanesboro have it at their disposal and can donate

it to a foreign chemical researcher.

A correspondent who is very knowledgeable about historical details, Larry Walsh (of the Museum of Limerick, and editor of *The Old Limerick Journal*), writes me about the place of the alleged discovery. Ballyknockane House, in County Limerick, was built by a Michael Scanlan. Kuznetsov may have somehow heard of him and the coincidence of the name may have led him to place there the grave of the ancient king. But this Michael Scanlan, as far as we know, had no relationship to the ancient king, and Ballyknockane House was built only in 1793-94. In addition, the place is not near to the ancient kingdom of Ossory, which extended roughly where today there is the county of Kilkenny, not of Limerick.

Monastery of St Domanagart. The correspondents have not heard that so ancient textiles have been found in this monastery. Somebody believes that in that area no graves were dug. However, since Kuznetsov speaks only of an "unidentified monk", it is difficult to reach a conclusion.

Liam Doughan, Lord Gillemore. The aforementioned Larry Walsh has provided useful information about the history of these Lords Gillemore (or Guillamore, as the name is usually written). I have found other news on the Internet. The family name of these Lords is O'Grady. But the first Lord Guillamore was only created in 1831, when Standish O'Grady was appointed Viscount. The O'Gradys had no connection with the possessions of Guillamore until the 18th century, when the grandfather of the first Viscount married a woman who brought them as a dowry. The residence of Castlegarde was inhabited by someone of the family, but this happened only in recent times. In fact Castlegarde was inhabited for the first time by a member of the O'Grady family in the 19th century, when a relative of the first Viscount built a house near an old tower. In the following years, other Viscounts Guillamore kept residence there. The name Liam Dougan (if not Doughan) can be found in Ireland, but I could not trace any historical personage with the name of Liam Doughan and connected with Castlegarde..

I have found that the old tower, which is part of Castlegarde, is sometimes described as the oldest inhabited house in the county of Limerick. Maybe Kuznetsov found this information (eg on the Internet, like me), and also read that Castlegarde was the residence of the Lords Guillamore. Not knowing, however, that these Lords arrived there not before the 19th century, he imagined that this was their ancestral home. As for the name of Liam Doughan, I do not know where he may have found it (or perhaps he has invented it).

At the East Clare Heritage they are compiling an archive for the history of the O'Grady family. From there, Gerard Madden informs me that the graves of both branches of the family are in other places (Aney and Knockainy), but not at Castlegarde.

Garrett Og Fitzgerald, 11th Earl of Kildare. The choice of this name has been unfortunate for Kuznetsov. The Earls of Kildare were important figures in Irish history in the 16th century, and the idea that someone in Ireland may give a Russian a piece of cloth from a tomb of a Kildare is so implausible that it

alone gives rise to suspicion. The 8th Earl of Kildare, grandfather of this Garrett (or Gerald), was a sort of Viceroy of Ireland. The father, the 9th Earl, met with the opposition of King Henry VIII and died in London as his prisoner. The elder brother, who still very young became the 10th Earl, led a rebellion of the Irish against the British crown, was defeated and was hanged by order of the King together with five of his uncles (1537). Our Garrett, still a boy, was saved because he fled abroad and was taken to Rome. He lived in exile for many years until after the death of King Henry VIII. Under Queen Mary he could return to Ireland, but later, under Queen Elizabeth, he was again persecuted and his possessions were partly expropriated. (This was the period in which Elizabeth crushed any ambition of independence with what later historians, from one or the other side, called "inflexible determination" or "unprecedented ferocity".) Garrett spent several years in prison, and was a prisoner of the Queen when he died in London in 1585.

In his residence, the Kilkea Castle, Garrett studied alchemy and magic arts, and because of this he was known as the "Wizard Earl". The people of Ireland continued, after his death, to cultivate the hopes of revenge that had invested in his dynasty. Legends were born according to which the castle was haunted by the ghost of the Wizard Earl. In one version of the legend, the ghost returns to the castle every seventh year mounted on a silver-shod white horse. When the silver will be all consumed, the Earl will awaken from death, will appear among the living already dressed in his armor, and will lead the Irish in a victorious battle against the British. He will restore independence to the whole of Ireland and will be its King.

Today the Irish people are no longer waiting for the Wizard Earl to rise from the tomb and to free them from the British, but they would not be happy if they knew that someone had desecrated his tomb and has cut a piece of his shirt for giving it to a Russian.

At any rate it would be difficult to take a piece of cloth from his grave, because the tomb no longer exists. The Earl died in London in 1585 and later his body was moved to Kildare (the city in the homonymous county in Ireland). But today his tomb cannot be found. Adrian J. Mullaney, of Kildare, who had been indicated to me as the most authoritative expert on local history, informs me that the St Brigid's Cathedral was partly ruined during the wars of the 17th century, and many tombs were destroyed. The church was rebuilt in the 19th century, but a tomb of the 11th Earl has not been discovered. Today in the Church, as well as in an adjacent crypt where, according to tradition, some Kildares were originally buried, there is no trace of a burial, nor is there a memorial tablet or an inscription of the 11th Earl.

I thank another local historian, Karel Kiely, of the Kildare Heritage & Genealogy Co, who has also availed of the advice of Con Costello of the Kildare Archaeological Society. I also thank Hermann Geissel.

For this Irish investigation, in addition to those mentioned so far, a number of other correspondents, who are experts in local history or archaeology, have answered my letters saying that they are not aware of the existence of the persons mentioned by Kuznetsov, nor of the fact that excavations have been carried out or textiles have been recovered in the terms described by him. I thank the following: Elizabeth O'Brien, William O'Brien, Oliver Cassidy, Eamonn

Cotter, Maria FitzGerald, Cathy Daly, Margaret Gowen, Annaba Kilfeather, Martina Malone, Conor McDermott, John O'Neill, Claire Walsh, Elizabeth Wincott Heckett. I thank in particular Richard Warner, curator for archaeology and ethnography at the Ulster Museum, Belfast, for his detailed replies. If many competent people, in a small country such as Ireland, agree in telling that they have never heard of the person or the facts cited by Kuznetsov, it is difficult to think that all his statements are true.

§3.1.4 *A confirmation from the National Museum of Ireland*

When this part of the investigation was nearly completed, from Dublin I received a confirmation from the most important Irish museum, the National Museum of Ireland, where officials had conducted a parallel investigation after I had informed them about Kuznetsov's paper. The conclusions reached by the Museum are important both because the investigations could be conducted from an authoritative and privileged position, and because, according to the regulations in force in Ireland, no archaeological finds can be taken out of the country without a special permission of this Museum.

Mary Cahill, Assistant Keeper of the Irish Antiquities Division, National Museum of Ireland, sent me a copy of a letter that she had sent to the Institute for Conservation, the London publisher of the journal where Kuznetsov's paper was printed. The letter is dated 7 January 2001. I reproduce it in full:

Mr David Bomford
Secretary General
International Institute for Conservation
6 Buckingham Street
London WC2N 6BA
England

Dear Mr. Bomford,

We have been contacted by Mr. Gian Marco Rinaldi concerning an article by Dmitri A. Kouznetsov, published in volume 45, part 2, of the Institute's journal. In the article the author purports to use a number of samples of textile from Ireland to support his assertion that ' a direct positive correlation exists between samples of different calendar ages and their degree of cellulose methylation'.

Having checked the article, I regret to have to inform you that, in so far as the samples of textiles from Ireland are concerned, there is no basis for the hypothesis put forward by the author. The burials which he describes containing the remains of some named individuals are unknown to Irish archaeology. The institutions and the individuals which he names as having provided the samples do not exist. Furthermore, both archaeological excavation and the alteration of

archaeological objects (including the removal of samples for analysis) are strictly controlled by legislation. *Licences to Alter* are granted by the Minister for Arts, Heritage, Gaeltacht and the Islands through the National Museum of Ireland. No record of any application or *Licence to Alter* has been granted for the samples described. Excavations at the sites described have not taken place.

The author seems to have gone to some trouble to 'identify' sites and names of persons which are clearly Irish in origin but to anyone familiar with the archaeology and history of the country are immediately suspect. I could go through each placename and person in detail but that is probably unnecessary. Suffice it to say that the information on Ireland given in the article has no basis in truth.

Once we were made aware of the article we felt obliged to inform the Institute. If there is any way we can assist you further with this matter, please let me know.

Yours sincerely,

Mary Cahill
Assistant Keeper
Irish Antiquities Division

§3.1.5 *A reference to a paper from Georgia*

A reference in the bibliography, no. 17, refers to a paper published in 1980 in the *Proceedings of the Georgian Soviet Socialist Republic Academy of Sciences*, written by three authors, V. G. Archilashvili, A. V. Tkhavaberidze and O. B. Pachkhelavia. It is a key reference because Kuznetsov refers to that paper for a description of the method he used for the culture of the microorganisms from which the enzyme for the experiments was extracted. If that paper does not exist, one wonders how Kuznetsov could do the experiments. From Tbilisi I received a letter of Dali Suladze, Scientific Secretary of the Central Scientific Library of the Academy of Sciences of Georgia. He informs me that the paper is not to be found in the publications of the Academy, *Proceedings* or *Bulletin*. Not even the number of the volumes for 1980 correspond with the volume n. 54 indicated by Kuznetsov. In addition Suladze has asked three scientists working in the field of biology (the academicians M. Zaalishvili, V. Okudjava, T. Dekanosidze), and they do not know the names of the alleged authors of the paper.

I also thank Dr. Adelaide Piccolomo, a librarian at the University La Sapienza of Rome, who had herself conducted a search of the volumes of the Georgian publications.

§3.2 *Affiliation*

At the end of the article there is a brief biographical note, where Kuznetsov, after having listed his titles, says of himself: «He is currently professor of biochemistry, Nesterova College, University of Moscow, and head of SBR Laboratories, Inc., Moscow.» Then he gives the presumed address of the laboratory, where the initials are those he always used as shorthand for Sedov Biopolymer Research Laboratories: «SBRL, 25-44 Menzhinski Street, Moscow 129327», but this is nothing more than his home address at the time.

In addition to the Sedov affiliation, here Kuznetsov gives a new affiliation: "Nesterova College, University of Moscow". Saying Moscow University, without other specifications, implies that the reference is to the large Moscow State University (MSU, also named Lomonosov University). I could not locate a Nesterova College in that university, although it may be difficult to prove that there is not. (23**) Suspicion is aroused by a curious alternating of masculine and feminine. In fact, when writing to me in October 2000 (after the paper had been published), Kuznetsov said to be part-time professor of chemistry and biochemistry at Nesteroff College of the University of Moscow. Also an update note to his curriculum gives the masculine form, Nesteroff College.

(23**) I have later found that in the Pirogov medical university (not the Lomonosov university) there is a department named after Arkady Pavlovich Nesterov (1923-2009). It is a clinical department which hosts patients mainly with rheumatological affections. Of course this has nothing to do with the cellulose of ancient textiles.

Mikhail Nesterov was a rather well known Russian painter, one hundred years ago, and there might be a college named after him. However, there is a private school in Moscow, sometimes named as "university", conducted by a Natalia Nesterova. It is a complex of schools of various kinds: English classes, courses on computer use, school of good manners for girls, up to a "humanistic university". It is possible that Kuznetsov has found a job at this school, but I doubt that it can be passed as a college of Moscow State University. I wrote to this Natalia Nesterova but did not receive a reply.

It is probable that this is the school because of a similar alternating of masculine and feminine with which Andrey Ivanov attended a symposium on the Shroud that was organized in 2000 in Turin by the local bishop. In the preliminary report sent to the symposium, as in the presentation on the website of the diocese, Ivanov's affiliation was to a "Nesteroff University" in Moscow. I wrote to an office at the diocese of Turin, asking to give me the address of that university, or to forward to Ivanov my letter where I asked him to get in touch with me. They told me of having forwarded my request to him. Not getting a response from Ivanov, I urged the Turin office where they sent him a second request, again with no response. The secretary of the office said that they could not give me the private address of Ivanov, since he had forbidden it. In fact, I did not ask a private address, but the address of the Nesteroff University. Finally, in the printed edition of the Proceedings of the symposium that was later published, the affiliation of Ivanov has changed gender becoming the "Natalia Nesterova University" in Moscow. Here the name "Natalia" is mentioned. I suppose, then, that also Kuznetsov might have had a

job at this school and that it is a private school owned by that Natalia, not connected with the University of Moscow. (23***)

(23***) Today (2012) this school has expanded and is denominated "Natalya Nesterova Academy of Education of Moscow". It has several departments in different areas, for example in Civil Law, Psychology, Tourism, Advertising and Public Relations, Economics, Choreography, Fashion Marketing, Fashion Design and others. The only marginal connection with chemistry might be in the departments of History of Arts and of The Fine Arts (Painting).

§3.3 *Financers*

In the Acknowledgements section at the end of the article, Kuznetsov writes:

«The greater part of this work was supported by the ATLAS Research Program Grant provided by the Guy Berthault Foundation, Meulan, France, in 1996-97. The enzyme isolation/purification procedure was supported by the Marc Antonacci Fund for Turin Shroud Research, St Louis, MO.»

Again Berthault as a financer, even if Kuznetsov refers to a period before his jailing. Then there is a thank to Mark (not Marc) Antonacci, who is an American lawyer with a passion for the Shroud of Turin and recently has published a book with the title *The Resurrection of the Shroud*. I wrote him to learn if he actually funded Kuznetsov, but he did not answer.

§3.4 *Advisers*

Continuing in the Acknowledgements, Kuznetsov cites two main advisers:

«Special thanks to Professor Shane Leslie Healy of the University of Dublin and Mgr.Denis Meehan of the Irish Heritage Foundation, Lanesboro, Ireland, for their consultations on the age-related stylistic details of ancient Irish textiles.»

I checked if they exist.

Professor Shane Leslie Healy of the University of Dublin. There is not a university in Dublin with this official designation, but for a foreigner it may be conceded that he uses a generic term for one of the city's universities. I requested information from the staff office for each of the three universities of Dublin: Dublin City University, University College Dublin, Trinity College Dublin. All of them answered that they do not know any Shane Leslie Healy.

Mgr.Denis Meehan of the Irish Heritage Foundation, Lanesboro. Denis Meehan is a common name in Ireland, but the correspondents of the area, those already mentioned in relation to the Foundation, are not aware that there be a priest with that name in Lanesboro, much the less if associated with a Foundation that does not seem to exist.

Kuznetsov continues:

«Dr Patrick O’Callaghan of the University of Dallas; Dr Elliot Byrne and Dr Kevin O’Toole of the Sacred Heart University at Fairfield, CT; Professor Alan O’Donnell and Dr Dylan O’Phelan of the Fordham University at New York; Fr. Patrick Guilhooley of the Albertus Magnus College at New Haven, CT; Dr Claude Maistre and Professor Kenneth Ryan of Loyola University at Chicago; Dr Paul de Caussade of the University of Notre Dame, Notre Dame, IN; and Professor Arthur McGeady of Quinnipiac College at Hamden, CT, are to be thanked for their fruitful critical remarks and kind attention to this study.»

These are ten names of doctors or professors at seven American universities. All the universities, except the last one, are confessional Catholic private schools. These universities have websites on the Internet with the full list of the teaching staff. I checked but could not find the names. However I have written to all the universities, asking if they have, or have had in the past years, these names on their staff. Five of the seven universities answered that they do not know the names. One did not answer. One said that they can not give information about the employees without their permission. I replied that I just need to know if they exist, but I did not receive an answer. I believe we can conclude that, at least for the most part, those persons do not exist.

Kuznetsov continues:

«Essential technical assistance in UV-VIS reflectance spectrophotometry was kindly provided by Mrs Anne-Marie Toussaint, St Vincent College at Bridgeport, CT.»

The St Vincent College is another Catholic school, but its home is in Pennsylvania, not in Connecticut. I wrote asking if there is a branch in Bridgeport, and if they have an Anne-Marie Toussaint among the employees. They answered that there is not a branch in Bridgeport and that they do not know a Toussaint. (Kuznetsov should know Bridgeport, the city where he remained in jail for months).

Finally, the last sentence of the Acknowledgments:

«Mr. Ignat Peremyshlo, Institute for Applied Microbiology at Moscow, Russia, is to be thanked for his continued assistance in the preparation of enzyme samples for textile treatment.»

I was unable to locate this Moscow institute with a name which is too generic. I think that at this point we can only wish Mr. Peremyshlo to exist.

It seems clear that Kuznetsov with this article intended to arouse interest in religious Catholics quarters. There was no other reason for selecting so many confessional universities.

§3.5 *Publishing*

I do not know what are the criteria of this journal for accepting the papers. The journal has six joint editors. They belong mostly to the British area and all deal in antiques and museums. I find it strange that any of them saw the Kuznetsov's article without noticing its inconsistencies. (23****)

(23****) William Meacham has kept me informed about some developments, see the Appendix.

Acknowledgements

I warmly thank the many correspondents who made it possible to conclude this investigation. Some of them had to do a considerable amount of work in order to answer my questions. In some cases the correspondence extended with the exchange of several letters.

In the above text I have mentioned the names of all those who provided useful pieces of information. Some of the names are again to be thanked for the willingness with which they collaborated: "Atheologian", Luigi Campanella, Odile Eisenstein, Marian Hyman, Mary Virginia Orna, Denise Parent, Sidney Weinstein and Ian Wilson, as well as Malcolm Bowden and Carl Wieland

It was a pleasure to get in touch with representatives of skeptical organizations of various countries. I thank Jon Blumenfeld (Connecticut), Dan Larhammar (Sweden), Barry Williams (Australia), and in particular Paul-Éric Blanrue (France). Here in Italy, Luigi Garlaschelli has been helpful in many circumstances.

I apologize if I forgot to mention any names. I extend my thanks to other correspondents who, without being in a position to provide important contributions, however had kindly made themselves available.

Lastly I thank Kuznetsov himself who, in spite of his wishes, offered me the opportunity to start the investigation. In fact he spontaneously sent me (October 2000), among other things, a copy of his most recent article, the study on the Irish textiles. I did not know the article and probably would never have seen if he did not send it to me. It was while reading that article that my first suspicions were born. Kuznetsov is also thanked for providing some of the photographs published here.

Appendix (2012)

The silence of the Journals

After ten years from the publication of my 2002 report, it may be interesting to see what has been the behaviour of the journals involved. As far as I know, no one of the journals has published a retraction or a note for informing about my results. Of course we have to except the *International Journal of Neuroscience* which had already published the article by Dan Larhammar in 1994.

I am not a regular reader of those journals and it is possible that they

have published a note without my knowledge. However I was not informed by them. Moreover, no trace of any pronouncements can be found on the Internet.

In 2002 my report was published only in Italian and this may explain why there was no reaction. But in 2000-2001, still before the publication of the report, I had written to all the journals involved (of course in English) with exhaustive accounts of my results. I did not expect that they should believe me on my word, but they could contact Kuznetsov and ask an explanation about my allegation. If he did not answer or could not give an explanation, this should have been sufficient indication that my allegations were founded.

In the following years, shorter accounts of the present report were published in English by Massimo Polidoro in 2004 (*) and by William Meacham in 2007 (**).

(*) Massimo Polidoro, The Case of the Holy Fraudster. *Skeptical Inquirer*, 28, March/April 2004
http://www.csicop.org/si/show/case_of_the_holy_fraudster/

(**) William Meacham, The amazing Dr Kouznetsov. *Antiquity*, 81 (2007), 779-783
<http://www.thefreelibrary.com/The+amazing+Dr+Kouznetsov.-a0169923805>

The Journals involved are seven:

- *Journal of Archaeological Science* (with papers [2a] and [3a])
- *New Journal of Chemistry* ([4a])
- *Analytical Chemistry* ([2b])
- *Archaeological Chemistry* (not a journal but a volume in a series of the ACS Symposia) ([2c] and [3c])
- *Acta Archaeologica Academiae Scientiarum Hungaricae* ([3b])
- *Textile Research Journal* ([4b])
- *Studies in Conservation* ([5])

From four of these Journals I received only a formal letter which acknowledged receipt without any comments (or even I did not receive a reply at all). They are: *Journal of Archaeological Science*, *Analytical Chemistry*, *Textile Research Journal*, *Studies in Conservation* (for the latter, see below).

For the other three Journals, as I mentioned in 2002, I received replies. I consider each of them.

New Journal of Chemistry

At the time of publication of Kuznetsov's paper [4a] in 1995, the Editor-in-Chief was Odile Eisenstein of the University of Montpellier, France. She had been Editor-in-Chief from 1993 to 2000 and subsequently has entered the editorial staff again as Consultant Editor.

As I told in §2.1.2, Dr Eisenstein was very helpful in collaborating to the inquest in 2001. She said she would inform the new Editor-in-Chief and thought that he would publish a note. I have not been informed if he did so.

Archaeological Chemistry

The editor of the volume was Mary Virginia Orna. We had a correspondence around 2001. As I told in §2.5, she said she regretted having published the two papers of Kuznetsov. This Volume of Proceedings is not a periodical journal and Orna could not publish a note in a subsequent issue. However it is part of a long series of volumes of the American Chemical Society and I think that she might have found other channels for publishing a retraction,

In the following years Orna has held a number of lectures in various cities in America where she touched upon the Shroud of Turin. I do not know the contents of these lectures as the most I can find on the Internet are notices such as this for a lecture she held in 2011 at Ohio Northern University:

«This talk will examine stained glass techniques, uses of atomic absorption on ancient pottery, analysis of ancient lead, and the radiocarbon dating of ancient linen in the case of the Shroud of Turin, which is said by many to be the winding sheet of Christ. In the latter case, the present theories regarding the Shroud will be discussed including some evidence that the radiocarbon date of the Shroud may not be valid because of fire damage experienced in 1532. Pro and cons will be discussed.»

I hope that at least in these lectures she has found occasion for unmasking Kuznetsov.

Acta Archaeologica Academiae Scientiarum Hungaricae

As I told in §2.5, the editor Dénes Gabler wrote me a letter in December 2000. In this letter, after having offered an excuse for having published the paper, as I told, Gabler added:

«We did not publish in later volumes any criticism: it is not a praxis in our journal.

«We indicated the authors' affiliation at the end of the volume below title "Auctores huius voluminis". A further information about Kuznetsov's career is not our matter.»

Therefore this Editor explicitly refuses to take account of the suspicions about Kuznetsov's behaviour.

Studies in Conservation

This case stands out because it is the only example of an Editor who has expressed a comment, even if not in the pages of his Journal.

Already at the start of my inquest, in Autumn 2000, I wrote to the International Institute for Conservation (IIC) in London, which edited this Journal. I expressed my first suspicions about the paper on the Irish textiles. I

hoped that they could help me in the investigation, which from their position would have been much easier than from mine. I received only a reply from a secretary who acknowledged receipt of my letter but did not add any comments.

Then in January 2001, as we know (§3.1.4), the IIC received the letter from Mary Cahill of the National Museum of Ireland, Dublin. If at the IIC they thought they had not to believe to my allegations, they however should have realized that they had to take very seriously the allegations from the Dublin Museum. I received no comments from the IIC and it seems that they did not even send a reply to the Dublin Museum.

Later in 2001 I sent the IIC an extended summary of my inquest. I did not receive any reply.

When William Meacham published his article on Kuznetsov in 2007, he dwelled in particular on the episode of the Irish textiles. I quote some sentences:

«One would have thought that such an impressive array of linen samples from Irish sites would have warranted verification by the journal, especially with one specimen coming from no less a famous personage than one of the Earls of Kildare. A brief enquiry by email or telephone to the National Museum of Ireland or Irish heritage authorities would have sufficed to reveal the amazing audacity of this fraud.» (p. 781)

«His [Rinaldi's] enquiry to the National Museum of Ireland elicited a response from Mary Cahill, Assistant Keeper in the Irish Antiquities Division. Her instant reaction was that the [textile] samples could not exist and '*anyone with the least familiarity with Irish archaeology would have known immediately that the data presented could not possibly be true*' (Cahill pers. Comm. 2006).» (p. 781-82)

«Having suffered such a debacle, the journal would naturally be expected to publish a correction, for the record, but surprisingly, *Studies in Conservation* chose not to do so.» (p. 782)

Meacham is an archaeologist and his article was published in a distinguished British journal of archaeology, but there was no comment in the pages of *Studies in Conservation*.

Soon after the publication of his article, Meacham wrote to an online forum of experts in art conservation, "Conservation DistList". I copy his letter of September 6, 2007 which is still online:

<http://cool.conservation-us.org/byform/mailling-lists/cdl/2007/1072.html>

«List members may be interested in an article I have just published in the current issue (Volume 81 Number 313 Pages 779-783) of *Antiquity*, Britain's premier archaeological journal. The article is entitled "The Amazing Dr Kouznetsov" and describes his quite incredible 3-stage career as an academic con artist.

«The final and most blatant fraud was perpetrated on the journal *Studies in Conservation* published by the International Institute for Conservation

in London. Kouznetsov, a Russian biochemist, had the audacity to simply invent a series of archaeological textile samples from Ireland (of all places!), and his article in *Studies* described testing that he claimed to have done on these samples. Anyone knowledgeable in Irish archaeology would have instantly known that the samples were bogus, but the journal did no checking and published the article in 2000 (number 45 pages 117-126). Worse, when informed of the fraud by officials in the National Museum of Ireland, the journal adopted the rather unsatisfactory conservation measure of sweeping the matter under the carpet. No correction or retraction was ever published.

«Earlier articles by Kouznetsov with fraudulent content were published in 1995 and 1996 in *Journal of Archaeological Science* and *Textile Research Journal*.»

At last Meacham's letter elicited a response from David Saunders with a letter on the same website. Saunders was one of the Editors of *Studies in Conservation* in 2000 at the time of publication of Kuznetsov's paper and since 2002 he was also the Director of Publications of IIC. In 2007 he was Keeper of Conservation and Scientific Research at the British Museum and formerly had been in the Scientific Department at the National Gallery in London.

I copy Saunders' letter to Conservation DistList of October 12, 2007:

<http://cool.conservation-us.org/byform/mailling-lists/cdl/2007/1101.html>

«In his posting in DistList 21:25 (October [September] 6, 2007), William Meacham refers to an article published by Dimitri Kouznetsov in *Studies in Conservation* (vol. 45, 2000, pp.117-126). As Professor Meacham points out it became evident over time and through subsequent reviews by experts in Irish textiles, that the so called "historic linen samples" on which the studies were purported to have been conducted were fictitious. In the initial review of the submission the editor responsible took the view that since the paper reported the complex enzymatic treatment of aged linen to determine its age, it would be appropriate to select biochemists with specialist knowledge in this field as referees. As neither the referees nor the editors had specialist knowledge in the area of Irish archaeology, the authenticity of the samples was regrettably not questioned.

«We are grateful to Professor Meacham for again drawing to our attention an issue that, despite being considered by the IIC Council in 2001, has never been adequately resolved. It is our intention to publish a short review of the incident in a future issue of *Studies in Conservation* and to ensure that the downloadable electronic version of this article on the IIC web-site bears a comment drawing the reader's attention to the doubts cast over the results the paper presents.

«With hindsight, and some knowledge of Dimitri Kouznetsov's other publications not available to the editor and reviewers at the time, it is clear that a broader critique of the paper might have prevented this fraud. However, it is unlikely that peer review systems will ever intercept all such deceptions; referees will seldom be expert in every aspect of a paper, and deliberate falsification may well play on this likelihood. Thankfully, the vast majority of authors who submit papers to *Studies in Conservation* and

other professional journals accord with ethical standards for conducting and reporting research.»

It does not seem that the journal has subsequently published the "short review of the incident" announced by Saunders. There has been only a comment by a reader on the website of the Journal. It has been sent in April 2009 by Jilleen Nadolny, an expert in art history and conservation. She gives the links to the two messages in the forum that I have already quoted and says:

http://www.iiconservation.org/publications/pubs_search.php?showallc=1&pub_id=61

«Fraudulent article

«I am curious as to why a note on the problem of fraud in this article has not appeared here yet - the work described by Kouznetsov was not undertaken as described as the samples "used" by the author do not exist. Below are links to the Dist List discussion of the matter.

«It would be a shame if this article passed without comment into the work of any of our colleagues.»

I thank William Meacham for having kept me informed about this case.

List of the examined papers

(The references have already been given in the above text.)

[1] D.A. Kouznetsov: "In vitro studies of interactions between frequent and unique mRNAs and cytoplasmic factors from brain tissue of several species of wild timber voles of northern Eurasia, *Clethrionomys glareolus*, *Clethrionomys frater* and *Clethrionomys gapperi*: A new criticism to a modern molecular-genetic concept of biological evolution". *International Journal of Neuroscience*, 49 (1989), 43-59.

[2a] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky: "Analysis of cellulose chemical modification: a potentially promising technique for characterizing cellulose archaeological textiles". *Journal of Archaeological Science*, 23 (1996), 23-34.

[2b] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky: "Detection of alkylated cellulose derivatives in several archaeological linen textile samples by capillary electrophoresis/mass spectrometry". *Analytical Chemistry*, 66 (1994), 4359-4365.

[2c] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky: "Analysis of cellulose chemical modification: a potentially promising technique for characterizing archaeological textiles". In Orna, M.V., ed., *Archaeological Chemistry*, American Chemical Society Symposium Series, 1996, 254-268.

[3a] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky: "Effects of fires and

biofractionation of carbon isotopes on results of radiocarbon dating of old textiles: The Shroud of Turin". *Journal of Archaeological Science*, 23 (1996), 109-121.

[3b] D.A. Kouznetsov, A. Ivanov: Chambéry fire of 1532 as the unique event in the "chemical history" of the Shroud of Turin: An experimental approach to the radiocarbon dating correction". *Acta Archaeologica Academiae Scientiarum Hungaricae*, 48 (1996), 261-279.

[3c] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky: "A re-evaluation of the radiocarbon date of the Shroud of Turin based on biofractionation of carbon isotopes and a fire-simulating model". In Orna, M.V., ed., *Archaeological Chemistry*, ACS Symp. Series, 1996, 229-247.

[3d] D.A. Kouznetsov, A.A. Ivanov: "Near-IR spectrophotometric technique for fast identification of carboxycellulose in linen fibres: A preliminary report". *Textile Research Journal*, 65 (1995), 236-240.

[4a] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky, V.L. Charsky, O.S. Beklemishev: "A laboratory model for studies on environment-dependent chemical modifications in textile cellulose". *New Journal of Chemistry*, 19 (1995), 1285-1289.

[4b] D.A. Kouznetsov, A.A. Ivanov, P.R. Veletsky, V.L. Charsky, O.S. Beklemishev: "A laboratory model for studying enviromently dependent chemical modifications in textile cellulose". *Textile Research Journal*, 66 (1996), 111-114.

[5] D.A. Kouznetsov, "Biochemical methods in cultural heritage conservation studies: An Alkylolation enzyme, S-adenosylmethionine transmethylase." *Studies in Conservation*, 45 (2000) 117-26.