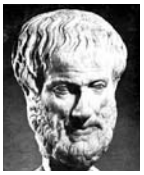

Newsletter

for the History of Science in Southeastern Europe

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EXHIBITION ON THE ANTIKYTHERA MECHANISM

Exhibition on the Antikythera Mechanism within the Astronomy and Technology of its time
December 7, 2009 – January 25, 2010, National Hellenic Research Foundation

The exhibition was organized by the History, Philosophy and Didactics of Science and Technology Programme (Institute for Neohellenic Research, National Hellenic Research Foundation in collaboration with the Athens Science and Education Laboratory, University of Athens), the National Archaeological Museum, the Antikythera Mechanism Research Project and the Association of Ancient Greek Technology Studies.

The exhibition was organised in the frame of the Hephaestus project. Exhibition curator, Yanis Bitsakis; Science & Image consultant, Tony Freeth; in charge of the NHRF cultural events, Eleni Grammatikopoulou; designers "Designbond".

At the opening, December 7th, Prof. Theodossios Tassios presented the lecture "Are we interested by the Antikythera Mechanism?"

The exhibition displayed models (from the older one, this of Theophanides to the more recent, those of Michael Wright and the University of Thessaloniki), six videos, an interactive screen, historical publications on the Mechanism, many photographs and explanations on the Mechanism and Ancient Greek astronomy and technology, and also an art representation of the Mechanism. On a hemispherical screen were projected two films, "The Antikythera mechanism: decoding an ancient Greek mystery", by Macmillan Publishers Ltd

and mfreeth.com, with animation and footage in Greece by Images First Ltd and «Cosmic Harmony», by Nikos Matsopoulos.

Introduction of the exhibition catalog by Mike Edmunds, M.A., Ph.D., F.R.A.S., F.Inst. P., C.Phys., Emeritus Professor of Astrophysics, Cardiff University, U.K. and Chairman of the Antikythera Mechanism Research Project:

It is a great pleasure to welcome a new exhibition associated with the extraordinary Antikythera Mechanism, organized by the National Hellenic Research Foundation and the National Archaeological Museum, with the Antikythera Mechanism Research Project and the Association of Ancient Greek Technology Studies.

The recent researches which have used the power of modern technology to discover its mysteries have created world-wide interest. I believe that such interest is important in two major ways. The modern results have come about through successful international collaboration, and its first effect has been to excite interest in the extraordinary achievements of ancient Greece. A whole new audience is becoming aware of a historical perspective which has been lacking or neglected since the study of the classical world ceased to be the primary basis of advanced education. Not only do we wonder at the newly-revealed technological abilities in the pre-Christian era, but we also re-discover the glories of Hellenic art, architecture and literature. Secondly the new results remind us of the heroic and fundamental studies that have been carried out by a century's-worth of enthusiastic investigators before the most recent studies were started.

We now have a fairly good overall understanding of what the Mechanism could do, although many details remain to be filled in. Work continues on interpreting the inscriptions and the subtleties of mechanical design. But we still do not really know why it was made, and a proper assessment of the implications of the level of technology involved has only just begun. Was the Mechanism basically a bold statement of what was known about the Universe at the end of the second century B.C.? What are the implications for the way Greek philosophy developed, knowing that philosophers must have been aware of these "deterministic" devices? The mechanisms, or "spherae", can be traced in literature over at least seven centuries from about 250 B.C., when Archimedes took an interest. What happened to the technology? Why was it not developed by the Romans? These are important questions, and I am pleased to note that the classical scholars of today are at last beginning to realise the significant implications of the Antikythera Mechanism, after many years of apparent neglect – possibly because they either doubted its authenticity (certainly no longer a problem) or were unaware of its unparalleled technical sophistication.

For the future study we must hope that other examples of ancient geared devices will be found, or perhaps recognised in other collections. It would be very good to be able to put several examples from before 200 A.D. on display – but so far the Antikythera Mechanism remains unique! We must be grateful that it survived. This exhibition will help to show you why it is both so important, and so amazing.

1ST HEPHAESTUS WORKSHOP: ANTIKYTHERA

The Antikythera Mechanism Workshop, 16-19 December 2009.

The workshop, sponsored by the Hephaeastus project, concerned the Antikythera Mechanism and its technological and astronomical heritage. In the frame of the workshop, a conference was organized at the NHRF theatre in December 16th, in order to present the recent results on the study of the Mechanism to the public. Ronald Numbers, Past-President of the International Union of the History and Philosophy of Science / Division of History of Science and Technology (IUHPS/DHST), opened the session; Theodossios Tassios, emeritus professor of the National Technical University of Athens and President of the Association of Ancient Greek Technology Studies spoke on Ancient technology at the times of the Mechanism and especially on gears; Robert Halleux, director of the Centre d'Histoire des Sciences et des Techniques, University of Liège and specialist of medieval technology, presented the ways of manufacturing the Mechanism; Paolo Brenni, President of the Scientific Instrument Commission of the IUHPS/DHST, presented the orreries, the mechanical devices displaying

the movements of the celestial bodies, after the 16th century and Tony Freeth, distinguished member of the Antikythera Mechanism Research Project, presented the movement of the Moon of the Mechanism. The British Council sponsored the simultaneous translation into Greek of the speakers. The Vice-Minister of Education, Ioannis Panaretos, attended the conference.

Professor Theodossios Tassios at Antikythera Conference

THE He.P.H.a.E.S.T.U.S. PROJECT

Hellenic Philosophy, History and Environmental Science Teaching Under Scrutiny

The Programme of History, Philosophy and Didactics of Science and Technology (HPDST) originates from two initially complementary teams, the programme of History and Philosophy Science of the Institute of Neohellenic Research of the National Hellenic Research Foundation (director Efthymios Nicolaidis) and the Laboratory of Didactics and Epistemology of Natural Sciences, of the Education Department of Primary Education of the University of Athens (director Constantine Skordoulis). The HPDST team submitted the project proposal Hellenic Philosophy, History and Environmental Science Teaching Under Scrutiny (He.P.H.a.E.S.T.U.S.).

The project Hephaestus, which was granted funding from the Seventh Framework Programme Theme FP7 of the European Union (specifically, Capacities, Part 4 and Activity 4.1, Regopot-2008-1), started in April 2009 and will be operational for three years.

This project is motivated by the desire not only to expand the activities of the HPDST team in the areas of History, Philosophy and Didactics of Science and Technology in the region, but also to establish connections with the international community.

Given these two foci, the project Hephaestus aims to enhance the research capacity of the team itself (by utilizing opportunities, presented at a European level, to improve its potential), to initiate collaborations with European research and university centres of excellence (an activity that will help develop a research network, which in turn will facilitate both cross-fertilization and recognition of the team's work), to intensify its efforts to communicate the results of its research activities to specialists and the general public alike, and to succeed in establishing close collaborations with the local socio-political authorities.

The main courses of action, which are anticipated by the project and dictate specific endeavors, are as follows.

Establishment of communication and development of research networks with European research centres of excellence.

Specifically, the project anticipates the collaboration and exchange of research personnel between the members of the HPDST team and the following European research and university centres:

- Conservatoire National des Arts et Métiers, France.
- Centre d'Archives en Philosophie Histoire et Édition des Sciences, (Ecole Normale Supérieure – CNRS), France.
- Oxford Science Museum, UK.
- The Departments of History and Philosophy of Science of the University of Cambridge and the University of Leeds, UK.
- Centre d'Histoire des Sciences et des Techniques of the Université de Liège, Belgium.
- The Max Planck Institute for the History of Science, Germany.

The collaboration expanded also to other partners, the Département de Philosophie (Université de Nantes), and the Laboratoire Territoires, Techniques et Sociétés (École nationale des ponts et chaussées - CNRS).

The implementation of the project Hephaestus makes possible the visit of eight junior researchers of the HPDST team to these European centres. Two researchers, C. Karella and K. Tabakis, are already visiting, since September 2009, the Oxford Science Museum and the Department of Hisotry and Philosophy of Science of Cambridge University respectively.

The team included in its proposal, and through the project Hephaestus is prepared to fully finance, the visit in Athens of ten scholars from the aforementioned centres. Visitors are expected to participate actively in the activities of the team through talks, seminars and other kinds of interaction with its members, and thus

enrich and diversify its research interests.

Professor Jullien Vincent, from the Département de Philosophie of the Université de Nantes, was the first among these ten European scholars to visit Athens. During his stay in Athens, in May and June 2009, he gave a series of seminars that focused on Descartes' philosophical outlook and on Needham's question "Why the scientific revolution took place in Europe". A highlight of his visit was the talk he delivered at the Institute of Neo-Hellenic Studies with the title «Pourquoi Descartes fait des mathématiques». As for the future, arrangements have been made for a specific collaborative project: the compilation of a volume on European history of science, which will target secondary education, and will be written by members of the team and European collaborators including Prof. Vincent.

Michel Blay, of the Centre d'Archives en Philosophie, Histoire et Édition des Sciences (CAPHÉS), was the second to visit, in September 2009. His visit was marked by a series of seminars on the mathematization of physics during the 17th century, and the talk «The infinite between Philosophy, Sciences and Theology or the making of Science in the 17th century» he gave at the Institute of Neo-Hellenic Studies. Michel Blay will be one of the main contributors in the aforementioned volume on European history of science.

The third visitor, Professor Robert Halleux, arrived in Athens in November 2009. Prof. Halleux is the director of the Centre d'Histoire des Science et des Techniques of the Univeristé de Liège, and he is a member of the Académie des inscriptions et belles lettres.

The fourth visitor, Girolamo Ramunni, Professor at the CNAM is expected on January 2010.

A third act, which is supported by the project with the expectation that it will contribute to the targeted expansion and enrichment of the research activities of the team, is the hire of two Greek researchers with experience abroad. This act has been completed with the hire for three years of the associate researchers Ioanna Katsiampoura, with specialization in the history and philosophy of sciences in Byzantium, and Antigone Nounou, with specialization in philosophy of contemporary physics. Their appointment was recommended by an international committee.

Organization of Conferences, Workshops and Seminars

The project will sponsor two international conferences, whose main theme will be "Science and its social function". The main aim of both conferences will be to meet the need for a holistic, interdisciplinary approach to the study of sciences, an approach that will bring to the fore the social dimension of science, alongside its history, philosophy and didactics. The first conference, with title "History of Science in Practice", will be hosted by the National Hellenic Research Foundation in 6-9 May, 2010.

"The Anikythera Mechanism", "Science and Society" and "Teaching science for sustainable development through its history and philosophy" are the titles of the three workshops that will be supported by the project. The central theme of each of these workshops is aligned with one of the three main axes of the team's research activities, and their aim is to facilitate the dialogue and exchange of ideas between internationally acclaimed researchers, who will be invited to participate, and the team's researchers.

Finally, the pre-existing institution of the interdisciplinary annual meetings of the team, known as Elati Meetings, have evolved, under the aegis and financial support of the project, into research seminars. The 6th Elati Meeting, which took place from 14 to 17 July 2009, was coupled with the first research seminar of Hephaestus, and a selection of the talks presented in it will be published by the journal *Kritiki: Critical Science and Education*, whose editors are members of the HPDST team.

Dissemination of research results and promotion of the team's activities

The dissemination of research results and promotion of the team's activities are crucial for the team's purposes and aims. Since the targeted audiences are not only specialists and academics but also the general public at large, a series of activities that will reach all targets have been planned, and some have already been effected, whereas the rest are in varying stages of completion.

Thus, a web portal that serves both the team members (through regularly updated calendars, live feedback etc.) and the wider scientific community (by granting access to the team's activities) has already been constructed (URL: http://www.hpdst.gr). The creator of the portal is the team member Yanis Bitsakis.

Three international exhibitions aim to communicate a substantial part of the team's work to the general public. The first of these exhibitions revolves around the Antikythera Mechanism, and its international opening will

be on 7 December 2009, at the National Hellenic Research Foundation. The same exhibition will travel to five European countries. The curator of this exhibition is Yanis Bitsakis. The other two exhibitions, "Scientific Instruments in Greece" and "Hellenic Scientific and Technological Heritage Permanent Exhibition", are scheduled to open in October 2010 and April 2011 respectively.

Of major importance in establishing the HPDST team as one of international caliber is the publication of the new international journal *Almagest*. The main focus of this journal will be on the formation and assimilation of scientific ideas, and a number of renowned scholars, mostly from Europe but also from other parts of the world, have already consented to participate in its editorial board.

Other publications of the programme include the *Newsletter for the History of Science in Southeastern Europe*, which will be published biannually, and the Greek journal *Kritiki: Critical Science and Education*, which invites essays that advocate radical approaches in sciences and education.

The HPDST Open Days aim to introduce high-school students to the concept of scientific research, at least in the areas covered by the members of the team. Thus, the team's working spaces, activities and exhibits, if applicable, will open for student observation once a year.

Having in mind its potential utilization in secondary education, the team will produce a documentary, whose theme will be the Greek scientific and technological heritage.

Finally, the team plans to publish a thematic volume on the History, Philosophy and Didactics of Science in Southeastern Europe. This work will embody part of the research experience that the team will have accumulated, and will provide a printed testimony for its prospects, that is for what more is to be expected from it after the completion of the project Hephaestus.

Upgrading of technological equipment

The upgrading of the necessary technological equipment has already been completed. In accordance with the project's specifications, the team has purchased a server and supporting material for the server, laptops, screens and projectors that will be used in the exhibitions, special equipment for image processing, planetarium projections, digitalization system, etc.

The everyday management of the project is provided by Maria Darmou.

Thanks to Prof. C. Skordoulis, the HPDST team has acquired spacious offices and a seminar room in the historic, early 20th century building of Marasleios Pedagogiki Akadimia (4 Marasli Str.).

The research team

Senior Researchers

Nicolaidis Efthymios (Director of Research, Institute of Neohellenic Research, National Hellenic Research Foundation)
Skordoulis Constantine (Professor, Department of Education, University of Athens)
Katsiampoura Gianna (Senior researcher, Hephaestus)
Nounou Antigone (Senior researcher, Hephaestus)
Vlahakis George (PhD in History of Science)
Karras Ioannis (Honorary Director of Research, Institute of Neohellenic Research, National Hellenic Research Foundation)
Bokaris Efthymios (Assistant Professor, Department of Chemistry, University of Ioannina)

Junior Researchers

Assimopoulos Stefanos (PhD Physics)
Drakopoulou Maria (MSc Natural Sciences in Education, BA Primary Education)
Karela Katerina (PhD Philosophy of Science)
Koutalis Vagelis (MA History of Science)
Bitsakis Yanis (MSc Physics, MSc History of Science)
Parkosides Ioannis (PhD Education Technology)
Prinou Loukia (PhD Biology)
Stavrou Ioanna (Msc History of Science, BA Primary Education)
Tabakis Constantine (PhD History of Science)
Terdimou Maria (PhD History of Science)
Halkides Anthimos (PhD IT in Education,)
Psomiades Ploutarhos (MSc Environmental Sciences in Education, BSc Physics)

Scientific Collaborators

Lazos Takis (Msc History of Science)
Matsopoulos Nikos (MA in Sciences)
Darmou Maria (MA in Communications and Administration)

PhD Candidates

Velentzas Athanasios (Secondary education)
Giolmas Aristotelis (Msc Physics)
Mandrikas Achilleas (Secondary education)
Mantzourides Demetrios (Secondary education)
Spiliopoulos Gregoris (Mathematician)
Stoumpa Artemissia (MA in computer education)

1ST HEPHAESTUS RESEARCH SEMINAR

Hephaestus Research Seminar and 6th Workshop on Critical Approaches to Science and Education
Elati, 14-17 July, 2009

The 1st Hephaestus Research Seminar organised by the History, Philosophy and Didactics of Science and Technology team was held in Elati from July 14th to July 17th. It was twinned with the *6th Workshop on Critical Approaches to Science and Education, organized by the Laboratory of Science Education*, Epistemology and Educational Technology (ASEL) of the University of Athens and the Institute of Neohellenic Research of the National Hellenic Research Foundation, with the participation of the Journal *Critical science and education* and hosted by the Municipality of Aithikon (Elati, Greece).

Senior researchers of acknowledged experience, invited from the Research Institutions hosting post-doctoral HPDST researchers, as well as other experienced scholars, took part in research Seminar, aiming to bring state of the art research methodology and expertise to bear in the tapping of the team's potential. The invited foreign researchers were Prof. Sabine Rommevaux, Director of research of CNRS in France and Alexandre Kostov, Senior research associate of the Bulgarian Academy of Sciences. They presented their respective research field. Prof. Rommevaux presented the subject of the transmission of Euclid's Elements to the Latin West, a seminal topic of Medieval history of science. Prof. Kostov presented the theme of the training and identities of Bulgarian engineers during the 19th century and the beginning of the 20th century, which is of great importance for HPDST team, as it opens the field of a comparative research on the modernisation of the Balkan States.

The seminar hosted several notable speakers as key lecturers on a variety of topics of History, Philosophy and Didactics of Science (see the Programme Hellenic Philosophy, History and Environmental Science Teaching Under Scrutiny site, http://www.hpdst.gr). The plenary session featured Professor Aristeidis Baltas expounding upon Marxism, Science and Philosophy.

Among other speakers D. Hassapis gave a talk on didactical and theological features of Paulo Freire theories, G. Katsiamboura upon the notions of faith and cognition as conceptualized in the Byzantine textbooks, E. Koleza on the social aspect of statistics, A. Nounou on gauge potentials, holonomies and time, etc

Papers of junior researchers were discussed during the seminar and commented by invited speakers. I. Stavrou lectured on epistemological and didactic approaches of science in fiction novels and M. Terdimou upon the formation of the greek science community in the 20th century. V. Koutalis, a PhD candidate, expounded upon the notions of Chemistry and Alchemy in the medieval history of science.

The participants were ranging from students pursuing their Master's degree to established experts in the fields of didactics, philosophy and history of science.

The Seminar was deemed a success by all participants, building on the legacy of its predecessors. Selected papers based on the talks given will appear in the peer reviewed journal *Critical Science and Education*.

ALMAGEST

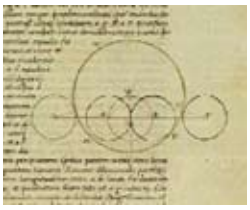
An International Interdisciplinary Journal

Editorial Statement

The new journal *Almagest* considers the history of science both as a history of ideas and as an activity that takes place in institutional and social context. In discussing the history of scientific ideas, the journal addresses the philosophical assumptions underpinning the ideas as well as the scientific developments themselves; it also addresses the influence of the historical context on these ideas.

Several historians of science believe nowadays that a proper understanding of scientific accomplishments requires a deep appreciation of their situation in time and place. As a result, historians have increasingly shifted the emphasis from universal validity to the local particularity of the most important developments of science. And yet, despite some pioneering efforts from the 1930s through the 1950s and important developments in historiography of science since then, a cross-culturally comparative perspective

(for example, on why modern science emerged in a specific region and time) is still in its infancy. Acknowledging this lacuna, and recognizing the potential applications of such an approach, the journal aspires to publish history of science papers which will contribute to a better understanding of some of the major issues concerning contemporary cultural conflicts, multiculturalism and globalisation.



Detail from Book VI, Chapter 7, of a late-1400s copy of George Trebizond's Latin translation (ca. 1451) of "Almagest". (Vat. lat. 2055 fol. 101 verso math17 NS.08)

One of the defining features of the journal's approach to the history of science is the belief that the history of scientific ideas, of research priorities, of conceptualizations of nature, and of the various external factors that are associated with scientific discoveries are deeply related to History, generally construed, and to cultural and socio-economic parameters. Following this approach, the journal invites papers on the history of scientific ideas in specific regions or related to a specific cultural context (for example, papers on science and religion). It also invites papers on the relations of scientific ideas to the material civilization, in particular to scientific instruments.

Among the goals of the journal is to devote a substantial part to the promotion of teaching of history of science, by advocating its utilization in science courses of all levels of education (from elementary school to university) and in programmes for the preparation of science teachers. It is a firm belief of our editorial board that historians of science can contribute substantially to the scientific education of both students and the general public, especially at a time when debates over "intelligent design" are raising major questions not only over what counts as science but also on what ought to be available to students in their school curricula. The journal, therefore, invites papers on the utilization of history of science in science education.

Last but not least, *Amagest* is edited by the network of history of science of Southeastern Europe, and therefore it aims to constitute a forum for the historians of science in Southeastern Europe and the Eastern Mediterranean. *Almagest* will promote their research and make it known to the international community of historians of science.

KRITIKI: CRITICAL SCIENCE AND EDUCATION

The Greek journal *Kritiki: Critical Science & Education* is the product of the work of a network of researchers. This network is formed having as its basic unifying element the intention to theoretically reconstruct the radical perspective about science and education.

Especially, *Kritiki* invites articles on Radical

Approaches to Science and the History of Science. *Kritiki's* aim is to publish selected papers from the Seminars on Critical issues of History, Philosophy and Didactics of Science organized each July in Elati, Greece. However, the journal is open and invites papers to be published, provided that they integrate in its repertoire.

During 2009, Kritiki published the 9th issue in June.

Contents of the volume 9:

Constantine D. Skordoulis: *Towards a Philosophy of Critical Science Education*; Aristotelis S. Giolmas, Ioanna K. Stavrou: *Global Education as an alternative model of education for Sustainability and Social and Environmental Justice. A Critical Assessment*; Vasilis Tsefles, Antigony Paroussi: Theatrical *narration of scientific ideas: an opportunity to approach learning in a dialectical manner*; Manos Skoufoglou: *The urban spatial structure during the transition from feudalism to capitalism: the case of the Netherlands*; Eleni Gianakopoulou: *Gender identities and educational administration*; Kostas Stergiopoulos: *Scientific Method and Abductive Defense of Scientific Realism*

HPDST MEMBERS DEFENDING PhD THESIS

Catherine Karella, Changement conceptuel et développement scientifique: le cas de la logique mathématique de Hilbert à Gödel, *PhD dissertation, 2009, 295p., IHPST: Sorbonne-CNRS- ENS.*

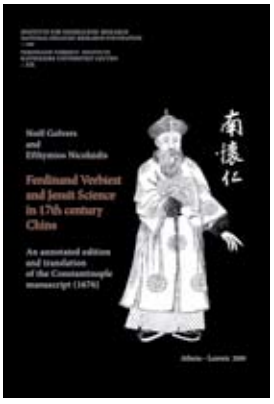
The objective of this project is twofold: to study a conceptual change in science on the one hand; to present some considerations on the methods of study on the other. Around 1900 there is considerable lack of determination concerning the term completeness and the status of the property it refers to (for example, is it the property conferred to a system of objects by its axiomatical characterisation, or a possible property of a system of axioms, that could be established by a demonstration on that system?). The variations around its meaning stopped during the 1930's, largely because of the fundamental results obtained in that period. Two types of examination are used in this work: one linear (chronological), how the term evolved from Hilbert's *Grundlagen der Geometrie* to Gödel's results, and one structural (logical/conceptual), on the determination of its meaning by adjacent concepts such as maximality or categoricity, in order to accentuate the ways in which both the changes and the stabilisation of the concept took place. Since these changes happen to be closely related to philosophical problems such as the ontological status of mathematical entities, or the relation between truth and prouvability, both important problems of the metamathematical context of that period, the author continues with this question: how are we to understand, to explain, or, what type of interpretative model are we to adopt, given that: 1) the variations of the meaning of the concept depend to a considerable extend on the meta-scientific context of the time, and, 2) that the relation between the philosophy of science and the formal sciences has some particularities compared to the relation between the philosophy of science and the empirical sciences for example.

University of Goettingen (1735)

The author examines post-positivist models such as: (1) sociology of science, or sociology of scientific knowledge (SSK), and (2) cognitive science or cognitive psychology as an interdisciplinary field, and goes back to (3) Kuhn and Lakatos in the sociological – historiographical tradition. While being cautious in the use of Kuhn's terminology in philosophy of mathematics, and taking into account several critics of *Structure's* themes, Kuhn's own evolution, and the discussions concerning the Crowe – Dauben debate from the seventies to present, she tries to show in what sense there are important elements in some of the *Structure's* conclusions, for readings in the history of the foundations of mathematics, and more in particular, for the studying of conceptual change, the variations of a concept's meaning, and the interdependence between these variations and the metamathematical context of a given time.

CHINESE SCIENCE FOUND IN CONSTANTINOPLE

Noël Golvers and Efthymios Nicolaidis, Ferdinand Verbiest and Jesuit Science in 17th century China. An annotated edition and translation of the Constantinople manuscript (1676), *Institute of Neohellenic Research, NHRF and Ferdinand Verbiest Institute, KUL, Athens-Leuven, 2009, 384 p.*



This book contains two manuscripts authored by Ferdinand Verbiest, S.J. (1623 - 1688), written in 1676 in Beijing for the attention of the Russian tsar and brought in Moscow by the legate Nicolas Spathary Milescu. Both texts represent the oldest version of the *Astronomia Europaea* corpus written by Verbiest, and had until recently been forgotten. Their recent discovery was in the form of a manuscript copy, produced by Chrysanthos Notaras (nephew of the Patriarch of Jerusalem Dositheos), during his mission in Moscow in 1693, which has languished in obscurity in the library of the *Metochion* of the patriarchate of Jerusalem in Constantinople.

The manuscripts describe astronomy, physics and mechanics as they have been introduced by Jesuits in China. In this book, the Latin texts have been reconstituted, translated into English and annotated. Illustrations of the sciences described, as they appear in the Chinese edition of Verbiest analogue texts, are also given in appendix. The introduction situates the manuscripts within the corpus of Verbiest's Latin writings and emphasises both the sections of the manuscripts that were subsequently included in the well-known *Compendium Latinum* and *Astronomia Europaea* edition (Dilingen, 1687) and those that were eventually omitted. It also describes Verbiest's science and its contexts, Chinese and Jesuit and his efforts to introduce European science and engineering in China. Furthermore, the introduction traces the histories of the Moscow manuscripts and especially their Constantinopolitan copy - the only remaining testimonium of them – and chronicles the until-now unknown reception of 17th century Jesuit astronomy, mechanics, and physics in post-Byzantine Russia and South-Eastern Europe.

IDEAS AND INSTRUMENTS IN THE SOCIAL CONTEXT

XXIII International Congress of History of Science and Technology, Budapest, 31 July-1 August, 2009 Symposium organised by Ekmeleddin Ihsanoglu, Efthymios Nicolaidis and Tuncay Zorlu, "Ideas and Instruments in the Social Context in the Ottoman Empire and National States"

The Symposium was organised in the framework of the XXIII International Congress of History of Science and Technology by Ekmeleddin Ihsanoglu, Efthymios Nicolaidis and Tuncay Zorlu (for the scopes of the Symposium, see Newsletter No 11).

University of Technology and Economics, venue of the 23rd International Congress of History of Science and Technology.

Programme of the Symposium:

1. Atilla Bir & Mustafa Kacar, *Evolution, functioning and capacity of the Mediterranean windmills*
2. Salim Ayduz, *The Ottoman royal cannon foundry: "Tophane-i Amire"*
3. Sevtap Kadioglu, *Semseddin Sami's treatise of astronomy 'Gök' (Sky): An effort in the way of formation of the Turkish scientific language*
4. Tofigh Heidarzadeh, *An analysis of Qushji's astronomical textbooks*
5. Cuneyd Okay and Tuncay Zorlu, *Engineering periodicals in the Ottoman Turkish*
6. Tuncay Zorlu, *Ottoman nautical terminology as attested in the 18th century sources*
7. Semra Saracoglu & Bulent Karakas, *Locks and keys: their story from past to present*
8. Cemil Ozan Ceyhan, *Books on Darwin and Darwinism in the Ottoman Empire*
9. Nihal Firat Ozdemir, *The point and importance of the works of Nasir Al-Din Tusi in the Ottoman world*
10. Emre Dolen, *Ottoman Ph.D dissertations of chemistry completed in European universities*
11. Panagiotis G. Lazos, *First instruments of*

the National Observatory of Athens: when, from where, why and how

12. Constantine D. Skordoulis & Kyriakos Kyriakou, *The Reception of Ernst Haeckel's Ideas in Greece*

13. Maria Terdimou, *The interaction between Mathematics and Greek Trade during the period of the Ottoman Rule*

14. Christophe Benoist, *The foundation and early phase of the Imperial Observatory of Constantinople*

15. Fotini Assimakopoulou, Konstantinos Chatzis, *Le rôle social et politique des ingénieurs du corps du Génie dans le jeune État grec: entre l'Europe et les structures traditionnelles*

ASTRONOMERS IN ISLAM

Astronomers in Islam and their Contribution to World History of Science, İstanbul, 7-8 May 2010

OIC Research Centre for Islamic History, Art and Culture (IRCICA) is organizing a panel titled Astronomers in Islam and their Contribution to World History of Science jointly with the Metropolitan Municipality of İstanbul, Directorate of Culture, on the occasion of the UNESCO/IAU "International Year of Astronomy" that was celebrated in 2009.

H.E. Prof. Dr. Ekmeleddin İhsanoğlu, Secretary General of the OIC, and other eminent scholars will participate in the panel with focus on astronomy in Islam, the place of Islamic astronomy in world astronomy and the activities that were conducted throughout history.

The panel will take place on 7-8 May 2010 in İstanbul on the premises of IRCICA, at Yıldız Sarayı.

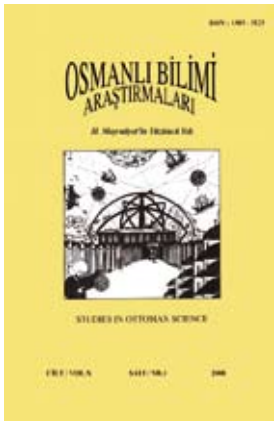
CELEBRATING THE INTERNATIONAL YEAR OF ASTRONOMY IN TURKEY

Galileo and the concept of Modern Science Kastamonu, 16 October 2009

A meeting was jointly organised by Kastamonu University and the UNESCO on 16 October 2009 to celebrate the International Year of Astronomy 2009. Celestial observations were performed and lectures were given at Kastamonu, a historical city in the Black Sea region of Turkey. These lectures are listed below: Galileo: His life and works (*Seval Yinilmez*); Galileo and the scientific method (*Hüseyin Gazi Topdemir*), Modern astronomy and the Ottomans (*Yavuz Unat*); Observational instruments in the evolution of modern astronomy (*Atilla Bir*), Historical notes on the solar eclipses observed in Turkey (*Feza Günergun*), Reflections on modern science in *Turkey* (*İnan Kalaycıoğulları*), Struves's jeodesical arc and Turkey (*Zeki Aslan*); Do numerals have a language? (Ethem Derman)

STUDIES IN OTTOMAN SCIENCE

Vol.X, Nr.1, 2008



Studies in Ottoman Studies is published by the Department of History of Science, Istanbul University, Turkey, to promote studies on history of science and technology in Turkey. The current issue contains the following research articles: Istanbul Darülfünunu (University) in the aftermath of the Young Turk Revolution (*Emre Dölen*); German chemists in Istanbul during WWI and the reformation of chemical education at the University/*Darülfünun (Feza Günergun)*; From Women's Teachers College to Ottoman Women's University (*Ali Baltacıoğlu*); Edward Kent Balls (1892-1984), plant collector and horticulturist (*Asuman Baytop*); Contribution of Otto Schwarz (1900-1983) to the flora of Anatolia (*Asuman Baytop*); Legal arrangements for the limitation of the number of pharmacies in Turkey and their consequences (*Mehmet Karayaman*); Geographical distribution of Ottoman mines XIXth century (*Mehmet Bayartan*); Waqfs in Ottoman cities and the values added to the city by the waqf system (*Mehmet Bayartan*). Articles in translation: Professor H.H. Sayman's declaration: The University, Science and Democracy (*Şeref Etker*); Mecmua-i Fünun, the monthly Turkish scientific journal (*Gaye Şahinbaş Erginöz*).

RUSSIAN-SERBIAN CONTACTS IN SCIENCE FIELDS

Eduard I. Kolchinsky, Aleksandar Petrovic (eds.), Russian – Serbian contacts in the field of science, humanities and education in the 19th – the first half of the 20th centuries*, St. Petersburg branch of the Institute for the history of science and technology, Russian Academy of Sciences, and Research center of the Serbian Academy of Science and Arts in Kragujevac, 2008*

During October 2008 at the Institute of the History of Science of the Russian Academy of Sciences in St. Petersburg took place scientific meeting *Russian – Serbian contacts in the field of science, humanities and education in the 19th – the first half of the 20th centuries*. The meeting gathered together researchers from the Russia and Serbia who belonged to the different scientific fields.

Proceedings from this meeting has just been published in St. Petersburg in Russian, and during spring it will be published the Serbian edition in English. From the Russian part, beside Institute of the History of Science RAS, following institutions were involved: State University of St. Petersburg, The Library of the Russian Academy of Science, Museum of Anthropology of Peter the Great, and from the Serbian part, Research Center of the Serbian Academy of Science and Arts, University of Kragujevac and University of Novi Sad.

The main subject of the meeting was research of the Russian – Serbian relations in the fields of science and education in past two centuries. Proceedings contain fifteen different contributions which cover various aspects and periods of the Russian - Serbian intellectual relations. They encompass a range of different topics - from ethnographic and cartographic subjects to historical and natural sciences analyses. Authors are E.I. Kolchinsky, Lj. Mijatovic, O.A. Krasikova, Dj. Djuric, A. Petrovic, M. F. Hartanovitch, T. I. Ulankina, V. P. Borisov, V. Zikic, S. I. Fokin, D.N. Saveleva.

Especially it is examined Russian scientific emigration in Serbia. The exodus of Russian intellectuals and scientists at the beginning of the XX century, during the October Revolution, represents the change of a centuries-long historical and cultural pattern and it was an entirely new experience for the Serbian culture. Even if 19th century Serbia was, not counting America, a country with the relatively greatest percentage of immigration influx, the simultaneous arrival of the great numbers of important scientists was still an unprecedented event since the times of the fall of Byzantine Empire. This also represents one of the rare instances in which one relatively big and closely-knot group of scientists in just three years was transferred from one country to another, from one culture to another. For this reason, a few papers follow this group's destiny and its influence on the country of arrival.

Nada Lasker

TIMELESS EINSTEIN IN CROATIA AND IN THE WORLD

Petković, T. (ed. and foreword), Theory of Relativity and Philosophy*, Croatian Philosophical Society (HFD), Zagreb, 2009*

The Proceedings of the Theory of *Relativity and Philosophy* - Book of Essays (edited and Foreword by Tomislav Petković) arose by the Symposium that was held 2005 in the town of Cres, Croatia, within the interdisciplinary and international framework of The 14 Days of Frane Petrić organized by the Croatian Philosophical Society, under the more specific title: In Celebration of the 100th Anniversary of Einstein's Special Theory of Relativity. Book of Essays brings Einstein's Thought, His Life, and His Impact on contemporary philosophy and cultural perspectives of the World and in Croatia, discussing the various aspects of the Einstein's Miraculous Year (1905) as the most remarkable in the history of science & technology. Proceedings may be understood as the characteristic Festschrift due to Croatian philosophical tribute to Einstein's legacy and his scientific discoveries undertaken in 1905. Articles in the book were written by experts in physics, philosophy, religion, science, arts and humanities, and have been published in 4 languages (Croatian, English, Italian, and German). That seems to be a unique case in the series of publications along the line of The Days of Frane Petrić as well as in publishing of various text-books for education and research as have been recently seen in Croatia. Papers bring new insights and interpretations of the interrelations

of the Theory of Relativity and philosophy which were composed in the 4 chapters in the book, according to 4 dimensions of Einsteinian space-time of his description of the universe, as follows:

1. Einstein's legacy in philosophy and physics, including modern philosophical and scientific conceptions (11 papers): philosophy and physics of the relativistic space-time, then space and time in classical philosophy of nature (Einstein, Poincaré, Gödel, Bergson, Newton, … and others). Theoretical attempts beyond the Theory of Relativity, and Einstein's exploration of the quantum domain with its philosophical interpretations. Interrelations between Einstein and Frane Petrić were examined for the first time.

2. Einstein and religion, theology, ethics and moral issues (3 papers): outstanding attempts and systemizing of Einstein's views on religion and theology.

3. Einstein and science (in general), arts and humanities (4 essays): poetry and literature (in general) and connections of the metaphysical poets and philosophers (N. Šop, G. Strniša, and P. Trubar, M. de Montaigne) with Einsteinian space-time and cosmology.

4. Reception of Einstein's physics and philosophy (8 papers) in Croatian philosophy, physics and culture, and in other cultures of the World (particularly in China and Mexico).

Einstein's Weltanschauung inspiring today: particle physics, astrophysics and cosmology in the 21st century are recalling the classical Einstein's General Relativity (GR) at the energies where gravity becomes strong (important). That means extension of the GR's toward a new physics in extra dimensions, to the gravitational waves and black holes, and to the dark energy and/or matter with the associated fields. Not less important are quantum-mechanical description of the physical reality (EPR) and Einsteinian ideal (perception) of the laws of Nature, with the Einstein's ethics (Russell-Einstein manifesto, 1955) as the basis for contemporary bioethical paradigm: man and nature and all varieties of life in it. Einstein was the greatest physicist (scientist) of the 20th century (Einstein's Good Year of 1905), to be comparable only to Newton's miracle years of 1666 (devised the Calculus) and of 1687 (Principia or Newtonian physics), and his model of thinking seems to be decisive for the current development of the cross-disciplinary science and technology.

Tomislav Petkovic
Department of Applied Physics
Faculty of Electrical Engineering and Computing
University of Zagreb, CROATIA

IN MEMORY OF DONTCHO KOSTOFF

National Scientific Conference of Genetics
Sofia, 28 – 30 October 2009

The Institute of Genetics "Acad. Dontcho Kostoff" at the Bulgarian Academy of Sciences (BAS) has organized a National Scientific Conference of Genetics, dedicated to the memory of the world-wide recognized Bulgarian genetician Academician Dontcho Kostoff on occasion of the 60th anniversary of his decease.

More than 140 researchers from different scientific organizations of the country contributed to the work of the Conference. They submitted 23 oral and 60 poster presentations covering topics of different areas: plant genetics, animal genetics, microbial genetics, ecological genetics, and medicinal genetics, as well as plant breeding. A special session was devoted to the history of genetics in Bulgaria.

In his speech Acad. Alexander Popov, Vice-president of BAS, addressed the Conference by emphasizing our research achievements in one of the most quickly developing and productive biological sciences – the genetics. He expressed the recognition and admiration of our scientific community for the important creative work of Acad. D. Kostoff.

An address of the President of the Union of Scientists in Bulgaria, corresponding member of BAS Damyan Damyanov, was also presented.

Prof. Valeryi Glazko, Director of the Nanobiotechnology Center at Moscow Timiryazev Agricultural Academy, presented a complimentary address by Iurii Nicolaevich Vavilov – sohn of the remarkable Russian biologist Nicolai Ivanovich Vavilov, emphasizing the deep professional and emotional connections relating N. I. Vavilov and D. Kostoff.

The Conference was initiated by an introductory session "Acad. D. Kostoff – a remarkable Bulgarian genetician". Prof. Dr. Sc. Kostadin Gecheff, Director of the Institute of Genetics at BAS, reported about the life and the scientific way of Acad. D. Kostoff underlining his important achievements and impact lasting until nowadays. In her speech "Acad. D. Kostoff and his time" Prof. Dr. Sc. Aglika Edreva draw the attention of the auditorium to the dramatic events related to the so-called Biological Conference "The situation of the biological sciences in the light of Michourin,s teaching" (Sofia, 4-8 April, 1949). The Biological Conference was a dark echo of a similar conference held in Moscow (August, 1948). It marked the full rout of genetics and other biological sciences imposed by the Bulgarian Communist Party, and led to the tragic decease of Acad. D. Kostoff.

The subsequent sessions of the Conference, devoted to plant genetics, animal genetics, genetics of microorganisms, ecological genetics and plant breeding, were distinguished by a basic characteristics, determining the high degree of actuality of the reported researches, namely the study of the genetic diversity and the genetic variability of organisms as a main factor for improvement of quality and adaptability to hostile environments of pathogenic and abiotic origin. Modern approaches (such as experimental mutagenesis) for inducing variability and plant gene fund enrichment were subject of an increasing interest. The high level of the presentations was evidenced by the large involvement of biotechnological and molecular methods.

The application of genetical and breeding research in the agrarian practice, for development of high-yielding, good quality and resistant cultivars and breeds, prove their significance for the country, and is a prerequisite for the development of sustainable agriculture – one of the priorities of the European Community.

At the session of medicinal genetics experimental results on problems of large social importance were reported, relevant to the inborne skeleton diseases and breast cancer gene control and molecular diagnostic.

The presentations of the Conference will be published as a special issue of the journal "Genetics and Breeding", published by the Institute of Genetics.

A remarkable event at the Conference was the presentation of the recently published book "Selected Scientific Works" of Acad. D. Kostoff – phototype edition of the Publishing House of the Bulgarian Academy of Sciences, released by the efforts of the Institute of Genetics at BAS, as well as the Scientific Society of Agrarian History in Bulgaria and Agrobioinstitute at the Agrarian Academy. For the first time the most important papers of the great genetician, dispersed in different editions world-wide, are collected together to be presented to the Bulgarian and international scientific community.

Aglika Edreva

THE ROYAL INSTITUTES OF NATURAL SCIENCES IN THE CULTURAL HISTORY OF SOFIA

The history of the foundation of research establishments is present for a long time in the cultural and educational policy of the Bulgarian state after 1878. With the proclamation of the city of Sofia as capital of Bulgaria the beginning is set forth of its affirmation as a scientific and cultural centre of the Third Bulgarian Kingdom. The development of the Bulgarian capital as a scientific centre is realized on the basis of the national traditions of the Revival. With the personal participation of Tsar Ferdinand and Tsar Boris III the Royal institutes of natural sciences are being established and developed. While lecturing activity is going on in the Sofia University concerning training of cadres for the sphere of education of the country, and the Bulgarian Learned Society /since 1911 Bulgarian Academy of Sciences/ is performing representative functions for the national sciences, the Royal Natural Science Institutes concentrate mainly the research activities of the Bulgarian natural scientists and the spread of the natural sciences knowledge.

The Royal natural science institutes are founded by Tsar Ferdinand after his proclamation as Head of State in 1887. Their foundation shows the lasting interests of the Bulgarian ruler in natural sciences and his concern for the study and preservation of the Bulgarian nature. Part of the Royal natural science institutes is the Royal Museum of Natural History /1889/; the Royal Zoo Garden /1889/; the Royal Enthomological Station /1905/; the Royal Botanical Garden / 1890-1911/; the Royal Scientific Library /1889/

and the Black Sea Biological Station in Varna /1905/. Towards 1928 the Royal Zoo Garden has more than 250 animals available, represented by 1500 live representatives and is the only one of its kind on the Balkan Peninsula. In the Historical Museum of Natural History a very rich collection of the flora and fauna of Misia, Thracia, Macedonia is being preserved which is used to study their natural science. This is the richest museum on the Balkan Peninsula. The Royal Enthomological Station has it as its aim the study of the insects' fauna of Bulgaria, the biology of the insects harmful for agriculture and forestry, as well as to show to the means for their destroyal. Its collection includes around 200 species of insects and 120 000 representatives. The Royal Scientific Library has about 20 000 volumes of scientific issues and has as its aim to collect the whole literature in Bulgarian and other languages in which one can find information for the flora and the fauna of Bulgaria.

In the autumn of 1927 the director of the Royal Natural Science Institutes, the outstanding zoologist Acad. Ivan Buresh presented the first report of Tsar Boris III concerning the program, the contents and the outer appearance of the issue of the Royal Natural Science Institutes in Sofia. According to this report original scientific works and articles written by the natural scientists taking positions in the Royal Natural Science Institutes have to find their place.

'The news from the Royal Natural Science Institutes' is a representative issue of the Bulgarian sciences. Similar printing issues at that time were issued by all known natural science museums in Europe and America. After 15 year existence of this issue 161 publications have come out, 78 of which have been the work of the scientists employed in these institutes. Scientific works have been issued by natural scientists from overseas and from our country that have been provided with materials for this scientific study from the collections of the Royal Natural Science Museum. In the 'News' materials have been published by overseas research workers who have visited and studied the flora and the fauna and the earth composition of Bulgaria.

In 1942 'The News from the Royal Natural Science Institutes' were forwarded to 33 states, 137 towns, to 288 research institutes, museums and academies, and on an exchange basis the Royal Scientific Library received 384 international scientific journals. In this way the activities of the Bulgarian scientists have been made popular abroad. Significant part of the publications included in 'The News from the Royal Natural Science Institutes' have been published in some of the foreign languages. In the 16 books that had come out 110 papers were in German, 10 in French, 2 in English, 2 in Latin and 44 in Bulgarian language, 8 papers being published in Bulgarian and in some of the foreign languages at the same time. In the 'News' a large number of species and types of animals and plants new to science have been published.

In order to study Bulgarian nature outstanding scientists from abroad have been invited such as Dr. Paul Leverkühn, Dr. H. Gretzer / the Royal Museum of Natural History; Bernhard Kurzius and Adolf Schuman /Royal Zoo Garden/; Johan Kelerer /Royal Botanical Garden/. Among the Bulgarian scientists that have contributed to the development of the Royal natural science institutes stands out the deed of Academician Ivan Buresh. With their useful activity the Royal natural science institutes turn into a centre of science and culture not only of the Bulgarian state but also on the Balkan Peninsula, they stand out as a landmark of the Bulgarian capital. Under the auspices and the personal concern of the Bulgarian rulers they are developing as a significant scientific and educational centre which is of importance to the spread of the knowledge on natural sciences and performs at the same time significant pedagogical functions.

In 1935 the new building of the museum was constructed which was destroyed by the bombings during the war, but the collections were evacuated and re-exhibited in 1948. Since 1947 the Royal Museum of Natural History becomes part of the Bulgarian Academy of Sciences under the name of Museum of Natural Sciences. In 1947 the Royal natural science institutes are transformed into the Institute of Zoology, Institute of Botany and the Institute of Ethnology to the Bulgarian Academy of Sciences. In 1962 The Natural Science Museum becomes part of the Institute of Zoology to the Bulgarian Academy of Sciences and since 1974 the National Natural Science Museum becomes an independent research and museum unit to the Bulgarian Academy of Sciences. The Royal natural science institutes form the scientific centre of the Bulgarian state on the basis of which the knowledge on the nature of Bulgaria is developing in the last 50 years. They represent a significant cultural landmark in the 120 year history of the Bulgarian capital and have contributed to the lasting incorporation of the Bulgarian scientists to the international scientific community, and their functioning is a

worthy example of the concern of the Bulgarian statesmen for the development of science in Bulgaria.

Dinko Mintchev

ECHOPHYSICS/EPS HOP GROUP A FUTURE EVENT

Together with the EPS/HoP Group, the Victor F. Hess Society is setting up this European Centre for the History of Physics in the exposition premises at Poellau Castle in Styria, in the Green Heart of Austria. Thus, at the same Poellau Castle, during May 28-29, 2010, the EPS/HoP Group and the Victor F. Hess Society will hold a first joint European Symposium of what shall become later a tandem series of annual international conferences and yearly changing European expositions in the History of Physics, the shared by topic being: 'The Roots of Physics in Europe'.

Regarding the (yearly changing) European exposition by echophysics, this will be composed of a permanent HoP exposition, which is related to Austria and Victor F. Hess, and of a parallel alternate exhibition, which is dedicated to a different European member State every or every second year, presenting her national HoP highlights. The alternate exposition series will start with the inaugural 2010 Austrian contribution 'Radiation and Mankind'.

The conference time will include 18 short lectures (15 min. each) and 8 plenary lectures.

On May 27 there will be an evening lecture by Prof. Paolo Galluzzi, Director of the Istituto e Museo Nazionale di Storia della Scienza, Florence on 'The shadow of light. The mind of Leonardo by candlelight'.

Polleau is a peaceful market town in Eastern Styria, easily reachable from both Graz and Vienna (at 60 km and 120 km of expressway distance, respectively), situated in the 12.500 hectares 'Nature Park Valley of Poellau' with its protected cultural landscape. On the hill nearby is the village Poellauberg, which has been elected the most beautiful village in Styria in 2009 and the most beautiful flower village of Europe in 2009.

'Echophysics' shall be the new, courageous undertaking by us physicists to have the heritage of the European physics presented to and preserved for the physicists, the specialists in HoP, and the interested public, to make sure that the tortuous but assiduous and successful ways of our predecessors' thoughts keep being understood by the young.

HISTORY OF PHYSICS IN THE EUROPEAN CONTEXT

ÖPG/SPG/ÖGAA/SGAA annual meeting 2009 and EPS History of Physics Group Board meeting
2-4 September, 2009

The History of Physics Group/ EPS annual meeting took place from 2nd to 4th of September 2009 along side with the Joint annual Conference of the Austrian and Swiss Physical Societies.

A memorable event was the HoP excursion to the nearby Mount Hafelekar (2300 m/7546 ft above sea level) to get a guided tour by an assistant professor from Innsbruck University at the prior Victor F Hess laboratory on top of the mountain (the laboratory has kept being active until today).

A special session on History of Physics was organized by Peter Schuster president of the HoP Group in 3rd and 4th of September in the framework of the Conference. The session was attended by many participants and a large number of papers delivered focused on general and specific subjects concerning the History of Physics.

Some of the members of HoP/EPS made also presentations during the session.

Prof. Denis Weaire gave a fantastic plenary lecture which could be considered as the most successful during the Conference.

The group welcomed the new members Dr. Sofia Talas from Italy and Dr. Rasa Kivilsiene from Lithuania and discussed, in a very friendly and collaborative climate as always, its future activities to promote the History of Physics in the European context.

SYMPOSIUM ON SPECTROSCOPY: SCIENCE AND SOCIETY

International History of Science and Technology Congress,
July 28 – August 2, 2009, Budapest,
Symposium organised by Peter Maria Schuster, George N. Vlahakis
"Spectroscopy: Science and Society"

The History of Physics Group of the European Physical Society organized a thematic symposium under the title "Spectroscopy: Science and Society" during the International History of Science and Technology Congress which was held in Budapest, July 28 – August 2, 2009.

The detailed programme of the Symposium was as follows:

Chair: George N. Vlahakis
Spectroscopy in Ireland in the Late 19th Century
Denis Weaire, Se O'Connor
Spectroscopy in Greece. The Early Days
George Vlahakis
The Scientific Network of Robert W. Bunsen, Founder of Spectroscopy, in the Light of his Private Library
Rudolf W. Soukup

Chair: Denis Weaire
Historical Development of the Spectroscopy of Planetary Atmospheres
Bruno P. Besser
Computer Simulations: A New Way to Approach Nature
Franjo Sokolic, Giovanni Ciccotti
Applying the Doppler Principle to the Amici Prisms – A Think-different in Astronomy Giving Birth to Astrophysics
Peter Maria Schuster

1ST HEPHAESTUS INTERNATIONAL CONFERENCE

History of Science in Practice
Athens, 6-9 May 2010

We are pleased to announce the International Conference *History of Science in Practice*, organized by the Programme of History, Philosophy and Didactics of Science and Technology (National Hellenic Research Foundation and University of Athens) and the Hellenic Society of History, Philosophy and Didactics of Sciences. The Conference will be held in Athens from 6th to 9th May 2010.

As its title suggests, the Conference will explore the possibilities of putting history of science into practice, both in teaching and in communication with the public.

The Conference will focus on the following themes:

- Exploring the creation of a common European textbook of History of Science
- Using History of Science in formal and informal teaching of science
- Examining epistemological problems in the teaching of History of Science
- Appraising what a History of Science Museum can offer to the public
- Examining the preservation of contemporary scientific heritage.

Conference papers will be published in the Proceedings volume. Selected papers will appear in a special issue of the journal *Almagest*.

Invited speakers

Fabio Bevilacqua, Physics Department "A.Volta", University of Pavia
Michel Blay, Director of the Centre d'Archives en Philosophie, Histoire et Édition des Sciences, ENS-CNRS
Christopher Cullen, Director of the Needham Research Institute, Cambridge
Robert Halleux, Director of the Centre d'Histoire et des Techniques, Univ. de Liège
Wilfrid Hodges, President of the Division of Logic, Methodology and Philosophy of Science / International Union of the History and Philosophy of Science
Jeff Hughes, University of Manchester, President of the British Society for the History of Science
Catherine Jami, REHSEIS-UMR 7219 (CNRS & Université de Paris-Diderot)
Vincent Jullien, Department of Philosophy, University of Nantes
Alexandre Kostov, Institute of Balkan Studies, Bulgarian Academy of Sciences
Eberhard Knobloch, President of the International Academy of History of Science
Helge Kragh, University of Aarhus, President of the European Society for the History of Science
Liu Dun, Institute for the History of Natural Science, Chinese Academy of Sciences, President of the Division of History of Science and Technology / International Union of the History and Philosophy of Science
Alexandar Petrovich, Faculty of Philology and Arts, University of Kragujevac, Serbia

Information and registration
www.hpdst.gr

ACADEMY OF ATHENS PRIZE FOR A BOOK ON HISTORY OF SCIENCE

Our colleague, Professor Christine Phili, has been awarded the Prize of the Academy of Athens (section natural sciences) for her book *Sovereignty and Mathematics* (see *Newsletter for the History of Science in Southeastern Europe*, No 11, May 2009, p.9). The Prize was presented to Christine Phili at the annual Prize ceremony of the Academy, December 2009.