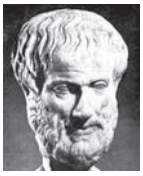

Newsletter

for the History of Science in Southeastern Europe

Published by the History of Science Programme
of the Institute for Neohellenic Research,
National Hellenic Research Foundation, Athens, Greece

No 8 / April 2005

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ISSN 1108-5630

CONTENTS:

HISTORY AND PHILOSOPHY OF SCIENCE IN THE GREEK AREA (17th-19th c.)

Ιστορία και φιλοσοφία των επιστημών στον ελληνικό χώρο (17ος-19ος αι.), ed. by Yannis Karas, Athens, 2003, 781 p.

This book of reference is the result of a long lasted scientific research carried out by a group of historians of science, within the Program of History of Science of the Institute of Neohellenic Research of the National Hellenic Research Foundation and under the coordination of Prof. Yannis Karas.

Mathematics, physics, biology, geology, geography, astronomy and medicine have been studied by the Greek scholars of the 18th century, in a level which cannot be considered as elementary. One of the conclusions of the authors of this book is that the Greek scholars of the 18th century worked on an ideological "project" in order to enlighten the Greek communities and to lead them to a national revival, which was also scientific, social and political.

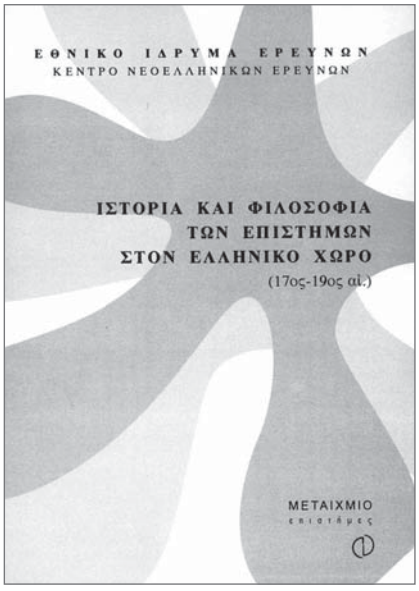
Indeed, Greek scholars of the Enlightenment considered that the Greek communities of the Ottoman Empire (and therefore belonging to the periphery of Europe) should prove that they were a component of the western civilization. Towards that way, these scholars tried to transmit to these communities the knowledge they acquired during their studies in European universities.

The first chapter of the book (by Efthymios Nicolaidis) presents the traditional scientific culture of the Greek communities of the Ottoman Empire which was the Byzantine science. This was the scientific background against which new science was introduced after the 17th century.

Nikos Kastanis, Michalis Lambrou and Maria Terdimou study thoroughly the mathematical thought of the period 17th-19th century. From Euclidean Geometry to 19th century Calculus, mathematics had been treated extensively and in depth in the books of Greek scholars. M. Anthrakites, N. Theotokis, E. Vulgaris, B. Vassilopoulos, K.M. Koumas, I. Moisiodax and others form a competitive background of mathematical knowledge in the Greek speaking communities.

Physics were considered as the corner-stone of the new scientific ideas. As George N. Vlahakis and Christos Xenakis

prove in the relevant chapters, Greek scholars accepted in general the Newtonian concept, and they understood perfectly the value of the experiments in the process to prove a theory as correct.



As Alexandros Papadimitriou comments in the relevant chapter, Chemistry was also treated in the books of 18th-19th c. at an advanced level. One of the most significant steps was the adoption of the chemical nomenclature proposed by Lavoisier and Fourcroy and its translation in Greek.

Nikos Matsopoulos presents the works on Astronomy and Geography, two disciplines which were of great interest for the Greek scholars of that period. The heliocentric system was accepted after a series of conflicts based mainly on theological arguments.

Dimitrios Karamberopoulos presents medicine and the reception of the new European medical methods.

Iannis Karas studies in detail the works of encyclopedic nature as well as the scientific contents of the magazines, *Hermes the Scholar* being the most significant of them.

In the last chapter, Theodoros Kritikos describes the scientific and institutional developments after the creation of the independent Greek State.

As a conclusion one may argue that this volume is actually a book which must be read not only by historians of science, but by all those who are interested in the history of Modern Greece.

World Year of PHYSICS 2005

EUROPEAN PHYSICAL SOCIETY SYMPOSIUM
"Notions of Physics in Natural Philosophy"
&
3rd Hellenic Conference
"History, Philosophy and Science Teaching"

Athens 19-25/9/2005

Amphitheatre "L.Zervas", NHRF, Vas. Constantinou 48, GR-11635
Languages of the Conference: English, French, Greek

The Symposium is organised by:
- European Physical Society / Division History of Physics
- Hellenic Physical Society
- National Hellenic Research Foundation / Program of History and Philosophy of Science
- University of Athens / Department of Education

Website: *http://asel.primedu.uoa.gr/synedrio/sinedrio_index_en.htm*

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The scope of the Symposium is to present the problematic concerning the emergence of Physics as scientific field from Philosophy and more precisely Natural Philosophy

Some themes of the Symposium:

- The emergence of notions of physics in Ancient Philosophy
- The concept of physical laws in Philosophy of Nature during the Antiquity and Middle Ages
- Questions on the heritage of Greek Philosophy of Nature during Middle Ages and Renaissance.
- The mathematization of Natural Philosophy and the emergence of classical physics.

Other themes will be proposed by the International Scientific Committee.

The International Symposium "Notions of Physics in Natural Philosophy" will be held during the three last days of the 3rd Hellenic Conference "History Philosophy and Science Teaching", i.e. from Friday 23 to Sunday 25 September 2005. Our scope (in programming these two events together) is to bring a large public of Greek Physicists to the International Symposium in order make known to them some of the historiography problems of their science.

RADICAL APPROACHES OF SCIENCE AND HISTORY OF SCIENCE

Symposium at Ermoupolis, Syros

Within the framework of the "Ermoupolis Seminars" organized annually by the municipality of Ermoupolis and the Institute of Neohellenic Research of the National Hellenic Research Foundation in the island of Syros, E. Nicolaides and C. Skordoulis convened a seminar on "Radical Approaches of Science and History of Science".

The seminar took place at the Industrial Museum of Ermoupolis from 6-8th July 2004.

The principal goal of this event was to give the opportunity to members of the Greek academic community to communicate novel ideas and approaches to scientific practice starting from the ambivalent relationship of radical scholars with science while underlining simultaneously the role of the History of Science.

The speakers included scholars of various scientific disciplines (Historians of Science, Education Theorists, Philosophers, Psychologists etc.). The seminar was attended by a large number of postgraduate students and educators. At some particular sessions the number of attendees amounted to nearly 65 which is one of the highest recorded in the 20-year long history of this seminar event.

The main characteristic of the seminar has been the lively debates and the hot exchange of arguments both among the speakers and between speakers and the audience. In some cases, heated debates continued during dinner in the tavernas of the island.

The lectures given at the seminar will be published in a volume under the editorship of the convenors.

At the end of the seminar it was decided that the participants of the seminar will participate in an electronic forum for an ongoing exchange of ideas, further coordination and better organization of the second event which will take place in Ermoupols at 28-30th June 2005 titled: "Sciences and Social Justice".

SCIENCE, TECHNOLOGY AND LEARNING IN THE OTTOMAN EMPIRE

Ekmeleddin Ihsanoglu, *Science, Technology and Learning in the Ottoman Empire*, Variorum Collected Studies Series, Ashgate/ Variorum, 2004, xiv+338 p.

This book contains papers relating to scientific, cultural and intellectual aspects of Ottoman history. In particular, it aims to explore the activities of science and learning that took place within the Ottoman Empire, a subject often neglected by both historians of science and of the Ottoman world. Ottoman science, states the author in his Introduction, witnessed several distinctive trends, some of which coincided with those outside the boundaries of the Ottoman State while others were quite different, and there are areas where Ottoman science played a pioneering role. Prof. Ihsanoglu traces the main lines of the development of Ottoman science: inspiration from the medieval Islamic tradition, acquaintances with European science, spread of this new science throughout the Islamic world. His articles describe and discuss the Ottomans' relationship and accommodation with Western science. Some of the articles take up current subjects of history of science which cover the period between the 14th-19th centuries and the first two decades of the 20th century that are studied for the first time within the increasing inter-

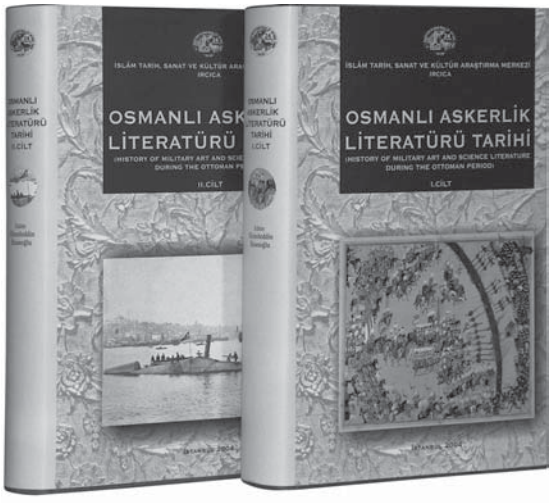
est in the Islamic science of the Middle Ages, specifically within the ambiance created by the studies conducted by Needham in the field of Chinese science and technology and also considering the current trend in contemporary studies that views history of science beyond the Eurocentric approach. Setting these trends in the context of cultural and political life, the author also examines the existing institutions of learning and the spread of Western-type institutions of learning and education from 19th century onwards. Furthermore, the author discusses the validity of various views formulated earlier relating to Ottoman science. Based on a methodical examination of numerous manuscripts and archival material, his articles attempt to present new viewpoints in the field of history of science, and maintain that "scientific traditions which developed in sub-cultural milieus are also worth examining, alongside the focused research on scientific activities in the major civilisations." In this context, Ottoman science gained new respect with the recent studies that received very good reviews in the history of science periodicals and journals of general scientific interest such as Nature. Thus history of Ottoman science is identified as a rich and unexplored field. Prof. Ihsano lu's articles in this volume and other publications have played a leading role in establishing this new understanding. The book may be commended to students of the history and civilisation of Islam, Ottoman history, the Middle East and the Balkans, as well as those who are working on the issue of the expansion of Western science and technology outside its own cultural realm.

MILITARY ART AND SCIENCE LITERATURE DURING THE OTTOMAN PERIOD

Osmanli Askerlik Literatürü Tarihi (History of Military Art and Science Literature during the Ottoman Period), 2 vols. Prepared by E., Ramazan Sesen, M. Serdar Bekar, Gülcan Gündüz, Editor: E. Ihsanoglu, IRCICA, 2004, Series of Studies and Sources on History of Science: No. 12, History of Ottoman Literature of Science Series: No: 5 (1290 p.)

Price: US$ 80,- excluding post

This study titled *History of the Literature of Military Art and Science during the Ottoman Period (OASLT)* is the fifth book in the *History of Ottoman Scientific Literature Series.* It covers the years 1299-1923 in Ottoman history and geography and deals with the authors and their works that comprise books, treatises, reprints, maps, etc., about military art and science. The works of known authors are followed by anonymous works that were written during the same period and within the same geography.



This study is divided into two parts: "Authors and their Works" and "Works whose Authors are Unknown." In the first part, authors are considered as separate entities which are arranged according to the dates of their demise. In the case these dates are not ascertained, the authors are placed at the end of the century in which they lived or the last date that they were still living is given. Works of unknown authors are alphabetically arranged. Each entry includes information about the lives and careers of the authors as well as their works on military science. If an author has more than one work, these are alphabetically listed. The titles of the works are written in the Arabic and Latin alphabets. Then the contents of the book, its manuscript copies, if any, its editions and incipit are mentioned. There is a bibliography at the end of each entry. Similar information is given for the works of unknown authors. We referred to different sources for information in cases where the copies or originals of a work were not available. The present book contains information about 762 authors who compiled works in the fields of military art and science. However, there is also considerable number of works by unknown authors.

The works, which this study focuses on, are divided according to the following subjects: Military laws and regulations; military literature;

military geography; military art and science; military engineering; *talimname*s (books describing the duties and regulations pertaining to all military branches); health and hygiene; ballistics; aphorisms of famous commanders in history on subjects of military art and science and warfare; statistics; vocabulary books (military terms and expressions); weapons; cannons and gunnery; guns; machine guns; tanks; infantry, the cavalry; the gendarme; marksmanship (training and the use of various light and heavy weapons); *tabiye* (fortification and strategy); reconnaissance, signals and transportation; maps and sketches, maneuvers; aviation-airplanes-balloons; archery; staff officers; the training of non-commissioned officers; the duties of the supply corps. This study informs the readers on works written in various languages, namely Turkish, Arabic, French and German. 10 works were written in more than one language.

The main objective of this book is to present information on the literature of military art and science during the Ottoman period for the benefit of the readers and researchers, to provide facilities for those who do research in this field and guide them in their studies.

MATHEMATICIANS COMMEMORATED: ALI QUSHJI AND SALIH ZEKI SYMPOSIUM

(Istanbul, Turkey)

The Department of History of Science of the Istanbul University celebrated the 20th year of its foundation with a symposium held at the Faculty of Letters on December 20-21, 2004. Sponsored by the "Sevinc ve Erdal Inonü Foundation", the symposium focused the life and works of two scholars of mathematics: Ali Qushji and Salih Zeki. The key-note lecture on Ali Qushji was delivered by Professor Jamil Ragep (Oklahoma University) who stressed the possible role of this 15th century astronomer-mathematician in the Copernican revolution. The key-note lecture on Salih Zeki (1864-1921) was given by Professor Erdal Inonü (Sabanci University, Istanbul) who pointed to the historical propositions by Salih Zeki regarding the priority of muslim mathematicians in using various mathematical devices and in establishing trigonometry as a separate discipline.

H.Senkon described a pre-1960 transliteration of Salih Zeki's work on the history of eastern mathematics and astronomy called *Asar-i Bakiye (Monumental Heritage),* while Y.Unat focused on the methodology he used in the composition of this work. A. Bir and M. Kaçar jointly discussed one of his articles where he critisized the impossible solution given by a mathematician for the trisection of an angle. I. Akdenizci-Demirta spoke on his university lectures of 1914 introducing the non-Euclidian geometry into Turkey. M. Dosay Gokdogan, reviewed his position in the history of mathematics. R. Demir gave a chronology of his life and publications. E. Dolen exposed Salih Zeki's Darülfünun (University) years where he acted as president and taught mathematics and physics. M. Akbas, examined his lecture on "time" in the light of the translations he made from H.Poincaré's works. F. Gunergun introduced Salih Zeki's activities in astronomy during and after his appointment as director to the Istanbul observatory, and his connection with the observation of the total solar eclipse of August 1914. S. Kadioglu described the scholarly circle that Salih Zeki frequented. Finally, S. Etker commented on the various dimensions that should be taken into account when writing a comprehensive biography of Salih Zeki. D. Cündioglu introduced Ali Qushji's philosophy of being and I. Fazlioglu discussed the possible sources and the influence of Qushji's definition of the number.

The symposium brought together historians of science, mathematicians and astronmomers, and paved the way for future interdisciplinary collaboration.

ALI QUSHJI (d.1474)

Ali Qushji was born in Turkestan, a major cultural area of the Islamic world during the reign of the Timurids in the 15th century. Bukhara and Samarkand were the prospering cities. When Ulugh Beg (1394-1449), the grandson of Timur, an able mathematician and astronomer, erected an observatory in Samarkand in 1420, the city became a center for astronomical and mathematical researches. Ali Qushji, together with Ulugh Beg, Kadizade-i Rumi (the head of the Samarkand Madrasah), and Giyasuddin Camshid, was one of the noteworthy scientists of the Samarkand Observatory. The foremost product of the Samarkand astronomers were the tables named "Zij-i Ulugh Beg".

Ali Qushji critisized the arguments forwarded by Ptolemy to advocate his geocentric theory of the universe in which the stationary Earth is assumed to be a central body around which the

Sun and the planets revolved. There were other medieval muslim astronomers who objected to Ptolemy's arguments about the immobility of the Earth, such as Ibn Heysem, Nasiruddin Tusi, Kutbeddin Shirazi. Ali Qushji, however, was the only member of the Samarkand School who was critical of the concept. The fact that Ali Qushji drew attention upon the revolution of the Earth may suggest a possible intellectual exchange between the Islamic world and Europe in the 15th century. According to Professor J.Ragep, Ali Qushji possibly played a role in the Copernican Revolution by proposing the use of eccentrics rather than epicycles for the lower planets.

After the death of Ulugh Beg (1394-1449), his mentor, Ali Qushji went to Tabriz where he lived for some years. Invited by Sultan Mehmed II, he came to Istanbul in 1472, where he remained until his death in 1474. Ali Qushji taught in the madrasah founded by Mehmed II in Istanbul. In all likelihood, it was due to Ali Qushji himself that mathematical sciences were included in the madrasah curriculum. He recalculated the longitude of Istanbul and constructed a sundial for the mosque of Fatih.

Al-Risalat al-Fathiyya (the enlarged Arabic version of his Risala der Ilm el-Hay'a, first written in Persian), a treatise that he dedicated and presented to Mehmed II, remained in use for many years in Ottoman madrasahs. In this work dealing with geometry, physics and astronomy, Ali Qushji sought to undermine the use of Aristotelian physics, did not believe in observational arguments advanced by Ptolemy to prove the rest of the Earth, and suggested that the Earth may be rotating.

SALIH ZEKI (1864-1921)

Born in 1864, Salih Zeki studied first in the Darüssafaka in Istanbul, then in Ecole Supérieure de Télégraphie in Paris. Following his return in 1887, Salih Zeki was instrumental in the diffusion of mathematical sciences through the many textbooks he wrote in a clear and comprehensible style. His teaching in various educational institutions (including the "Darülfünun" which subsequently became "Istanbul University") contributed to the formation of a good number of mathematicians in early 20th century. His interest was not confined to mathematical sciences, he was also much interested in the history of these disciplines as well as in philosophy.

Salih Zeki translated into Turkish the three books of Henri Poincaré (1854-1912), pertaining to philosophy of science and of ethics: *La Valeur de la Science*, *Science et Méthode*, *Science et Hypothèse*. He also rendered the *Principes de la Philosophie scientifique et de philosophie morale* of Alexis Bertrand (1850-1923). It may be quite possible that his sympathy for philosophy arose during his stay in Paris where he possibly attended the lectures of Poincaré.

Salih Zeki developed an interest in history of science while he was stil in his twenties. To explore the rôle of the Islamic scholars in the advancement of Greek mathematical lore, he set to examine the Arabic and Persian manuscripts kept in Istanbul libraries. In order to establish the Eastern impact on Europe, he studied the knowledge that Islamic mathematicians inherited from the Greeks. Thus, he began to learn about Greek mathematics and astronomy through the books of Paul Tannery (1843-1904) and read about exact sciences in India and eastern mathematics.

He started to publish his works on history of science from 1897 on. The first volume of *Kamus-i Riyaziyat* saw the press in 1897 and the first two volumes of *Asar-i Bakiye* in 1913. The remaining volumes are still in manuscript form. *Kamus-i Riyaziyat* (Encyclopaedia of

Mathematical Sciences, 11 vols.) includes articles on the mathematical and astronomical terms as well as biographies of Islamic and European mathematicians and astronomers. In *Asar-i Bakiye* (*Monumental Heritage,* 4 vols.), Salih Zeki discusses the contributions of Islamic scholars to mathematics and astronomy and points out that some mathematical techniques attributed to Europeans were in fact introduced by muslim scholars: i.e. he stresses that the use of tangent was not discovered by Regiomontanus, but in the Islamic world in the Middle-Ages.

Salih Zeki undertook administrative and academic duties as well. He acted as the director of the Rasathane-i Amire (Observatoire météorologique), director of Mekteb-i Sultani (Imperial Highschool), counsellor at the Ministry of Education and president of the Darülfünun (University).

In February 1919, Salih Zeki fell ill with a cerebral affliction and had to be hospitalized. The lament of his students and colleagues turned into protest when the authorities announced his dismissal from the presidency of the Istanbul University. The pres saw this act as an ingratitude and humiliation. Although Salih Zeki did not seem to express any political tendencies, his dismissal has been interpreted as a move of the liberals against the conservatives. He died in 1921 at the age of 56.

DISCOURSES ON HISTORY, PHILOSOPHY AND SOCIOLOGY OF SCIENCE IN ASSOS (TURKEY)

The 2nd symposium of the "Working Group for the History, Philosophy and Sociology of Science" met on June 18-20, 2004 in Assos. This harbour-city located on the Turkish coast of the Aegean Sea dates to 7th century BC, and is located by the fishing village of Behramkale. The historical site had already welcomed historians of science, philosophers and sociologists in 2003 during the first symposium of the Working Group. Both symposia, organised by the Department of History of Science (Faculty of Letters, Istanbul University) paved the way for multidisciplinary research and enabled scholars from various backgrounds to come together for hot discussions. Papers presented covered a wide range of subjects. A good number of them were on the history of mathematics, natural sciences, paleontology, physics, astronomy-astrology and technology, while others focused on philosophical issues. Sponsored by the TUBITAK (The Scientific and Technical Research Council of Turkey), the symposium offered the opportunity to visit ancient site of Assos under the guidance of Umit Serdaroglu, professor of archeology and director of the Excavation House.

Papers presented at the symposium are as follows:

Karl Popper and indeterminism (*H.R. Acar);* Chaos and the role of popular culture as a simulacrum in the evolution of social systems (*G. Akdeniz);* Georges Canguilhem's "Epistemological history" (*A. Avar);* Sociomathematical notes on two measures for cereals: kile of Sebinkarahisar and godük *(D. Ayan);* Faire de l'histoire en Thrace grecque (*F. Assimacopoulou*); A peculiar view on causality (*H.Berkmen);* The tradition of *hiyel* in Islamic technology: Benu Musa brothers, el-Cezeri and Takiyüddin bin Maruf (*A. Bir & M. Kacar*); Memex, hypertext, literary tradition (*S.Bulutsuz*); Conceptual confusion in astrology and misconceptions (*O. Demircan); On positivism* (*R.Ertürk*); A pathologist in Troy: Rudolph Virchow (*F. Günergun & S. Etker);* Innovations that bare the eponyms of Turkish scientists (*E. Inonü & H.Dogan);* Ideas that influenced the fundamentals of 20th century mathematics (*T. Karacay*); A theoretical study on the boundaries of science (*B. Kuryel*); Rethinking objectivity in social science (*E. Montuschi*); The historiography of science in Greece (*E. Nicolaidis);* Plinius' Naturalis Historia (*E. Ozbayoglu*); Kasparov's revolt or comparing the carbon atom with man's role in the evolution of the universe (*A.C.Ozcan*); Paleontology and the history of natural sciences (*M. Sakinc);* The 40 year long adventure: from cybernetics to artificial intelligent control systems (*A. Savaci);* The earliest global tectonic theory (*C. Sengor*); Ionian renaissance in the 6th century BC (*U. Serdaroglu);* Possible outcomes of genetic engineering (*Y. Tarkan-Argüden & S. Yilmaz & D. Tiryaki);* Universal knowledge: From particles to the community of nations (*D. Tiryaki);* Ontologic and linguistic aspect of the concept of truth: contribution of Frege and Tarski (*S. Ural*); University, Industry and patents (*V.Yüksel & E.A. Akyol);* **Posters:** Drawing curves: past and present (*I. Akdenizci*); Sociological outline of science and art in Europe and the Ottoman Empire during 18th c. (*B. Dikecligil*); Carriages in ancient protoasia (*G. Sahinbas-Erginoz);* An equation that brings together the physical and biological sciences: "Bernoulli" (*T. Zeren & N. Ekerbicer).*

STUDIES IN OTTOMAN SCIENCE

Vol.V, Nr.1, 2003: Chemical nomenclature in nineteenth century Turkey (*Feza Günergun*); The French artillery officer Saint Rémy and his work on guncasting for the Ottoman army in Istanbul (1785-1787) (*Mustafa Kacar*); Introducing Einstein's relativity to Turkey (II): Hüsnü Hamid [Sayman] (*Meltem Akbas*); Professor Dr.Akil Muhtar Ozden's memorandum on the Darülfünun (*Emre Dolen*); The history of quarantine in the Ottoman Empire (transliteration of a late 19th century Turkish text by *Abdullah Kose*). Book reviews: *Endüstri Oncesi Teknolojilerin Mekanigi* by Brian Cotterell & Johan Kamminga (reviewed by Günhan Danisman; *Darülfünundan Günümüze Universite Yayinciligi ve Yasami* (compiled by E. Dolen, N.Yildirim, F. Aral) (reviewed by Sevtap Kadioglu).

Vol. V, Nr.2, 2004: The foundation of the Zeynep-Kamil Hospital in Scutari, Istanbul – Waqf documents (*Seref Etker, Feza Günergun & Abdullah Kose*); A Turkish journal on agricultural sciences: Ziraat ve Sinaat Tercüme-i Fünun Odalari Mecmuasi (*Sevtap Kadioglu*); Child health in Istanbul: Dr. G.B. Violi and his monthly La Pédiatrie en Turquie / Türkiye'de Emraz-i Etfal (1909-1914) (*Gülten Dinç & Seref Etker*); The Scientific Revolution and Turkey (*Erdal Inonü*); The Department of History of Science, Faculty of Letters, Istanbul University: Activity Report 2000-2003 (Gaye Sahinbas Erginoz). Book review: *Türkiye'de Botanik Tarihi Arastirmalari* by Asuman Baytop (reviewed by Gaye Sahinbas Erginoz).

Vol.VI, Nr.1, 2004: A plant collector in Anatolia at the end of the nineteenth century: Paul Sintenis (1847-1907) (*Asuman Baytop*); Pierre Apéry (1852-1918): Un pharmacien face à la peste dans l'Empire Ottoman (*François Apéry*); Spiridon Mavroyéni Pacha /1817-1902) et sa contribution à la diffusion des sciences médicales dans l'Empire Ottoman (*Feza Günergun*); Darülfünun students' demonstrations for the Balkan War and their journey to Edirne (*Emre Dolen*); Sociomathematical notes on two measures for cereals: kile of Sebinkarahisar and godük (*Dursun Ayan*). Books and exhibitons: the journal *Kebikec* (Nr.17, 2004) and the exhibition "Science and Technology in Islam" (Exhibition of some scientific instruments from the museum of the Institute for the History of Arabic-Islamic Science at the Wolfgang Goethe University, Frankfurt) are reviewed by F.Günergun.

GREEK MATHEMATICAL CULTURE AND THE FORMATION OF BULGARIAN MATHEMATICAL CULTURE DURING THE 19th C.

During the second half of the 20th century scientific researches on formation of Bulgarian mathematical culture of Bulgarian Revival in 19th century were held by the authors of the present report as well by other authors. These researches show that the main role in this process was played by Greek, French, Russian and German mathematical cultures. The first influence was that of the Greek mathematical culture. There is no well-founded answer "why". The search of reason in geographical closeness of Greek and Bulgarian schools is not convincing, as Ottoman Turkish schools were close too, but they did not had any influence on Bulgarians' mathematical culture. In the following paragraphs we outline only the basic directions of Greek influence on Bulgarian mathematical culture, especially during the foundation of this culture in 19th century. These main lines are three:

1. The use of Greek mathematical books by Bulgarian pupils, when they had studied in Greek Schools; after graduation they applied this knowledge in their practical activity. For example, the case of using arithmetical knowledge in Greek language in a record in Plovdiv from 1615 to the middle of 19th century.

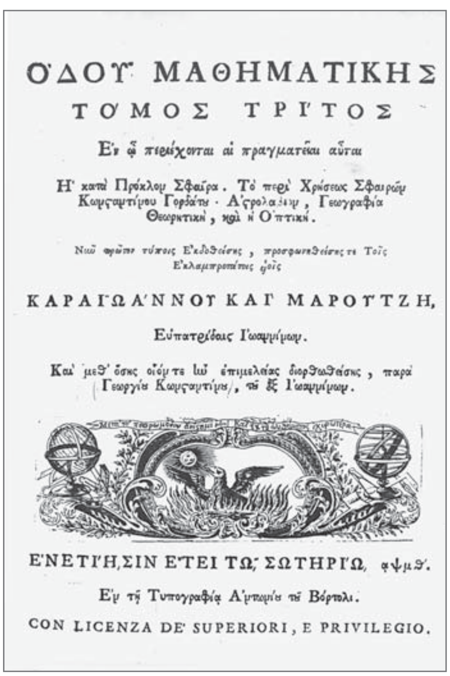
2. Use of Greek mathematical textbooks in Bulgarian schools. Such is the case of the Greek textbook in Raino Popovich's school.

3. Greek mathematical training of the first Bulgarian non-religion school's creators in Svishtov and Gabrovo, namely Emanuil Vaskidovich, Hristaki Pavlovich and Neofit Rilski.

Concerning the first kind of influence, we will note that Bulgarians trained in Greek schools have afterwards used Greek mathematical books. Convincing is the fact that such books were widely spread all over Bulgarian people's territory. Up till now, they are kept in our libraries and monasteries. For example, a copy of *Practical arithmetic* by Manouil Glizonios, republished numerous times between 1569 and 1818, is now kept in Bachkovo monastery. This copy is of the 1596 print. More distinguished among

the 40 Greek mathematical books spread over Bulgarian land are: *Course of mathematics* by Methodios Andrakitis, published in 1749, *Elements of mathematics*, by Nikiforos Theotokis. (1798) and the volumes of the series *Elements of mathematics, physics, and chemistry* by Konstantinos Koumas, published in the early beginning of the 19^{th} century.

Having received their mathematical training in Greek schools, where mathematics played a significant role, E. Vaskidovich, H. Pavlovich, and N. Rilski published the first Bulgarian texts and exercise books in mathematics. In the school created by Vaskidovihc in 1815 in Svishtov the following learning subjects were studied: Bulgarian language, old Slav's language, old and contemporary Greek, old and modern history, geography, drawing tracing, and pen craft writing. In the school created by Pavlovicth in Svishtov in 1831 the following disciplines were taught: Bulgarian grammar, catechesis, arithmetic, Bulgarian history, rhetoric, logic, religion, geography, Slav's language, and Greek.



ΟΔΟΥ ΜΑΘΗΜΑΤΙΚΗΣ

ΤΟΜΟΣ ΤΡΙΤΟΣ

Ἐν ᾧ περιέχονται αἱ πραγματεῖαι αὗται

Ἡ κατὰ Πρόκλον Σφαῖρα. Τὸ περὶ Χρήσεως Σφαιρῶν Κωνσταντίνου Γορδάτη · Ἀστρολάβιον, Γεωγραφία Θεωρητικὴ, καὶ ἡ Ὀπτική.

Νῦν πρῶτον τύποις Ἐκδοθεῖσαι, προσφωνηθεῖσαι τε Τοῖς Ἐκλαμπροτάτοις υἱοῖς

ΚΑΡΑΓΙΩΑΝΝΟΥ ΚΑΙ ΜΑΡΟΥΤΖΗ,

Εὐπατρίδαις Ἰωαννίνων.

Καὶ μεθ' ὅσης οἷόν τε ἦν ἐπιμελείας διορθωθεῖσαι, παρὰ Γεωργίου Κωνσταντίνου, τοῦ ἐξ Ἰωαννίνων.

ΕΝΕΤΙΗΣΙΝ ΕΤΕΙ ΤΩ ΣΩΤΗΡΙΩ, αψμθ'.

Ἐν τῇ Τυπογραφίᾳ Ἀντωνίου τοῦ Βόρτολι.

CON LICENZA DE' SUPERIORI, E PRIVILEGIO.

Mathematical education occupied an important place in the third Bulgarian non-religion school created by Rilsly in Gabrovo in 1835. For the purposes of this education in the primary school, as we know, he developed his famous "each-other teaching" tables.

The first book in Bulgarian containing extensive mathematical knowledge with the aim of student training is the *Fish ABC book*. Its author Petar Beron graduated the renowned "Hellenic high school" in Bucharest, where mathematics was taught by the famous Greek teacher Vardalakhos.

Pavlovish, author of the first Bulgarian arithmetic textbook, printed in 1833, received his education in the Greek schools in Melnik and Seres. In the content of the book there is strong notion of the influence of Darvaris' *Arithmetic*, 1803.

Vaskidovich, author of the second Bulgarian arithmetic textbook, published in 1835, studied in the Greek schools in Melnic and the isle of Hios. In this book we find influences of Greek textbooks, mainly of the *Elements of mathematics*. In 1845, Sichan Nikilov, student of Hristaki Pavlovich, publishes the fourth Bulgarian arithmetic textbook. The book is influenced by the *Arithmetic* of Gerakis, as well as of Kalambakidis book *Review of practical arithmetic*, 1834.

All these textbooks set not only the basis of mathematical book tradition in our country, but the fundament of Bulgarian mathematical terminology. This means that the impact of Greek mathematical culture on Bulgarian mathematics is quite significant and supplements some important elements. Taking into account the fact that in the considered period many Greek handwritten books of arithmetic and geometry were used in Bulgarian lands, we reach the conclusion that this impact is even stronger.

We do not consider the mentioned subject is covered by our work. A more detailed research would give valuable information on history of mathematics and mathematical education in Bulgaria and the Balkans. The research on the other hand would give solid basis for collaboration among historians of mathematics of the Balkan countries.

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SOCIAL STUDIES OF SCIENCE IN BULGARIA – TOWARDS THE HISTORY OF AN INTERDISCIPLINARY FIELD

The social studies of science, which can be found under different labels: Science and Technology Studies, Science, Technology and Society Studies, Science of Science in the Anglo-Saxon world, or as Naukovedenie (Russia), Naukoznawstvo (Poland), Naukoznanie (Bulgaria) is a relatively new research area with interdisciplinary character. It provides knowledge about science as socially constructed and performed activity although the impact of the "social" is not always considered in the same way by different schools and researchers in the field. However the basic idea refers to the limitations of traditional disciplinary approaches like epistemological, sociological, historical, and psychological for understanding the general trends of the development of science as a complex system.

In this paper will be presented the development of the field in Bulgaria. The use of the most popular abbreviation STS, is intentional as it reflects the complexity of the subject. At the end of 30's John Bernal, the acknowledged father of the field called the Science of Science "a new star on the scientific skies". In 1968, the year of foundation of the first institutions of the field in Bulgaria the country was only 3 years behind the moment which specialist in STS called the 'Turning point" in its history. The revival of STS is closely linked with the book of Derek de Solla Price "Little Science, Big Science" in 1963 and the application of some statistical instrument, reveling important tendencies of the development of science,-the exponential growth of the scientific literature, the saturation principal and the other. The echo of these findings gave the field new directions of investigation.

To understand the role of science studies in this country we have to make a short overview on the context of it emerge and development. The history of the field also shows the path of the integration process between the researchers from different disciplines around the "hot topic", facilitated by the adoption of the common research program.

1. The totalitarian period

The general attitude of the totalitarian state and ruling communist party toward science and education was positive. It was based on the concept of "scientific and technological revolution", which main characteristics were believed the historical advantage of the socialist system. The ambition was to bring Bulgaria, a country with predomination of the agricultural production to the family of the industrialized countries.

Bulgaria was one of the least industrialised countries at the end of World War without such scientific traditions that characterises most of the other countries in Europe. There are a few institutions with scientific heritage that can be traced to developments that followed World War II. For example while the predecessor of Bulgarian Academy of Sciences (BAS), the Bulgarian Learned Society was founded in 1869, only 200 scientists were involved in its activity in 1945 and most of them were from the humanities and social sciences. Similarly, in the educational field there has not been a long scientific tradition. Sofia University, founded in 1888 had good achievements in mathematics and physics, but they have been modest in comparison with other East European Universities.

Until 60's the predominant concern of the state policy was higher education. The main tasks of the Committee for Science, Art and Culture (set up in 1948) and Council for Science Co-ordination (which replaced the former body in 1956) were the registration of scientific manpower and institutions, elaboration of recommendations to the financing of the Academies and co-ordination of the research subjects. It is illustrative that the number of students at Sofia University grew from 9000 to 33000 within three years.

The real steps towards creation of the national S&T system were associated with the activity of Committee for Technological Progress (1960), transformed into State Committee for Science and Technological Progress (DKNTP) in 1962 - a special agency of the Council of Ministers .The main functions of DKNTP were planing, financing, co-ordination and evaluation of the development of science and technology.

Generally the system followed the path of the "soviet model of S&T system": the separation of research and higher education; separation of production and R&D; central regulation of research assignments and implementation of results; the dominant role of the BAS in basic research; weak industrial R&D, lacking market-orientation.

As result of the new stage of science policy of the DKNTP the extensive development of science in the 1960-1968 is noticed: the number of research institutes grew from 122 to 340, the number of employees in the sector increased from 17,200 to 37,400, that of researchers – from 2694 to 5566. The research expenditure as per cent from GDP also rose up - from 0.5% to 1.7%.

Under these circumstances the study of science in its social context has found increasing acceptance in Bulgaria and specialised scientific units have been created to assist its development The first such specialised unit was the Centre of Science of Science set up in 1968 at the Presidium of the BAS Its initial task was to carry out theoretical and applied studies for the internal purposes of the Academy. This year marked the beginning of intensive institutionalization of the social studies of science in other areas as well. Thus in 1969 a section on the Sociology of Science were formed in the Institute of Sociology of BAS. In 1972 a Scientific Center on the Economics, Organization and Management of Scientific and Technological Progress, oriented mainly towards economic questions arising from the development of science and technology was established in DKNTP. The following year, a scientific group to deal with theoretical problems of scientific information was set up at the Center for Scientific Information of the BAS and a department with similar function was set up in the Agri-

cultural Academy. In the mid 70's the Section on the History of Science has been founded in the than existing Center for research and training in History at the BAS. Few years later the research into the psychology of scientific creativity has started at the Laboratory of Psychology at Sofia University "Kliment Ochridsky" (latter transferred into BAS).

Therefore looking to the first step of the field in Bulgaria one can clearly see the domination of the differentiation processes and the derivation of the specialized problem aria from the "mother" discipline, usually under the same institutional umbrella. The counter-movement of integration of the researchers and the formation of the unified scientific community in social studies of science was a result of more than ten years of interchange and communications, not always free of rivalry and competition. What are the main factors, favoring such movement? The integration process among the researchers in this new field went via different channels and under different forms

On the first place, the *cognitive maturity reached by the field***.** The institutional development of the social studies of science in Bulgaria coincided with its intensive consolidation as a scientific field. In the discussion about the character , subject and method of this new activity , its relations with the other disciplines studying science two opposite approaches were distinguished clearly : one regarded the field as a "complex research " with variant configuration, depending on the subject, i.e. as applied research. The second, strongly supported in Bulgaria by the researchers in the Center for Science of Science claimed that social studies of science have reached the status of independent research field. The theoretical framework of its conceptualization was found in the "general system theory" and system approach. According to the conception elaborated in the Center the basic elements, which interdependence underlines the dynamics of historical evolution of science, are the "internal" and "external "mechanisms of the production of knowledge. These terms refer to the cognitive and organizational aspects of science and much research work has been done to analyze the impact of the changing research instruments on the organization of research teams, on co-operation including multi- and interdisciplinary research. Among the external organizational elements a key issues are the manpower, assemblage of all social conditions and resources that influence the course of research. These include among others the qualification of staff, intellectual styles, facillities and forms and source of funding.

On the second place *the recruitment process*. Like many young disciplines the social studies of science in Bulgaria faced some difficulties to be established as a university specialty. The training and qualification activities were organized mainly by postgraduate studies in Bulgaria and abroad. The students were recruited from different disciplines in social sciences like economics, philosophy, psychology, but also from natural sciences –chemistry, physics, and biology. With the extension of research profile to include science policy and innovation issues many young engineers also jointed the Center's training programs. Between 1970 and 1988 about 20 postgraduate students have been trained in the Center.

Special role for the integration has to be attributed to the International Summer School on Science Studies, organized in Primorsko on Southern part of the Bleak Sea Shore every second year since 1978. Each school was attended by an average 50 young researchers from the country and other mostly ex- socialist states. The panels of recognized scientists were invited as lecturers.

On the third place the *common evaluation bodies* like Joint Scientific Council on the Center for Science Studies, and the Center for Scientific Information with Library and Scientific Archives, responsible entre allia for the research topics, training programs, promotion of scientists and publication activity in the field.

It is worth mentioning the role of the professional organizations of scientists, in particular the positive impact of the Society for Theory and History of Science (STHS) at the Union of Scientist in Bulgaria. Many international activities and nation-vide conferences organized by it on different issues of history and present development of science, followed by publications in the Society's review attracted the interest of people not only from professional milieu.

It was not surprising after the development briefly described above that in 1988 the unification between the three most developed units took place. The earlier started integrative processes superseded the fragmentation and differentiation of research. The Scientific Group on Theoretical Problems of Scientific Information and the Section on the History of Science of the Center for research and training in History was transferred into the Center for Science Studies and this event marks the new stage of the development of social studies of science in the country.

The 1988-1990 period is characterized by the strengthening of the institutional mechanisms in the Center- full financial autonomy was achieved, an institute's scientific council was established and the management became more efficient. In cognitive perspective the new balance between quantitative and qualitative approaches, between theoretical and historical studies, conceptual and empirical research resulted in higher productivity of the Center. By the end of the period the publication output of the researchers was ranked on the first place among the social science department units of BAS. The international co-operation was extended to developed Western countries – bilateral agreement was signed with Finland, Norway; some long-term specialization provided in USA, UK, and Finland.

Second part of the article, "The new challenges to the Social Studies of Science in the transition period" at the next issue of the *Newsletter*

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PHD THESES ON HISTORY OF SCIENCE

Gianna Katsiampoura, *Perception, transmission and function of science in middle Byzantine era and the Quadrivium of 1008,* [in Greek], PHD Thesis, Department of Sociology, Panteion University of Social and Political Science, Athens 2004, p. 295

The PHD Thesis entitled *Perception, transmission and function of science in middle Byzantine era and the Quadrivium of 1008* has as its objective a presentation, as clearly as possible, of the scientific researches and of the general perception of mathematical sciences in the middle Byzantine era, in the area of Byzantine Empire. Thematic axes of the Thesis are the Education on mathematical sciences (a sector that constituted the superior educational stage in Byzantium), the perception of science and the particular text *Ευσύνοπτον σύνταγμα εις τας τέσσαρας μαθηματικάς επιστήμας* used for the teaching of mathematical sciences. This text, written in 1008 by an unknown writer and been in use until many centuries later, knew wide circulation after the proliferation of typography, considered widely to be the work of Michael Psellus. This text, the first complete handbook on the teaching of the four mathematical sciences, i.e. arithmetic, geometry, music and astronomy, drafted in the Byzantine period, is considered as product of Michael Psellus era, and consequently its study is connected with a number of questions directly or indirectly related to him. But apart from that, the writing of an instructive handbook forms part of the general educational system of a specific society, and is therefore directly related to that society, aiming to correspond to its expectations, needs, its cognitive level and sovereign ideology. Accordingly, it provides information on the cognitive charge that is offered, as well as on what is considered as essential knowledge for the members of the specific society. Finally, the handbook in question can function as a reflection of the perception of science in Byzantium of that era.

The Thesis is divided in three chapters, following a general introduction. The introduction brings in an overall presentation of the relevant questions and the determination of the examined period of time and its particularities: middle-Byzantine era, with a focus on the 11th century, time of writing of the handbook.

In the first chapter, entitled "The education in Byzantium", following a presentation of the different periods to be assessed, the institutional framework of superior education is examined, as well as the organization and structure of the educational system through its historical course. The objective of the second chapter, entitled "Mathematical sciences in Byzantium", is the presentation of the scientific discussion in the same era, the main axe of investigation being Byzantines' perception of mathematical sciences and their use. In the third and last chapter, the Quadriviun (*Ευσύνοπτον Σύνταγμα*) is scrutinized. The presentation is organized in multiple axes. In the beginning, the role of Quadrivium as method of teaching in the medieval education, as well as its role in the history of science is presented, both in the West and the East. Then, the Thesis deals with the history of this particular text, from its drafting until modern times, when it is printed in multiple copies, as a work of Michael Psellus. The final part of the Thesis undertakes to present the personality of the writer, as it appears from the study of the text.

George Zoumpos, *Mathematics in the Times of the Ionian Academy (1824-1864)*, [in Greek], PHD Theses, Ionian University, Corfu, 2004

During the years of the British "Protection" (1814-1864) the Ionian Islands started enjoying for the first time some degree of educational autonomy, with all three levels of public education functioning while their social and intellectual potential was being fully extended. In this way, the foundations for further development were being gradually laid and with the establishment of the Ionian Academy (1824-1864) a whole new scientific world was added which, in the long run, did also influence the history of the islands.

During the *first period* (1824-1832) of the Ionian Academy, which coincides with the term of Lord High Commissioner Adam, the figure of Ioannis Karandinos is dominant. In his rela-

The building of the Ionian Academy

tively short academic career he translated some of the most important French books on elementary mathematics of the time and through the influence of his students he is the man who introduced French mathematics into Greek education curricula.

The graduate students went on to work in the secondary education schools of the Ionian Islands and also in the newly constituted Greek state.

The *second period* (1833-1844) starts with the retirement of Karandinos and is characterised by a decline of the activity previously achieved in the Academy. The main figure in this period is Ioannis Koundouris, who succeeds in maintaining the teaching of elementary mathematics at a relatively good standard up until the arrival of Ottavio Mossotti who taught Advanced Calculus, Mechanics and Astronomy.

The *third period* (1845-1855) was characterised by a general decline in all levels of education in the Ionian Islands that went on until the end of the British protection, with a simultaneous shortfall of its liberal characteristics. This period started with Andreas Mavromatis who taught advanced mathematics but his premature death deprived the Academy of a first-rate scientist. In the *fourth period* (1856-1865) the main figure is Spyridon Katsaitis. Regarding this politically difficult period that led to the unification of the Ionian Islands with Greece, the retrieved data about the teaching of mathematics (but also those regarding the overall function of the Academy) are limited

In conclusion, the main characteristic of mathematics teaching in the Ionian Academy during the forty years of its existence is a steadfast orientation towards France and its main mathematical personalities. Apart from the local mathematicians, even the Italian Mossotti was deeply influenced in his methodology and conception by the leading French analysts and figures like Laplace, Poisson and Ampere.

BYZANTIUM – VENICE – MODERN HELLENISM: A TRAVEL IN THE WORLD OF MODERN GREEK SCIENTIFIC THOUGHT.

Βυζάντιο – Βενετία – Νεώτερος ελληνισμός: μια περιπλάνηση στον κόσμο της επιστημονικής σκέψης, edited by G. N. Vlahakis and E. Nicolaidis, National Hellenic Research Foundation, Athens, 2004, 320 p.

This volume presents the proceedings of a Conference with the same title, organized by the History of Science Programme of the Institute of Neohellenic Research of the National Hellenic Research Foundation and the Greek Institute of Byzantine and Post-Byzantine Studies of Venice, during November 2003 in Athens.

The volume aims to present the latest research on the scientific thought in the Greek speaking communities of the Ottoman Empire and Italy, and especially the role of Venice as intermediary between Byzantium and Europe and between European science and the Greek communities.

From the 14th century, Venice played an important role for the spreading of Byzantine science (included Persian science transmitted by Byzantines) to Europe. After the conquest of Byzantium by the Ottomans, the most important Greek scholars fled to Venice and from there they propagated Greek studies participating in that way to the Humanist movement. During the Ottoman period, an important Greek community flourished in Venice, and the Venetian university of Padua was the main destination for Greek students of the Ottoman Empire. New science was spread to the Greek world by those students.

In the volume two periods are presented: the Byzantine and the Ottoman. During the first period, the way of transmission of the scientific knowledge was mainly from East (Byzantium) to the West and during the second, from the West to East.

The volume contains two papers in English: Marino Zorzi (Director of Marciana Library}, "Bessarion's scientific manuscripts know in the Marciana Library" and Sofia Talas (Padua Un.), "The creation and the role of Giovanni Poleni's Teatro di

Filosofia Sperimentale".

The papers in Greek present the following themes:

Science spread from Venice to Moscow by Leichoudis brothers (by I. Vandoulakis), an overview on the studies of Greeks in Padua (G. Vlahakis), the life of Antonio Cagnoli from Zante to the Societa Italiana (G. Zoubos), the nomenclature of sinus in Greek from Byzantium to Modern period, (Y. Thomaidis and N. Kastanis), Byzantine medicine and its spreading (D. Karaberopoulos), the author of an anonymous manuscript of philosophy (Ch. Karanasios and K. Petsios), the relations between Europe and Modern Hellenism (Y. Karas), the spreading of Simeon Seth's Physics (M. Kartsonakis), the spreading of a Byzantine Quadrivium (Yanna Katsaiaboura), the geographer of the Renaissance Nicolaos Sophianos (Catherine. Koumarianou and G. Tolias), two astronomical manuscripts of Bessarion (D. Loukou), Ptolemaic versus "modern" knowledge in Byzantium (E. Nicolaidis), the treatises of Seirinus from Byzantium to the West (K. Nikolantonakis), Cyril Lucar and Korydaleus' programme (M. Patiniotis), Middle Age scholastic Aristotelism in Venice (K. Petsios), the first translations in Venice of Euclid, Archimedes and Apollonius (Christine Phili).

The volume is presented by Prof. Chrysa Maltezou (Director of the Greek Institute of Byzantine and Post-Byzantine Studies of Venice) and by its editors.

EUROPEAN SOCIETY FOR THE HISTORY OF SCIENCE

European societies and federations of societies exist in a number of disciplines. Such bodies reflect a growing awareness of the benefits that international collaboration within Europe can bring. The benefits have been fully recognized within the International Council of Scientific Unions, and for some time now one of ICSU's priorities has been to further the coordination of scholarly and scientific activity on the European scale.

Despite recent progress, some fields still lack a European organization. The history of science is one of these. A recommendation in favour of the establishment of a European society was advanced by the European Union in 1998, and now, five years on, that recommendation has been implemented.

Following some months of discussion, the European Society for the History of Science was founded in October 2003 at a meeting in Paris attended by representatives from nine countries. At the founding General Assembly, held on 12 October 2003 in the Sorbonne, in the premises of the Ecole Pratique des Hautes Etudes, IVe Section, the following officers were elected:
Robert Fox (Oxford), President
Eberhard Knobloch (Berlin), Vice-president and President-elect
Claude Debru (Paris), Vice-president
Erwin Neuenschwander (Zurich), Treasurer
Stıphanie Dupouy (Paris), Secretary

The society is planning a number of initiatives aimed at promoting contacts between scholars across Europe and advancing the place of the history of science in education. Its website is being developed as a means of coordinating and publicizing these various activities. Another core initiative will be the holding of regular European congresses. The first of these, organized in association with the Dutch national society Gewina and the University of Maastricht, will take place in Maastricht from 4 to 6 November 2004. Further details of this congress, which will be devoted to the theme of 'Science in Europe/ Europe in science, 1500-2000', will be available soon.

Membership of the society will be open both to individuals and to societies and other institutions with appropriate aims. Arrangements for the collection of the annual subscription, currently fixed at 20 euros for individual members, 100 euros for institutional members, and a minimum of 200 euros for supporting members, will be announced in the society's first newsletter, to be published very shortly in electronic form.

For further information about the society, please contact the secretary, Stıphanie Dupouy, Dıpartement de Philosophie, Ecole normale supırieure, 45 rue d'Ulm, 75005 Paris, France (email: stephanie.dupouy@ens.fr).
www: http://www.ens.fr/chps

INTERNATIONAL STUDY GROUP ON THE RELATIONS BETWEEN THE HISTORY AND PEDAGOGY OF MATHEMATICS (an affiliate of the International Commission on Mathematical Instruction)

Our colleague Nikos Kastanis (Department of Mathematics, Faculty of Sciences, Aristotle University of Thessaloniki), is the new co-editor of the Newsletter of the International Study Group on the Relations between the History and

Pedagogy of Mathematics (HPM). The new Chair of HPM Group is Constantinos Tzanakis (Department of Education University of Crete). The two other co-editors are Chris Weeks, (Downeycroft, Virginstow, Beaworthy, GB) and Bjorn Smestad (Faculty of Education, Oslo University College).

The Newsletter can be downloaded from HPM websites: http://www.clab.edc.uoc.gr/hpm/ and http://www.mathedu-jp.org/hpm/index.htm.

SECOND BULGARIAN CONGRESS ON HISTORY OF MEDICINE

Varna, Bulgaria, October 2005


БЪЛГАРСКОТО ДРУЖЕСТВО
ПО ИСТОРИЯ НА МЕДИЦИНАТА (БДИМ)
ОРГАНИЗИРА
ВТОРИ БАЛКАНСКИ КОНГРЕС
ПО ИСТОРИЯ НА МЕДИЦИНАТА
през октомври 2005 г. в гр. Варна
Заявки за покана за участие очаквами на адрес:
София 1527, ул. „Бело море" №6
Факултет по обществено здраве
проф. М. Апостолов
тел.: 943 22 60, 961 10 43, GSM: 098 44 19 70
e-mail: m_apostolov@abv.bg
от Ръководството на БДИМ

Prof. Miladin Apostolov is organising the second Bulgarian Congress on the history of Medicine.

Information, contact: m_apostolov@abv.bg.

2005 DHS PRIZE FOR YOUNG SCHOLARS

Each four years, the Division of History of Science of the International Union of the History and Philosophy of Science awards the best PhD Theses in various fields. The medals are given at the International Congress of the Union.

For Beijing Congress, 2005, the medalists are:

- Western Civilization: *Jimena Canales*, "Sensational Differences: Individuality in Observation, Experimentation and Representation (France 1853-1895)".
- Islamic Civilization: *François Charette*, "Mathematical Instrumentation in 14th-Century Egypt and Syria: The Illustrated Treatise of Najm al-Din al-Misri".
- Far East Civilization: *Kenji Ito*, "Making sense of Ryoshiron (Quantum Theory): The Introduction of Quantum Mechanics into Japan, 1920-1940".

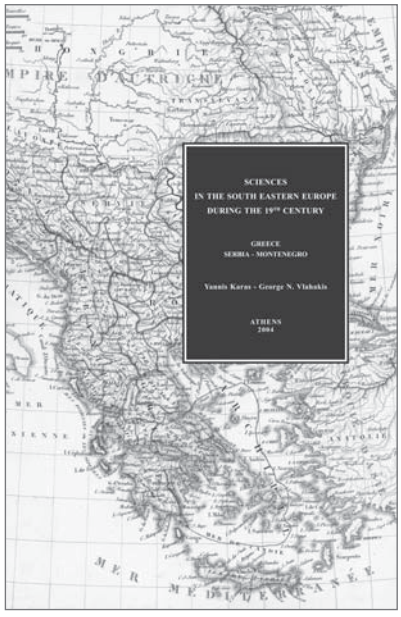
Honorific mentions will be awarded to:

- Western Civilization: *Maria Rentetzi*, "Gender, Politics and Radioactivity Research in Vienna, 1910-1938" and *Karin Nickelsen*, "Botanical Illustrations of 18th - Century Production, Content, Function".
- Islamic Civilization: *Marwa Elshakry*, "Darwin's Legacy in the Arab East: Science, Religon and Politics, 1870-1914" and *Mahmoud Masri,* "Manuscript on Masalih Al Abdan wa El Enfus li Ebi Zeyid Al-Balakhi: editing and study".
- Far East Civilization: *Zhang Li*, "The Institutionalization of Polymer Science in China, 1949-1965".

SCIENCES IN THE SOUTHEASTERN EUROPE DURING THE 19th CENTURY

Sciences in the southeastern Europe during the 19th century, *Greece, Serbia-Montenegro*, ed. by Yannis Karas and George N. Vlahakis, Athens, N.H.R.F., 2004, 170 p.

This book is the contribution of the History of Science Programme of the National Hellenic Research Foundation to the project of bilateral cooperation between Serbia and Greece. This project aims to study the scientific relations between these two countries of Southeastern Eu-

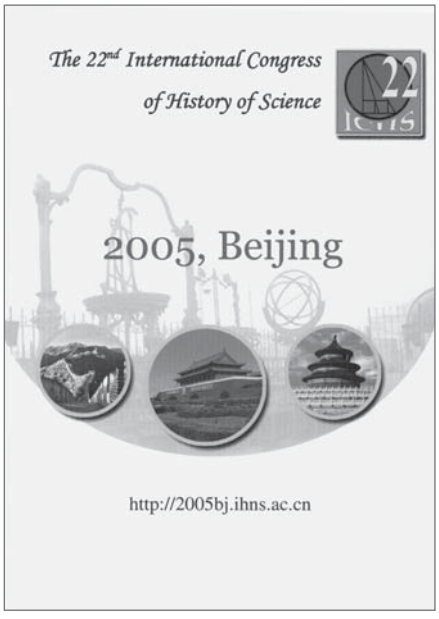


rope. The book is divided in two parts: a) the scientific thought in the Greek intellectual area during the 19th century, b) sciences within the independent Greek State. The book presents a bibliography on the cultural relations between Greece and Serbia during the 19th century.

INTERNATIONAL SYMPOSIUM DIFFUSION OF SCIENCE AND TECHNOLOGY: OTTOMAN EMPIRE AND NATIONAL STATES

Beijing, China, 24-30 July 2005

The theme of diffusion of science and technology is one of the main concerns of historians studying the scientific culture in the countries which have not participated to the process of the development of the new scientific ideas, known as "scientific revolution". The geographical area of the Ottoman Empire of the 16th-18th centuries, which includes Southeastern Europe, Anatolia, Middle-East and part of North Africa and where live people with different cultures and religions is one of the regions where one can study this diffusion throughout time and cultures. From the Ottoman Turks who inherited Arabic scientific culture to Orthodox Greeks who inherited Byzantine scientific culture the diversity is important but all those people lived in the same State. After the dismantlement of the Ottoman Empire from the 19th century, a great number of National States have born. These States had strong interference until the beginning of the 20th century.



At the last International Congress held in 2001 in Mexico, historians of science from various countries had gathered at a Symposium titled "Science and cultural diversity: from the Ottoman Empire to the National States". The papers of this Symposium had studied the various scientific traditions of the Ottoman Empire which have been inherited by the National States coming out of this Empire. The proceedings of this Symposium have been edited in the volume E. Ihsanoglu, K. Chatzis and E. Nicolaidis, *Multicultural science in the Ottoman Empire*, De Diversis Atribus, Collection de Travaux de l'Acadumie Internationale d'Histoire des Sciences, Brepols, Turnhout, Belgium, 2003.

The Symposium we propose to organize in the frame of the XXII International Congress of History of Science which will be held in July 2005 in Beijing, completes this of Mexico. In our last Symposium we have studied the theme of diversity in the area of the Ottoman Empire. In the next one we propose to study the diffusion and the interference of science in this area.

The Symposium is organized by Prof. Ekmeleddin Ihsanoglu (IRCICA), Prof. Mustafa Kacar (Uiv. of Istanbul) and Prof. Efthymios Nicolaidis (NHRF).

www of XXII ICHS: http://2005bj.ihns.ac.cn

PROFESSOR EKMELEDDIN IHSANOGLU SECRETARY GENERAL OF THE ISLAMIC CONFERENCE

Our colleague, Professor Ekmeleddin Ihsanoglu, General director of IRCICA and President of the International Union of the History and Philosophy of Science, Division of History of Science, has been elected as Secretary General of the Islamic Conference. The editorial team of the *Newsletter for the History of Science in Southeastern Europe* and also all our Greek colleagues wish great success to Professor Ihsanoglu at this extermely important position. Professor Ihsanoglu is working hard for many years now for the peaceful coexistance of all civilisations. History of science is a very important field as far as it concerns the history of cooperation and dialogue between various religions and traditions.

Please, send your contribution to the *Newsletter for the History of Science in Southeastern Europe* in order to be published to the editorial secretary, e-mail: gvlahakis@eie.gr. The Newsletter aims to make known all the activities, publications etc of history of science in our region.