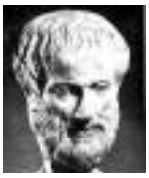

Newsletter

for the History of Science in Southeastern Europe

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CONTENTS:

21st SCIENTIFIC INSTRUMENT SYMPOSIUM
9-14 September 2002, Athens

After the successful symposiums held in Oxford and Stockholm, this year's symposium of the Scientific Instrument Commission was held in Greece. The Symposium was organised by the National Hellenic Research Foundation (NHRF). Some one hundred delegates from all over the world participated in the Symposium.

The opening session was held on Monday evening, September 9 in the building of the NHRF, where all paper sessions were to be held that week. Warm words were spoken, and the Director of the INR, Paschalis Kitromilides, awarded SIC President Jim Bennett an inscribed plaque for his outstanding contributions to instrument history. Paschalis Kitromilides also awarded our colleague Yannis Karas for his outstanding contribution to the Greek history of science. Followed a lively and masterful concert by the Melos Brass Quintet, and a reception in the Atrium of the NHRF.

Tuesday 10 September

The first session of the day had as its theme "20th century scientific instruments". In parallel was held the session "Interpretation of scientific instruments". Followed a plenary session organised by Suzanne Debarbat and Françoise Launay "Optics in the 19th century"

In the afternoon, participants visited the Newall Telescope at the Observatory of Athens, Penteli. N. Matsopoulos presented the history of this big Thomas Cooke refractor of 63 cm aperture, made in 1869 for R.S. Newall, Esquire of Gateshead.

Wednesday 11 September

The first session of the day had as its theme 'Instruments in National Context'. In fact this turned out to be too narrow a title, since all of the papers revealed clearly the importance of the international dimension in scientific inquiry and the purchase of instruments. The second session of papers dealt with Museums and Collections.

The day concluded with a visit to the Archaeological Museum, mainly to see the Antikythera mechanism. As participants viewed the display, Michael Wright of the Science Museum gave a fascinating account of the discovery of the piece and of the various attempts to

Some of the participants photographed by Ioli Vingopoulou.

decipher it and deduce its purpose.

Thursday, 12 September

This day, parallel sessions dealt with Instrument Makers, Museums and Collections (II), Cabinets / New Techniques, and Observatories and Scientific Instruments.

After lunch, some participants were given a tour by Professor Chrysoleon Symeonidis of the collections of scientific instruments held in the building of «Palaio Chimeio» of the University of Athens. During the plenary session of Scientific Instrument Commission that evening, a resolution was proposed by the local organizers and carried by the meeting, to support the efforts that have been made for the establishment of a Museum (the complete text of the resolution can be read in the minutes of the session, which are available on-line at www.sic.iuhps.org.)

During the plenary session there was a standing ovation for Jim Bennett, who has long served as President of the Commission. The meeting enthusiastically recommended Paolo Brenni, currently Vice-President, as his successor.

The day was concluded with the Conference Dinner, held in Taverna Karavitis, a large neighbourhood taverna near the National Hellenic Research Foundation. A highlight of the dinner was Jim Bennett's address to the assemblage, thanking the organizers and their staff and commenting on the Commission's activities with wit and humour.

Friday 13 September

The morning began with a choice between a session on Ancient and early modern instruments, and one on 19th century scientific instruments.

The second part of the morning was taken up with poster sessions and a demonstration by Michael Wright of his model Antikythera Mechanism.

A tour to the Observatory of Athens (Lofos Nymfon) was organised for a few astronomers to visit the great transit circle of Gautier, acquired in 1896 and the big equatorial Gautier of 40cm aperture acquired in 1900. Visitors were astonished about the perfect restoration of both instruments.

In the afternoon, participants were off to catch a boat to reach the city Hermoupolis on the island of Syros.

Saturday 14 September

After breakfast on the terrace of the hotel overlooking the sea, the participants visited the new Technical and Industrial Museum, where they were given an interesting tour of the exhibits by Maria Mavroeidi. The exhibitions are laid out to tell the story of the refugees who created the new city, Hermoupolis in the 1820s, the city's role in trade, navigation and industry and its industrial technology. Note that the Museum is expanding and a permanent exhibition of scientific instruments is planned. The rest of the day was spent around the city and the island independently, before meeting up at the boat back to Athens.

After the Symposium, the Organising Committee has received dozens of congratulating messages and among them from the Officers of the SIC, for the well-run and the hospitable week in Athens.

The Abstracts, the List of Participants, the Programme and Photographs of the Symposium can be found on the site of Hellenic Archives of Scientific Instruments: http://www.eie.gr/hasi.

Efthymios Nicolaidis, George Vlahakis, Dimitra Loukou, Vagelis Tsamis, Stella Thomadaki, Maria Mavroeidi and Anestis Georgiadis were involved in the organising of the Symposium.

XXII Symposium will be held at The Mariners' Museum, Newport News, Virginia, USA, from September 30 to October 4, 2003 (Website: www.mariner.org/sic2003).

(Based on the report of
Peter de Clercq for SIC)

THE PROCEEDINGS OF THE INTERNATIONAL CONGRESS ON *LEARNING AND EDUCATION IN THE OTTOMAN WORLD*

The international congress on "Learning and Education in the Ottoman World" was held in Istanbul, on 12-15 April 1999, on the occasion of the 700th anniversary of the foundation of the Ottoman State. Under the patronage of the President of Turkey H.E. Süleyman Demirel, the congress was organised by IRCICA with the cooperation of the Turkish Historical Society (Ankara) and the Turkish Society for History of Science (Istanbul). The Ministry of Foreign Affairs, and the Commemoration Committee of the Seventh Centennial chaired by the Ministry of State, gave support to the congress. One hundred and seventy-five scholars and researchers from twenty-eight countries actively participated in the congress. In addition, about one hundred interested researchers attended the sessions.

This volume contains the papers which were presented in the English language. Those papers in Arabic were published earlier, in a first volume dated 2000. A third volume, containing the papers presented in Turkish, newly appeared (2002).

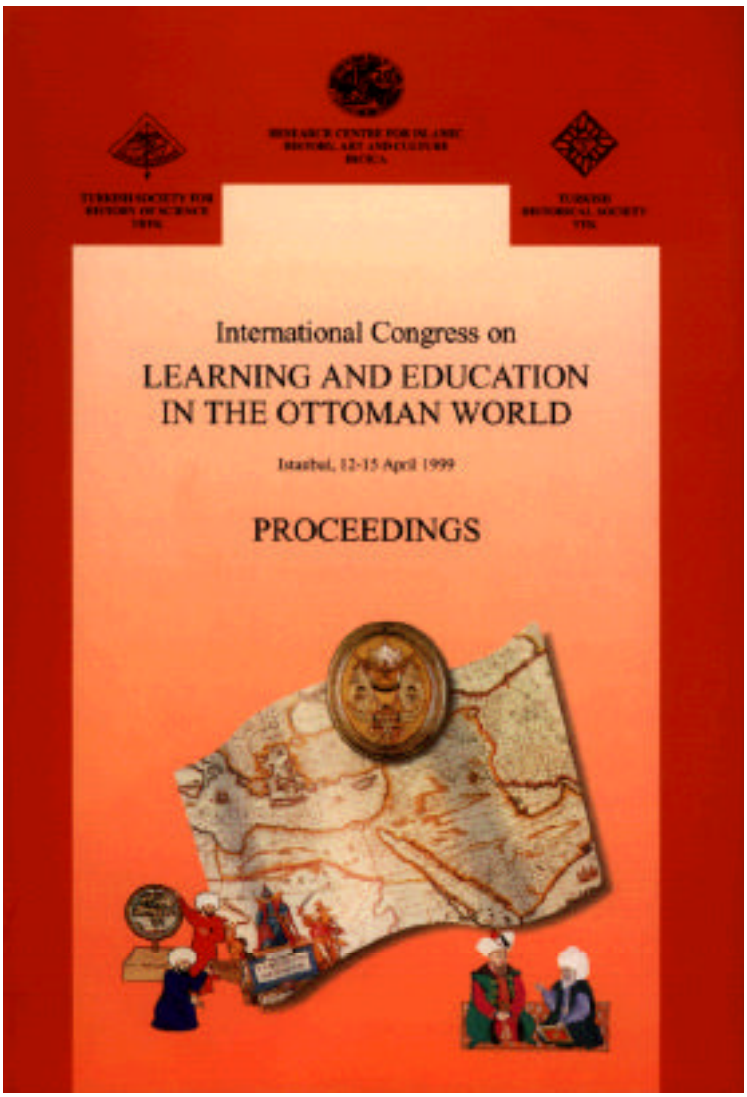
In this volume, there are fifty-eight papers in total, contributed to the congress by scholars from Turkey. The papers were revised by their authors before publication. Most of them deal directly with issues of education such as primary education, literacy, women's education, medical education, religious education, Sufi education, modern and secular education, educational reform as well as foreign schools in the Ottoman lands. Others address a wide range of topics including the Islamic lunar calendar, development of medical terminology, military education and technology. In the field of architecture, several aspects of Ottoman and pre-Ottoman architectures are studied. For instance,

Ottoman architecture in different regions of the empire is examined. The relationship between mathematics and architectural design are explored. While some articles discuss Ottoman-European relations, some others examine relations between Ottomans and other Muslim lands. Apart from these, some others deal with various aspects of the relationship between religious or ethnic communities within the boundaries of the Ottoman State. A few articles study the influence of various ideas on Ottomans and their reaction to them. These ideas include constitutionalism, national identity formation, educational and administrative reforms.

These articles reveal many facts about the real nature and magnitude of the scientific, cultural and educational activities carried out during the Ottoman period. They give evidence to the richness and variety of the cultural heritage which was produced in the Ottoman realm. This richness and variety was created due to the fact that Ottoman civilisation assimilated elements from the cultures of peoples living in its lands and established a particular kind of active and dynamic cultural symbiosis. The study of this collective experience of the peoples in different regions of Ottoman territory contributes in highlighting many common elements of culture that link together the descendants of those peoples to each other and to the neighboring civilisations.

The introductory article by Ekmeleddin Ihsanoglu is entitled “Modern Turkey and the Ottoman Legacy”. It examines the roots and different aspects of the multi-faceted Ottoman legacy, the misinterpretation of this legacy on the basis of political and ideological interests as factors that contributed in creating international conflicts, the effects of the modernization process upon the worldview of Ottoman intellectuals, language as an important element of the Ottoman legacy, the problem of the transmission of the legacy of the past into posterity.

IRCICA has the pleasure to present this collection of valuable articles by scholars of Ottoman history from around the world.



Proceedings Of The International Congress On Learning And Education In The Ottoman World
on the occasion of the 700th anniversary of the foundation of the ottoman State, Istanbul, 12-15 April 1999
Istanbul, 2000
Volume 1: papers in Arabic, Volume 2: papers in English,Volume 3: papers in Turkish

The international congress on Learning and Education in the Ottoman World (Istanbul, 12-15 April 1999) was organised by IRCICA in cooperation with the Turkish Historical Society and the Turkish Society for History of Science, with the support of the Ministry of Foreign Affairs of the Republic of Turkey, on the occasion of the 700th anniversary of the foundation of the Ottoman State. The congress took place under the patronage and in presence of the President of Turkey. 175 scholars and researchers from 28 countries participated in it. The papers

presented, subsequently revised by their authors, are published in three separate volumes for Arabic, English and Turkish respectively.

Papers In Arabic (Vol. 1): *Buhus Al-Mu'tamar Al-Duwali Hawl Al-'Ilm Wa'l-Ma'rifat Fi'l-'Alam Al-Usmani* Edited By Salih Sadavi, Preface By Ekmeleddin Ihsanoglu, Studies And Sources On Ottoman History Series 5, X+411 p., XII., Istanbul, 2000
Price: US$ 30 - Postage Included

Papers In English (Vol. 2): *Proceedings Of The International Congress On Learning And Education In The Ottoman World* Edited By Ali Caksu, Preface By Ekmeleddin Ihsanoglu, Studies And Sources On Ottoman History Series 6, X+406 p., Ill., Istanbul, 2001
Price: US$ 30.- Postage Included

Papers in Turkish (Vol. 3): *Osmanli Dünyasinda Bilim ve Egitim Milletlerarasi Kongresi Bildirileri*, Edited By Hidayet Y. Nuhoglu, Preface By Ekmeleddin Ihsanoglu, Studies And Sources On Ottoman History Series 7, XXXVII+761 p., Ill., Istanbul, 2002
Price: US$ 30.- Postage Included

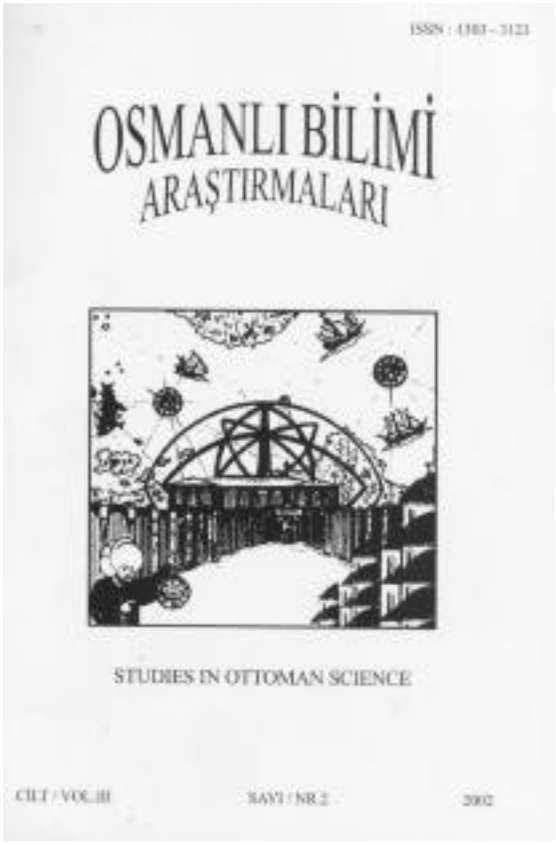
STUDIES IN OTTOMAN SCIENCE

Vol.III, Nr.1, 2001, edited by F. Günergun and published by the Chair for History of Science, Istanbul University, Turkey. The present issue includes the following articles:

The Ottoman Engineer Mehmed Said Efendi and his treatise on vertical sundials (*Mustafa Kaçar & Atilla Bir*); The criticism brought on the Ottoman Imperial School of Medicine by the Société Impériale de Médecine de Constantinople between 1857-1867 (*Feza Günergun & Nuran Yildirim*); "Doctor in Medicina" diploma given to a Turk from Izmir in 1843 by the University of Pisa (*Turhan Baytop*); Pharmacist Mustafa Hakki Nalçaci (1881-1953), Professor of Chemistry (*Emre Dölen*).

Vol.III, Nr 2, 2002 includes the following articles:

School of Pharmacy's buildings in Istanbul (*Turhan Baytop*), A French-Turkish Medical Journal published in Istanbul: Gazette des Hôpitaux (Ceride-I Emakin üs-Sihha) (*Feza Günergun*), Anticholeric preparations used by



Vincent Pêche from the Imperial Pharmacy and Cyrus Hamlin, from Robert College during the 1865 cholera epidemic in Istanbul (*Suzan Bozkurt, Nuran Yildirim, Yesim Isil Ülman, Bülent Özaltay*), Süleymaniye Medical Medrese – I (*Tuncay Zorlu*)

ELITES URBAINES ET SAVOIR SCIENTIFIQUE DANS LA SOCIÉTÉ OTTOMANE (XIXe-XXe Siècles)

International symposium organised by l'Institut Français d'Etudes Anatoliennes (Istanbul) and sponsored by CNRS (Paris). Held in Istanbul on March 21-23, 2002. The programme was as follows:

Introduction (*Paul Dumont, Meropi Anastassiadou*); Gueorgui Valkovitch (1833-1892): un médecin militaire ottoman au service de l'Etat bulgare (*Gueorgui Peev*); Elitisation des médecins turcs dans l'Empire Ottoman (N.Yildirim); Mehmed Emin Dervich Pacha (1817-1879), chimiste, professeur à l'Ecole Militaire et homme d'Etat (*Feza Günergun*); Manouk Avedissian (1841-1925), alias Bechara al-mouhandis. Itinéraire beyrouthin d'un ingénieur ottoman à la fin du XIXe siècle

(*May Davie*); Transformations et permanences dans la condition de notable. Meguerditch bey Margasof (Trieste 1840- Le Caire 1919), un notable arménien d'Egypte (*Anne Kazazian*); L'ange gardien des femmes et des enfants: Prof.Dr. Besim Omer Akalin (1862-1940) (*Yesim Isil Ülman*); Médecin hygiéniste, discours d'élite et transformation sociale à Istanbul à la fin du XIXe siècle. Le cas du docteur S. C. Zavitziano (*Méropi Anastassia - dou*); Médecine et influence dans les communautés juives ottomanes. Le docteur Moise Allatini (*Henri Nahum*); Les concepts de "ulum, fünun and sanat" dans la Turquie en voie de modernisation: le cas des islamistes (*Ismail Kara*); Assoiffés de science. Elites ottomanes et foyers turcs en Suisse (premier quart du XXe siècle) (*Hans-Lukas Kieser*); Les médecins ottomans et la révolution jeune-turque (*Zafer Toprak*); Le docteur Konstantin Misajkov (1807-1880) (*Bernard Lory*); Expert knowledge between tradition and reform. The Caratheodory's: a Neo-Phanariot Family in the 19th century Constantinople (*Maria Georgia - dou*); Between professional duty and national fulfillment: the Smyrniote medical doctor Apostolos Psaltoff (1862-1923) (*Vangelis Kechriotis*); Christo Tanev Stambolski: une carrière bulgare à Istanbul (1858-1877) (*Johann Strauss*); Les médecins bulgares de la fin de l'époque ottomane (*Stoyanka Kenderova*).

THE FIRST SCIENTIFIC CONGRESS IN SOUTH-EASTERN EUROPE

The exhibition "Remembrances of the First Congress of Serbian Physicians and Natural Scientists" was held in the Gallery of the Serbian Academy of Sciences and Art in May 2002, in honor of the first Serbian Medical Society, founded 130 years ago. The idea of the exhibition was to explore the first international scientific congress in Serbia and South-eastern Europe, as well as to emphasize the importance it had for the whole region. The authors of this exhibition were Budimir Pavlovic, PhD, director of the Belgrade Museum of Medicine, and Adela Magdic, curator of Belgrade Museum of Science and Technology.

The first congress of Serbian physicians and natural scientists was held in Belgrade in 1904, marking the centenary of the first Serbian national uprising and the celebrations for the coronation of king Petar Karadjordjevic I. The congress was held under the aegis of one of the greatest Serbian scientists and physicians, Josif Pancic (1814-1888)

There were 433 delegates and guests present from Serbia and many European countries, exchanging experiences, medical knowledge as well as knowledge from other sciences such as chemistry, physics, geology etc. Among them there were three women: Dr Draga Ljocic, the first female physician in Serbia, Dr Eva Haljecka, medical officer from Poland and Miss Berry from England

Dr. Platon Papakostopoulos, one of the participants of the congress. The son of a Greek physician, he studied medicine and specialized in psychiatry in Vienna. He came to Serbia in 1855 and was one of the founders of Serbian Medical Society in 1872.

New scientific knowledge presented in this congress was a step forward not only for Serbia, but also for the neighboring countries participating part in this congress. The scientists worked in five groups, presenting 75 papers in their native language; those were subsequently printed in a two-volume proceedings

A paper presented by a Serbian doctor, Dr Jovan Chokor, deserves special attention. This epidemiologist, infectologist, and professor at the Medical and Veterinary Faculty in Vienna, corrected a statement by Robert Koh, presented in London, in 1901, according to

which, a type of tuberculosis bacillus from an infected cow could not infect man and vice versa. Dr Jovan Chokor proved this to be wrong after experimenting on plants and animals. Two years later, Koh acknowledged this discovery in a letter, in which he wrote that Jovan Chokor saved humanity from a large epidemic

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Aleksandar Petrovic, Belgrade

JOVAN KARAMATA (1902-1967)

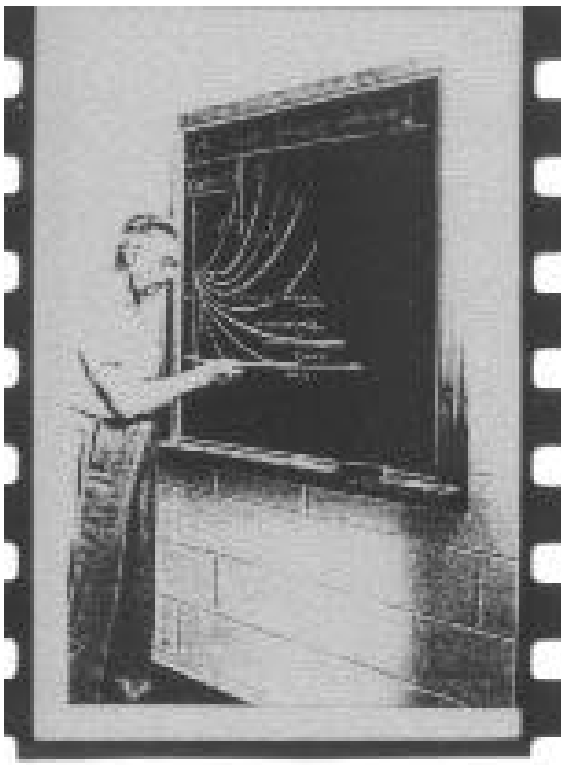
(On occasion of the 100th anniversary of his birth)

This year's 1st of February marks the 100th anniversary of the birth of the academician Jovan Karamata, one of the most famous Serbian mathematicians. This jubilee is celebrated in all mathematical institutions in Yugoslavia through relevant lectures, seminars and scientific meetings. The publication of Selected Papers by Jovan Karamata (editorial board: academician M. Tomic, academician B. Stankovic, academician V. Maric, Dr D. Adamovic, Dr D. Arandjelovic, Dr C. Mijajlovic, Dr T. Ostrogorski, Dr A. Nikolic) is due to be completed soon. It is an occasion to remember who Jovan Karamata was and why he is so important for Yugoslav and world mathematics.

Mathematician Jovan Karamata comes from an old, respectable and wealthy Greek-Tzintzar family which was among the first merchants from Katranica village (today Pyrgos) near Mavrovo (Macedonia, Greece) that moved to Zemun, then the border city in the Austro-Hungarian Empire. His ancestor Dimitrije, as well as the other members of the family, adapted successfully and quickly to the new environment, amassed an enviable fortune, but also received education abroad, and made partnerships and family connections with Serbs. Anastas, a son of Dimitrije, would be remembered as the founder of the first Greek school in Zemun. Atanasije Karamata, Jovan's grandfather, who graduated at Vienna's Polytechnic where he studied trade and technical sciences, was appointed a finance minister in Serbian Voivodina. Stevan Karamata, Jovan's father, finished trade school while his uncle Kosta was professor of mathematics in a secondary school in Zemun, respected not only as professor but also as the scientist. Uncle Jovan, beside the fact that he was the owner of well-known printing-house, was also the Zemun's savings-bank manager and the member of the Hungarian parliament.

It is in such a milieu that Jovan Karamata was born in Zagreb on February 1st, 1902. He started his studies in 1920 at the Faculty of Engineering, but in 1922, he transferred to the faculty of Philosophy to study mathematics. He graduated from this faculty in 1925 and was immediately appointed as a teaching assistant to Prof. Mihailo Petrovic. He obtained his doctoral degree in 1926. He was promoted to the position of assistant professor in 1930, became an associate professor in 1937 and professor at the Belgrade University in 1950. He left Belgrade in 1951 when he was appointed a professor of the University in Geneva, where he stayed until the end of his life. He died on August 14th, 1967.

As a highly respected mathematician and lecturer, he participated in the work of numerous congresses and was a visiting professor at many universities in Europe and America. He became a member of the Yugoslav Academy of Science (in 1933), the Czech Royal Society (1936) and the Serbian Royal Academy (1939) as well as a fellow of the Serbian Academy of Sciences (1948). Karamata was member of the Swiss, French and German mathematical societies, the



Jovan Karamata

French Association for the Development of Science, the permanent reviewer in referee journals and the editor-in-chief of the journal L'Enseignement Mathématique. He took an active part in the activities at the Belgrade University and in the work of the Serbian Academy of Science and its Institute of Mathematics, thus contributing a great deal to the world reputation Belgrade mathematics had in those days.

In his works, Karamata paid attention to form and style in scientific expression. His most significant results are in the field of classic mathematical analysis, more precisely in the theory of functions of Tauberian nature and the theory of slowly varying and regularly varying functions. These results, as well as those of others areas of analysis and mathematics (Mercer's theorems, inequalities, trigonometrical integrals, Froullani's integrals etc.) have frequently been quoted in various papers and monographs. The originality of the approach to the various subject in mathematics, as well as the simplicity and elegance in proofs of theorems, confirm in the best manner not only Karamata's exceptional mathematical talent, but also his wide mathematical education and many mathematical interest. Researching classic and already historical results by the greatest world mathematicians, Karamata found in them possibilities for some supplement, extendings or, at least, simplifications and "aesthetic corrections" of their proofs.

There are some of results that represent real progress in science, results which are further thrown in and which stay forever remembered as lasting scientific value. One of these results is in a Karamata's paper from the thirties and it is equally known today as in the time of its creation. That is his proof of Abel's inverse statement i.e., the new proof of Hardy-Littlewood's theorem that was characterized as surprisingly simple by Knopp or extremely elegant by Titchmarsh. In spite of the efforts of many mathematicians (e.g. Landau, Hardy, R. Schmidt), the proof of Littlewood's theorem remained rather difficult and far from the apparent for very long. But in 1930 in the journal "Mathematische Zeitschrift" appeared Karamata's two-page paper entitled *Über die Hardy-Littlewoodschen Umkehrungen des Abelschen Stätigkeitssatzes* which brought new proof to Littlewood's theorem, and created a sensation in mathematical circles. Karamata became world-renowned immediately. There, he devised a new method of approach, enabling thus other applications and results to follow. It entered later in the well-known books of Titchmarsh, Knopp, Doetch, Widder, Hardy and Favard.

Karamata continued to study inverse theorems in the integral form, with the most general conditions of convergence. He also gave a set of variants and equivalents of those conditions, and the proofs were often based on one new theory, which Karamata created after intensive work during the late twenties and early thirties. These became the foundation for the theory of regularly and slowly varying functions. In 1930 in the less known Romanian journal "Mathematica" (Cluj), appeared a paper in which definitions and basic characteristics of regularly and slowly varying functions were given. It was entitled *Sur une mode croissance régulière des fonctions*. Starting from his simple definitions, Karamata developed the whole theory of regularly and slowly varying functions, which included the majority of the most significant characteristics. While the works related to the problems of theorems of Tauberian nature brought immediate fame to Karamata and a honored name in the world of mathematics, the works on regularly varying and slowly varying functions got their true value only by the later developments in mathematics, primarily in probability theory. Karamata's theory has grown, beyond all his expectations, into a great mathematical edifice whose significance is still paramount.

It must be remembered, as is often emphasized, that with Mihailo Petrovi_ Serbian mathematics set out in the world of science finding its equal place in that world. It could be added that with Jovan Karamata, perhaps most famous Serbian mathematician, it reached its culmination. Karamata's original results in many areas of mathematics earned him recognition in the world of mathematicians, but for history of Serbian mathematics it is equally significant to note famous Karamata's school (Yugoslav school) of mathematics and his colleagues and pupils. Most of them later became eminent mathematician and Karamata's assistant.

Selected bibliography about Jovan Karamata:

1. Papadrianos I, *Greek families in Zemun in 18. and 19. century* (in Greek),

Thessaloniki, 1988.
2. Nikolic A, *About two famous results of Jovan Karamata*, Archives Internationales d'Histoires des Sciences, 141 (48), pp. 354-373, 1998.
3. Tomic M, *Jovan Karamata 1902-1967*, Bulletin de l'Acad. Serb des Sci. et des Arts, T. CXXII, No.26, Belgrade, 2001, pp. 1-30.
4. Tomic M, *Jovan Karamata (1902-1967)*, L'Enseignement Mathèmatique, t.XV, Genève, 1969, pp. 1-20.
5. Tomic M, Aljancic S, *Remembering Karamata*, Publications de l'Institut Mathèmatique, n.s, t. 48 (62), Belgrade, 1990. pp. 1-6.

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University of Novi Sad, Serbia

THE ACTIVITY OF THE ROMANIAN TEAM

Pursuing research in the subject of European scientific unification, the Romanian team dealt, in the period from 1 October 2001 to 30 April 2002, with the exchange of ideas in the field of genetics between Romania and other European countries.

As it is widely known, it is Gregor Mendel who signed the birth certificate of genetics in 1865 (*Versuche über Pflanzenhybriden*, Verhandlungen des Naturforschendes Vereines in Brünn, 1865, *4*, 1866, pp. 3-47). This work, which establishes the laws of hereditary transmission in plants, was ignored for 34 years. It is only in 1900, that the botanists Hugo de Vries (from the Netherlands), Carl Correus (from Germany) and Erich Tschermok (from Austria) came to the same conclusion as Gregor Mendel. In all books pertaining to the history of genetics, the names of H. de Vries, C. Correus and E. Tschermok are mentioned as having "rediscovered genetics" and mendelism.

Based on a French source, two members of our team, Prof. Dr. Radu Iftimovici and Prof. Ion Marina (Romania), along with Jeanine Chauvet (France), had the opportunity to discover at the Bibliothèque nationale in Paris, an article, unknown to the historians of science, referring to mendelism and dating back in 1896. We refer to the research made by the Romanian veterinary surgeon Constantin

Professor C. Vasiliescu

Vasilescu between 1887 and 1895, who at the time was working as a researcher at the College of Veterinary Medicine in Bucharest (C. Vasilescu, *Coup d'œil sur l'existence des porcs monodactyles*, Journal de Médicine Vétérinaire et Zootechnie, Lyon, 1896, nº 5).

The anomaly called monodactyly occurs in porcines (a single digit instead of two) and was reported for the first time already in the 17th century by the Romanian prince Dimitrie Cantemir (*Descriptio Moldavi_*) who also pointed out the hereditary transmission of this malformation.

Between 1887 and 1891, Prof. C. Vasilescu studied several generations of monodactylous pigs and reported the results in Paris. These first investigations were reviewed under the title *Transmission héréditaire d'une malformation* in "Le Progrès Médical" nº 24, Paris, 13 June 1891. In this review, the research of Vasilescu is appreciated in laudatory terms and the French reviewer blames the biologists of the Musée d'Histoire naturelle in Paris for neglecting a field of such interest. The article published by Vasilescu in

Lyon, in 1896, which comments the observations made in the course of nine years on the hereditary transmission of monodactyly in porcines of the Romanian plain, confirm fully Mendel's laws. The Romanian veterinary surgeon is not only the first researcher in the world who points out the validity of Mendelism, he is also the first who confirms that the Mendelian laws apply not only to plants but to animals as well. In reality, Vasilescu had no knowledge of Mendel's work, he came to the same conclusions absolutely independently.

The Romanian team continues its investigations by studying the archives of the first school of veterinary medicine in the world (Lyon), in order to find other reports by Vasilescu, referred to by "Le Progrès Médical" of 13 June 1891.

GEORGE EMIL PALADE, NOBEL PRIZE WINNER AT 90

The well-known American cytologist of Romanian origin G.E. Palade turns this year the venerable age of 90. Born in 19 November 1912, in Jassy, Romania, son of a Philosophy professor, Palade studied at the Faculty of Medicine in Bucharest (1931-1937). Among his professors were names of high repute, such as Fr. J. Rainer, Gr. T. Popa and André Boivin (Paris). Palade worked as a lecturer in Anatomy in Bucharest until 1946, when he emigrated to the United States, where he worked at the Rockefeller Institute in New York, at the Yale University and at the University of California in San Diego.

G.E. Palade's exceptional contribution in the field of science is nowadays acknowledged in the whole world. Between 1947 and 1950, he improved electron microscopy techniques by introducing the sucrose configuration (1948) and Palade's osmium tetroxide fixation (1951). Between 1950 and 1970, in his capacity of competent electron microscopist, Palade became, along with the Belgian Albert Claude and the American Keith Porter, a pioneer in the fine structure exploration of the living cell. Thus, in 1952, he detected the fine structure of mitochondria; in 1953, he discovered the ribosomes, called also *Palade's granules* and in 1954, he studied, in collaboration with S. Paley, the structure of nerve synapses, discovering thus the "synaptic knob." After elucidating some aspects of the protein synthesis at the level of ribosomes, along with P. Sickevitz and J. Kirsch (also born in

George Emile Palade

Romania), Palade devoted himself to the study of the protein secretion and circulation in the cytoplasm of the living cell, a topic which he will make the object of the Nobel Lecture he held in Stockholm, in 1975, on the occasion of the bestowment of the prestigious Nobel Prize (G.E. Palade, *Intracellular Aspects of the Process of Protein Secretion*). Finally, other significant works by Palade deal with cell membrane biosynthesis.

His works were crowned by twelve other prestigious prizes and numerous universities (among which, Yale, Columbia, the Universities of Chicago, Bern, Philadelphia, Bristol, London, Cambridge, Uppsala, New York, Paris and Bucharest) conferred him the title of *Doctor Honoris Causa*.

In spite of his 90 years, "George," as he is called by his collaborators, is every day present at the Cellular and Molecular Institute of the Medical School at the University of California in San Diego, where he continues his work and offers his guiding to his

collaborators as well as to PhD candidates who come to the Cellular and Molecular Institute from all over the world.

Prof. Radu Iftimovici,MD
Prof. Ion Marina, MD

INTERACTION BETWEEN GREECE AND RUSSIA ON THE FIELD OF SCIENCE AND SCIENTIFIC EDUCATION ACCORDING TO THE ARCHIVE MATERIALS

The General Secretariat of Research and Technology of the Greek Ministry of Development and its Russian counterpart have approved a bilateral joint research project on the topic "Interaction between Greece and Russia in the field of science and scientific education according to archive materials".

The project aims to the research of the archive material for the study of the interaction between Greece and Russia in the field of science and scientific education, from the Byzantine era to 1980.

The Russian team will research the Greek manuscripts and other archive material kept in Russian Libraries and Archives.

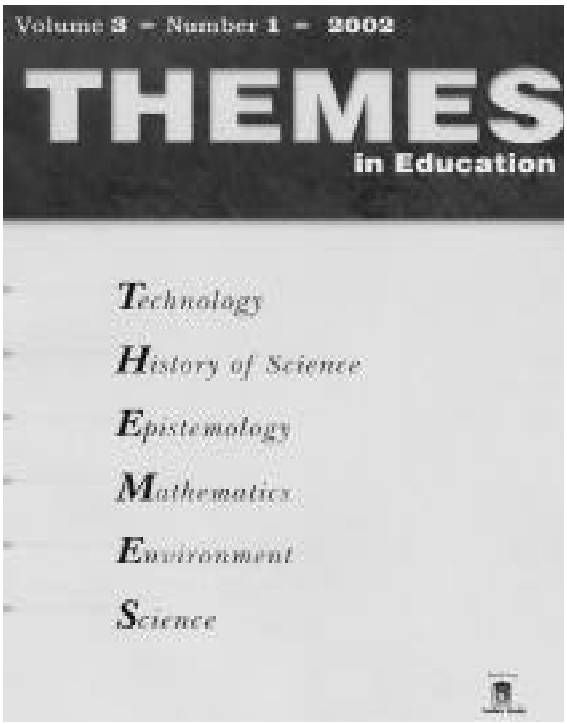
In Greece, the main research will focus on the 20th century. This will result to a complete catalogue of the numerous Russian scientific books of the Soviet era translated in Greek and to a database of the various articles and publications concerning Soviet science.

The material that will be collected, will be available to researchers in order to study the mechanisms and the various ways of the interaction between the two countries in the field of science and technology and the importance of this interaction on the development of scientific culture in Russia and Greece. From the foundation of the Slavo-helleno-latin Academy in Moscow (17th c.) to the Greek translations of Russian scientific books of the 20th c., the interaction has always been present.

The catalogue of the archive material and part of the material itself will be available on the net. More interesting material for a general public will be published. Two events will be held, in Moscow and in Athens, in order to present and diffuse the results,.

Project leaders are: Dr Serguei Demidov, Director of the Department of History of Mathematics of the Institute for the History of Science and Technology of the Russian Academy of Sciences and Dr Efthymios Nicolaidis, Director of the History of Science Programme of the N.H.R.F.

Russian map of Greece



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SCOPE

This multidisciplinary journal is published four times a year and aims in bringing together the communities of Mathematics Educators, Science Educators, Information Technology Educators and Historians and Philosophers of Science & Mathematics and promoting a deeper understanding of the relevant issues of Education. Its scope is to convey the latest in research reports and critical analyses to both theorists and practitioners.

The journal 'THEMES in Education' publishes peer-reviewed articles of value and interest to educators and researchers, book reviews, conference announcements and news of interest to the thematic research community. Articles may be submitted in English.

EDUCATION AND SCIENCE IN 19th c. GREECE
Syros, 4-5 July 2002

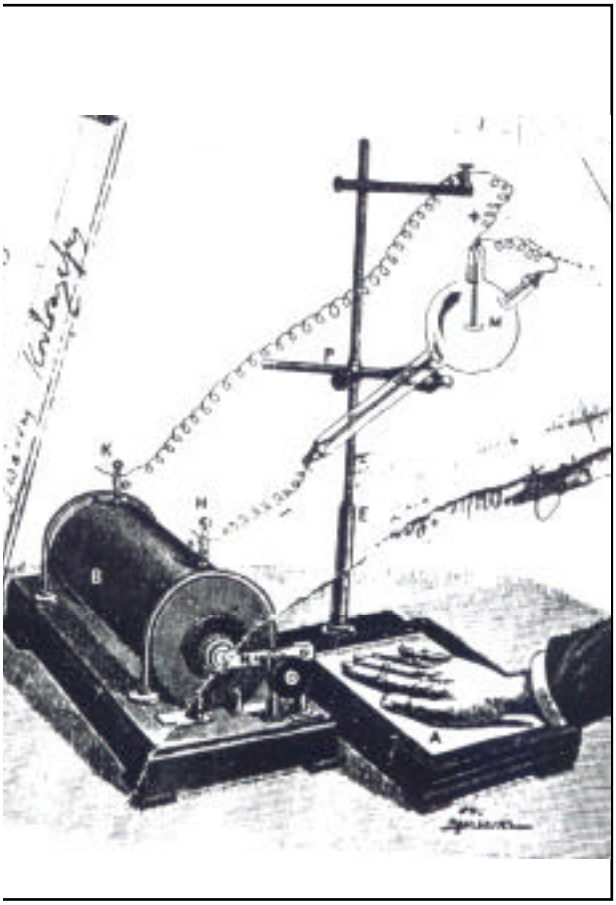
G. Vlahakis (History of Science Programme of the NHRF) and F. Assimacopoulou (National Technical University of Athens) organised a Conference in the frame of the Seminars of Syros in July 2002. The theme was «Education and Science in 19th century Greece». The participants presented the results of their current research.

During the first day of the Conference, Vaggelis Karamanolakis presented a paper on the interaction between philology and history laboratories of the University of Athens and positivism during 1880-1932. Yannis Antoniou gave a paper on the ideological background of the celebrations for the 100 years of the National Technical University of Athens in the 1930ies. Fotini Assimacopoulou described the Archives of the National Technical University of Athens and Christine Phili gave a pertinent view of Mathematics during the first period of the University of Athens.

The second day, Maria Terdimou described

the efforts of Greek Mathematicians of the 18th and 19th c. to solve the fifth problem of Euclid, Manolis Kartsonakis discussed the way the Greek scientific thought just before the 19th century could be descried and Sofia Dirdiri gave a paper on the introduction of the concept of energy in 19th century Greece.

At the Conference, Costas Skordoulis and Tassos Tsiantoulas were invited to present some aspects of history of science form the same period in an international milieu.The first gave a talk on the Michelson-Morley experiment as a case study of the interaction between history of science and teaching of



science, and the second on how physical chemistry started to be considered as an interdisciplinary field.

The success of the Conference was reflected on the long discussions after each session. Indeed, the informal ambiance of Syros Seminars promote exchange of knowledge and ideas of the participants and allow young scholars to feel free to be involved.

FOUNDING MEETING OF THE EUROPEAN SOCIETY OF THE HISTORY OF SCIENCE (ESHS)

A meeting for the founding of a European Society of the History of Science was held in Paris on Sunday, 6 October 2002.

Were present: Claude Debru (Paris), Erwin Neuenschwander (Zurich), Pietro Corsi (Paris), Fabio Bevilacqua (Pavia), Theodore Arabatzis (Athens), Jean-Claude Pont (Geneva), Luis Saraiva (Lisbon), Eberhard Knobloch (Berlin), Jean Gayon (Paris), Danièle Jacquart (Paris), Hermann Hunger (Vienna), Ida Stamhuis (Amsterdam). Efthymios Nicolaïdis (Athens) was representing Ekmeleddin Ihsanoglu (Istanbul), President of the IUHPS.

It has been decided to found a Society comporting two types of members: individual members and institutions. Institutions may include national societies, universities, libraries and research centers, and will pay higher fees than individuals. Individual members and institutions will be represented at the council according a quota, which will be defined in the future. The aims of the society were discussed at the meeting and noted down by Prof. Debru who, along with Prof. Gayon and Prof. Danièle Jacquart, is to write the Society's statutes, which will be based on those of other European scientific societies. The main aim of the ESHS is to promote European collaboration in the field of history of science.

Next meeting has been scheduled for 7 and 8 March 2003 at the same venue.

NEW COUNCILOF THE GREEK SOCIETY FOR THE HISTORY OF SCIENCE AND TECHNOLOGY

On the 6th April 2002, the General Assembly of the Greek Society for the History of Science and Technology took place at the NHRF.

The members of the Society voted for the new Board consisting of:
G.N. Vlahakis, President
G. Papagounos, Vice-President
A. Tsiantoulas, General Secretary
N. Kanderakis, Treasurer
Th. Lekkas, Assistant Secretary
D. Papagiannakos, Member
M. Terdimou, Member.

The new Board is open to any proposals for the promotion of the history of science and technology in Greece, and looks forward to collaborate with all relevant institutions countrywide. The Society has already planned a series of actions towards this target, such as lectures, symposia etc.

INTERNATIONAL UNION OF THE HISTORY AND PHILOSOPHY OF SCIENCE / DIVISION OF HISTORY OF SCIENCE EXECUTIVE COMMITTEE MEETING ISTANBUL, TURKEY, 22-23 DECEMBER 2001

The Executive Committee of the IUHPS/DHS was housed by IRCICA and the Turkish Society for History of Science, on 22 and 23 December 2001.

Were present the following members of the Council of IUHPS/DHS: E. Ihsanoglu, (President), V. Kirsanov, (First Vice-President), J.J. Saldana, (Secretary General), F. Bevilacqua (Assistant Secretary), E. Nicolaidis, (Treasurer). M. Kacar (Turkish Society for the History of Science), T. Kevser (assistant to the President) and G. Arroyo (Assistant to the Secretary General) assisted the members of the Council.

The Committee, approved the amended Minutes of the Old and New Council meeting held in Mexico on July 2001; the Secretary General presented his report; the ad hoc Committee report concerning the reform of the IUHPS/DHS (a proposal of the President during the meeting in Mexico) was approved; the treasurer presented his report and grants were allocated to IUH{PS/DHS Commissions; F. Bevilacqua presented his plans concerning the website of IUHPS/DHS; the International Proram Committee for the next Congress in Pekin was approved; the Proceedings of Mexico Congress were discussed as well as the strategic plan of the S.G.; an initiative for DHS Prize for young scholars was introduced, etc..

The Minutes of the Committee and various information on IUHPS/DHS and its activities can be found on the website of the IUHPS/DHS: http://unipv.it/dhs. Historians of science can also find an important amount of information concerning their field of research on above mentioned site.

Next meeting will take place at Pavia on 17 and 18 January 2003.

The Executive Committee of the IUHPS/DHS at IRCICA

4th International Congress of History of the INR/NHRF «HISTORIOGRAPHY OF MODERN GREECE, 1833-2002»

The Institute of Neohellenic Research of the National Hellenic Research Foundation has organised its 4th International Congress of History in Athens, from 29 October to 3 November 2002.

The subject of the Congress was «Historiography of Modern Greece, 1833-2002».

Eighty papers were presented on almost all the fields of historiography, presented in six general themes:

Constitution of national historiography,
Cultural history and history of education,
Social history,
Economic history,
Institutional history of the Greek State,
Historiographical debates.

The historians S. Asdrachas. P. Kitromolides, M. Aymard, R. Clogg, M. Godelier, A. Molho and A. Pippidi participated at a round table on the incorporation of Greek historical studies in the international history.

The Congress included a session on history of science, presided by Yannis Karas. Three papers were presented in that session:

«When History Meets Biology» by Athens Academy member K. Crimbas, «Historiography of Science in Modern Greece» by E. Nicolaïdis, and «Historiography of Arts and Sciences of Space» by G. Tolias.

2nd HELLENIC CONFERENCE 'HISTORY, PHILOSOPHY OF SCIENCE AND SCIENCE TEACHING'

Athens 2003, May 8-11

http://2ndhpsst.primedu.ooa.gr/index.html

Endorsed by:
Greek Society for the History of Science and Technology
Hellenic Society of Physicists

Scientific Committee

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Halkia K.	National and Kapodistrian University of Athens
Assimakopoulos M.	National Technical University of Athens NTUA
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The Conference aims to bring into contact teachers and researchers in order to present their results on the relations between the History and Philosophy of Science and the Teaching of Science.

The main trends of Role of History and Philosophy of Science on Science Teaching will be discussed.

International Conference
BYZANTIUM – VENICE – MODERN HELLENISM:
A TRAVEL IN THE WORLD OF MODERN GREEK SCIENTIFIC THOUGHT
Athens, 17-20 September 2003

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, are organising an International Conference on the subject: Byzantium – Venice – Modern Hellenism, a travel in the world of Modern Greek scientific thought. Other co-organisers are: the Institute of Byzantine Studies of Paris, the University of Cyprus and the Institute of Modern Greek Studies of London.

The conference 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 of the Ottoman Empire. Indeed, from the fall of Byzantium until the end of the 18th century, the city of Venice played an important role both on the spread of Byzantine science (and through Greek language of Persian science) to Europe and on the spread of European science to the East. The university of Padova under Venician rule, was the main European destination of Greek students during 17th and 18th centuries.

For information on the Conference, please contact the Organising Committee at the following e-mail address: gvlahakis@eie.gr.

The Institute of Byzantine and Post-byzantine Studies of Venice

RESEARCH PROJECTS IN PROGRESS OF THE HISTORY OF SCIENCE PROGRAMME OF THE NATIONAL HELLENIC RESEARCH FOUNDATION

1. “Science, technology and modernisation in the East Mediteranean area, 19th-20th centuries”.
2. Greek-Yougoslav joint research project: “The introduction of scientific thought in Geece and Yougoslavia since 18th century until nowdays: historical documents, interactions, simiãarities and differences”.
3. Greek-Russian joint research project: “Interaction between Greece and Russia in the field of science and scientific education according to archive materials”.
4. “Hellenic Archives of Scientific Instruments” (http://www.eie.gr/hasi).