ICOHTEC NEWSLETTER

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Newsletter of the International Committee for the History of Technology ICOHTEC

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Editorial

Dear Colleagues and Friends,

If your proposal for the 44th ICOHTEC Symposium in Rio de Janeiro (23 – 29 July 2016) is accepted by our program committee please upload it to the homepage of the 25th International Congress of History of Science and Technology. There will be *no* second evaluation, but personal uploading is necessary, because some additional information is required. The deadline has been extended to **16 December 2016**. The submission form can be found at:
http://www.ichst2017.sbhc.org.br/pessoaevento/busca.
Detailed information is available in the ICOHTEC Newsletter, no 138, October 2016, http://www.icohtec.org/publications-newsletter.html.

The deadlines of ICOHTEC's prizes are in 2017 already:

- Maurice Daumas Prize for articles (Chair: Stefan Poser): **15 January 2017**
- Turriano ICOHTEC Prize for books (Chair: Jeremy Kinney): **3 February 2017**

The announcements are available on http://www.icohtec.org/resources-prizes.html.

The next Newsletter will be published in January.
Merry Christmas and a Happy New Year!
Stefan Poser

Contents

I. Conference Reports

Artificial Materials: Joint Annual Conference of the Society for Design History (GfDg) and the Society for the History of Technology (GTG), 29 April - 1 May 2016, NRW-Forum, Düsseldorf

Conference report: Andie Rothenhäusler, andie.rothenhaeusler@gmail.com and Carsten Thomas, ccern@web.de, Karlsruhe Institute of Technology (KIT)

Artificial materials drastically changed not only the industrial societies during the past two centuries. They revolutionized products and their production by overcoming previous technical limits. Their success had huge social, cultural and economic impacts. At the same time the evolution of plastics furthered a distinction between a natural and an artificial world, which led to counter-movements against an increasingly artificial world. This dichotomy between naturalness and artificiality influenced and still influences not only how artificial materials are perceived, but also how technological progress is appreciated per se. Therefore artificial materials suited well as a topic of the joint annual conference of the German Society for History of Technology (GTG) and the German Society for Design History (GfDg), which took place from 29th of April till 1st of Mai 2016 in the NRW-Forum in Düsseldorf.

First Panel: Material Semantics

KASSANDRA NAKAS (Berlin) gave the opening speech of the first panel “Material Semantics”. She discussed the history of aluminium and its public reception. Although aluminium was perceived as a trend-setting material for a long time, it lost its positive image, when mass production gained influence and criticism concerning its unpredictability came up. Only in the late 20th century aluminium experienced new appreciation in architecture and the arts.

FRANZISKA MÜLLER-REISSMANN (Zurich) gave an insight in the transformation of the social significance of a material within one century. Next to aluminium asbestos was formerly

famous for being an advanced material. Due to its carcinogen impact asbestos is expelled mostly of public area today, while aluminium is still a successful mass product, albeit without the recognition it received during the 19th century.

JOHANNES LANG (Weimar) demonstrated how the attributes “natural” and “artificial” themselves have gone through a semantic change. Within the industrialization the awareness of materials changed in the sense that geometric shapes of mechanical relevance were perceived as being natural, while imitating or decorating elements appeared to be “unnatural”.

Second Panel: Application of Materials

The second panel “Application of Materials” started with a talk by CATARINA CAETANO DA ROSA (Darmstadt) who gave insights in historic aspects of the production of India rubber during the last centuries. Her viewpoints contained not only a history of technology about the material, but also how India rubber caused social and environmental changes.

In his lecture KAY MEINERS (Dusseldorf) focussed on the political dimension of plastics, precisely to what extent the plastic Pollopas (1931 – 1939) was propagated by the National Socialists as a “home-made” material. Mostly used for kitchen articles Pollopas underwent a short boom period but was soon forgotten after the outbreak of World War II.

REBECCA WOLF (Berlin) researches surrogate materials used in the manufacturing of musical instruments, her special interest lies on instruments of glass and acrylic glass. Acrylic glass was registered 1933 as brand, its usage based more on the fascination for the material than practical reasons since wooden instruments proved to be similarly expensive, yet more durable.

In the evening KARSTEN BLEYMEHL presented a business perspective on material trends, production methods and the way companies can adapt innovations. According to him the transfer of knowledge between manufacturers, engineers and designers is important to receive a satisfying outcome.

Third Panel: Digital Materiality

ROLAND GRIEDER (Luzern) discussed the Human-computer interaction in relation of our perception of material aesthetics. Since computers have left the closed system and have become “invisible companions” in our daily life, the problem arises of how we determine if an idea is our own or generated by a device or its software.

MARTINA EBERLE (Berlin/Zurich) gave a practical viewpoint on the language of designing models within the process of 3D printing. Users of 3D printing marketplaces have become designers and create their items through digital toolboxes without having to know everything about the desired material and the required software.

ANNIKA FRYE (Offenbach) led the discussion of the 3D Printing hype back to its roots and explained how the digital turn transformed this production method. The first wave of 3D modelling began with CAD-Programs in the 1960, but only the second wave added the possibility that also the material itself could be generated within the digital process.

JULIA WOLF (Berlin) left the area of additive manufacturing and provided an overview of other innovative concept and product development possibilities via new "smart materials." In a project promoted by German federal ministries designers and material experts collaborate and shape new memory alloys, piezo-ceramics and diaelectric elastomers which react autonomously to their environment.

As part of the 25th anniversary of the GTG the evening lecture "Ballast and Wings" of ULRICH WENGENROTH (Munich) functioned as a journey back to the 1990s, a time in which differing "wings" of the discipline argued, if history of technology should be conducted as a social science or a history of engineering. The loss of this "ballast" of old wings resulted in a now widely acknowledged new and more interdisciplinary approach.

Fourth Panel: Material and Technology

SUSANNE JANY (Berlin) illustrated the role of synthetic substances as part of technical systems. She demonstrated how organic materials within the technique of dialysis in the first half of the 20th century made way for inorganic materials like collodion, cellophane and polymers. This transition brought benefits like stability, sterilization and mass production.

FRANK DITTMANN (Munich) examined in his lecture permanent magnets and their application in electrical engineering. Permanent magnets were used in early electrical devices until the success of electromagnets in the 1930 made them redundant; yet the development of artificial materials like Alnico Metals made them again an important component of modern electrical devices.

In his lecture WULF BÖER (Zurich) tried an uncommon material term. He queried if air can be seen as a synthetic material rather than a natural resource. Börer's argument was that air in air conditioners is transported, distributed, heated, cooled and manipulated in its chemical composition.

Fifth Panel: Textile Materials

LEONIE HÄSLER's (Basel) paper was dedicated to the history of the textile industry in Switzerland and analysed the spread of synthetic materials under social, cultural and economic aspects. Although synthetic fibres as rayon firstly were not perceived as a deception by consumers, they lost their positive image in favour of the natural fibre industry, which was propagated since the 1960 by renowned advocates like the author Umberto Eco.

MONIKA BURRI (Luzern) presented the progression of rayon, crepe and taffeta within the silk industry of Zurich in the first half of the 20th century. During the war periods the positive perception of rayon changed, because the material had become a mass product.

II. Conference Announcements

30 – 31 March 2017
Research and Education in Urban History in the Age of Digital Libraries & Digital Encounters with Cultural Heritage
Dresden, Germany
CFP – Deadline **15 January 2017**
Please find the cfp on: http://arthist.net/archive/14200/view=pdf

4 – 6 May 2017
Techniques of the Corporation
Toronto, Canada
CFP – Deadline **13 January 2017**

How do corporations know themselves and their world? Over the last 150 years, corporations, like universities and laboratories, have generated an abundance of knowledge-making techniques in the form of psychological tests, efficiency technologies, scenario planning, and logistical systems. As dominant forms of the last century, corporations are assembled with instruments, infrastructures, and interventions that arrange and rearrange the dynamics of capitalism. These techniques of the corporation have filtered into our daily lives, influencing everyday understandings of self, inequality, environment, and society.

Techniques of the Corporation will assemble an interdisciplinary network of established and emerging scholars whose work contributes to the critical study of the techniques, epistemologies, and imaginaries of the 20th-century corporation. This conference aims to foster a timely conversation between Science and Technology Studies (STS) approaches and the recent histories of capitalism. We treat the corporation in the same way that historians of science and STS scholars have approached science, colonialism, and militarism as generative sites for knowledge production, value-making, and technopolitics. The conference takes as its starting place North American corporations with the understanding that corporations are multinational forms with complex transnational histories. Building from the recent history of capitalism, we attend to the entangled genealogies of

corporations with slavery, exploitation, environmental destruction, colonialism, and inequality.

Hosted by the Technoscience Research Unit at the University of Toronto, this event will be an intimate multi-day conversation between established and emerging scholars in the fields of STS, history of science, and the history of capitalism. Techniques of the Corporation will be headlined by keynote speaker Joseph Dumit, and features invited talks by Dan Bouk, Elspeth Brown, Deborah Cowen, Orit Halpern, Louis Hyman, Michelle Murphy, Martha Poon, and Elise Thorburn. The conference will be an immersive experience in the Greater Toronto Area with meals and cocktails provided.

We invite emerging and established scholars in diverse fields (including business history; labour history; anthropology; geography; economic sociology; media studies; critical race studies; architecture studies; feminist and sexuality studies; environmental studies; and cultural studies) to explore the techniques, epistemologies, and imaginaries of corporations. Our overall goal is to crystallize a new field, culminating in a field-defining publication. We welcome work on corporate practices that exceed calculative logics, such as work on social relations, affective and psychological states, and speculative futurities. In addition to traditional papers, the conference encourages creative methods to query corporate forms, including art installations, videos, interactive multimedia projects, and role-playing games. Applications for travel assistance will be arranged after acceptance.

Please submit abstracts of no more than 300 words and a CV to the conference organizers at corporatetechniques@gmail.com by 13 January 2017.

Please visit http://corporatetechniques.com/
Please contact the organizers by corporatetechniques@gmail.com

4 – 6 May 2017
„Mit den wohlfeilsten mitteln dauerhaft, feuersicher und bequem“ Dritte Jahrestagung der Gesellschaft für Bautechnikgeschichte / 3rd Annual Conference of the German Society for Construction History
Potsdam
Please visit www.bautechnikgeschichte.org
Please contact the organizers by info@bautechnikgeschichte.org

30 – 31 May 2017
Household Consumption and Environmental Change in the Twentieth Century
Bologna, Italy
CFP – Deadline **31 December 2016**

The Rachel Carson Center for Environment and Society at LMU Munich, the Department of History, Cultures and Civilization of the University of Bologna (Italy), and the Center for History at Sciences Po (France) invite paper proposals for a conference on *Household Consumption and Environmental Change in the Twentieth Century* which will take place on 30-31 May 2017 in Bologna.

Please find the cfp on: http://eseh.org/wp-content/uploads/CFP_Household_Consumption_final.pdf

Please contact the organizers by conferences@rcc.lmu.de

29 – 30 June 2017
Histories of Measurement and Self-making.
University of Utrecht, the Netherlands
CFP – Deadline **6 January 2017**

Speakers: Hilary Marland & Roberta Bivins (University of Warwick)
Harro Maas (University of Lausanne)

Today, people increasingly use digital technologies to collect data on their health, habits and wellbeing and sociologists of science and technology have started to discuss how these development change our notions of identity, autonomy and privacy. This workshop explores the histories of these practices, looking at different forms of measurement and self-management in the 19th and 20th century. So far, historians have paid more attention to the role of scientists and the state in producing data about people than they have to individual practices. The aim of this workshop is to trace the genealogies of today's culture of quantification and to investigate the role of (personalized) quantification in the making of the modern self.

We seek to address the following questions: How were scientific techniques such as quantification applied to the individual body and household? How were sciences such as phrenology, medicine, statistics and anthropometry made personal? How did quantification change people's understanding of themselves? How did numbers become an incentive to self-improvement? Do today's metric practices represent change or continuity?

We invite submissions on topics related (but not limited) to histories of:

- Personal quantification
- Self-monitoring, self-tracking and self-management
- Private numbers and public numbers

- Popular science and personal uses of quantification
- How individuals related to statistics and averages
- Measurements in the household
- Numeracy/quantitative literacy
- Accounting tools in the home
- Measureing as entertainment
- Self-surveillance

Deadline and contact information:
Abstracts (max. 300 words) for a 20-minute paper and a short biographical note should be sent by 6 January 2017 to: f.h.sysling@uu.nl

Organizers: Fenneke Sysling and Hieke Huistra (University of Utrecht)

This workshop is organized as part of the project The Quantified Self: a history – funded through the Veni Innovational Research Incentives Scheme of the Dutch Science Foundation (NWO) and with support of the Descartes Centre for the History and Philosophy of the Sciences and the Humanities in Utrecht.

Please contact Fenneke Sysling and Hieke Huistra, University of Utrecht, via f.h.sysling@uu.nl

7 – 10 September 2017
Borders and Technology. 8th Tensions of Europe Conference
Athens
CFP – Deadline **15 February 2017**

The 8th Tensions of Europe Conference will have as its main theme the history of borders and technology. We invite papers studying the history of the relationship between national borders and transnational infrastructures, hidden technological linking and delinking that reinforced or challenged border delineations and demarcations, the relationship between borders and technologically-induced environmental crises and disasters, the virtualization of borders and the territories that they contain through the use of electronic and related technologies, geopolitics and technology, the redefinition of borders due to the use of technology (and vice versa), all the way from the production to the circulation and use of goods and commodities. One central aim is to cross-fertilize between disciplines and we therefore invite contributions from a wide variety of historical disciplines as well as from **fields like Migration and Border Studies, Migration History, Mobility History, etc., especially in connection to borders and migrations from, to and within Europe.**

Themes that fall under the general agenda of the Tensions of Europe network are very welcomed(e.g. transnational histories of technology, history of European infrastructures and networks, environment and technology, the democracy-technology relationship, conflicting interests and technology, technology and hidden integration, technology and culture, gender and technology, technology and ethnicity, technology and disability).

Tensions of Europe has a long tradition of fostering **alternative meeting formats**. We encourage proposals for non-traditional sessions with different formats and new ideas (e.g. round tables, agenda-building sessions, brainstorm sessions, break-out groups with assignments, poster discussion, film discussion, event-based sessions). As long as quality can be demonstrated, the program committee will not prioritize between formats. By quality we mean suggestions that promise constructive, stimulating and engaging discussion.

We invite scholars to submit proposals to: 8toe2017@phs.uoa.gr by 15 February 2017

For information on the scientific and social program, affiliated events, keynote speakers, see conference website: http://8toe2017.phs.uoa.gr/

All proposals should include a title, short abstract, the academic title and affiliation of the applicant(s) and a short bio. Please name your file with your surname. Abstracts for individual papers and posters should be no more than 300 words. For panels, we ask for a description of the theme of the panel (max 300 words) together with shorter abstracts (max 150 words) of the individual papers. If you wish to suggest a presentation of a different format, please use these word limits as guidelines. We will inform applicants by April 1st 2017 whether their contribution has been accepted.

Important dates:
Deadline for proposals: 15 February 2017
Notification of acceptance: 1 April 2017
Registration: from 1 May 2017

Pre-conference affiliated event:
'Borders, Technology, Peace'
Discussion and excursion to Delphi, 6 September 2017

Welcome to Athens in September 2017!
Aristotle Tympas (Chair of the Organizing Committee)
Division of History of Science and Technology
Department of Philosophy and History of Science, School of Science
National and Kapodistrian University of Athens

The Tensions of Europe conference is organized biennially. Tensions of Europe is an interdisciplinary community of scholars who study the shaping of Europe by paying attention to the role of technology and material culture. It welcomes fruitful interaction between historians of technology and scholars who study technology from all other fields of the humanities and the social sciences (http://www.tensionsofeurope. eu). The 8th Tensions of Europe Conference will be co-organized by the Division of History of Science and Technology, Department of Philosophy and History of Science, School of Science, National and Kapodistrian University of Athens (http://www.phs.uoa.gr/hst/) and the Foundation for the History of Technology (http://www.histech.nl/www/en/), which is hosted by the Eindhoven University of Technology.

15 – 16 September 2017
Scientific Bonanzas – Infrastructures as places of knowledge production
Munich, Germany

CFP – **15 January 2017**

Preliminary workshop for preparing a book – please find more information in the chapter "Call for Contributions"

21 – 27 September 2017
7th Congreso internacional sobre patrimonio geologico y minero ***/Seventeenth International Congress on Geological and Mining Heritage*** **and the** ***Twenty-first Scientific Session of the Spanish Society for the Preservation of the Geological and Mining Heritage*****.**
Almadén, Spain
CFP – Deadline **15 August 2017**

The University of Castilla-La Mancha's School of Mining and Industrial Engineering at Almadén announces the *Seventeenth International Congress on Geological and Mining Heritage* and the *Twenty-first Scientific Session of the Spanish Society for the Preservation of the Geological and Mining Heritage*.

Please visit http://eventos.uclm.es/6175/news/xvii-congreso-internacional-sobre-patrimonio-geologico-y-minero.html

III. Call for Contributions

Scientific Bonanzas – Infrastructures as Places of Knowledge Production
A book edited by Eike-Christian Heine and Martin Meiske
With a preliminary workshop on 15-16 September 2017 in Munich
Deadline for submissions: **15 January 2017**

Scientific Bonanzas – Infrastructures as places of knowledge production

Bonanza is the place called where two mother lodes, rich in gold or silver, meet. The bonanza of our publication project is at the crossroads of technological infrastructures and scientific discovery. We invite contributions that analyse historical examples of large-scale construction projects— sites proven to have provided unique opportunities for researchers from all disciplines.

It seems that the relations between infrastructures and scientific knowledge underwent a change during the twentieth century. While in the nineteenth century "mega projects" offered opportunities for research, later the production of infrastructures and the production of knowledge seemed to have become increasingly interwoven. Planning—the modelling of future trends, technological impacts, and ecological evaluations—became integral part of infrastructure projects. Do we see a steady accumulation of scientific and technologic expertise or can we identify certain turning points, such as the failure of the French Panama Canal project, the interwar period, and the Cold War? Moreover, knowledge (about ecological consequences for example) became a tool to criticise, change, or stop construction plans. When did these changes occur? Are there other timelines, other continuities, or ruptures?

To understand infrastructures as unique opportunities for knowledge production challenges notions of technologies as applied sciences. The perspective opens up other questions too, for example: If infrastructures "locked up" territories and gave nation states and colonial empires the tools for rule, how can we understand the relations between power and different forms of knowledge? National, global, and imperial projects that rely on technological and scientific expertise challenge familiar categories of culture, politics, environment, science and technology. The scientific bonanzas we are interested in are characterised by hybrid actors, as well as the circulation of knowledge and practices between various societies and regions of the globe.

Research as a side product of construction

It seems that infrastructures often became scientific bonanzas by chance. The construction of major canal projects, such as the Kiel Canal or the Panama Canal, provided geologists with unique opportunities to research cross-sections of large regions and produce detailed geological tableaus. The construction of roads or buildings leads to unexpected archaeological findings until today. The construction of motorways under National Socialism allowed medical doctors to research and describe hundreds of cases of typical injuries

resulting from manual work, highlighting the fact that technology and knowledge production are not politically innocent but can be deeply interwoven with ideology. We invite submissions that present examples of how knowledge production was a “side product” of infrastructure projects.

Knowledge production as a formative element of infrastructure projects

Yet it also seems that there was a significant change that distinguishes the second part of the twentieth century from what had happened before. All forms of knowledge became played a part in legitimising, asserting or confronting infrastructure projects. For example, the concepts of planning traffic and of modelling traffic flows became integral part of infrastructure projects; often they contribute to conceiving and defining them. This again confronts us with questions of power: Whose interests were represented, whose seemed scientifically relevant, whose interests were excluded? To what degree is this nexus between knowledge and legitimisation universally true for the second half of the twentieth century? What role do national, ideological, colonial, or postcolonial contexts play?

Knowledge as de-legitimisation of infrastructure projects

Yet, knowledge not only came to play a major part in the conception and legitimisation of infrastructure projects, it also became a tool to de-legitimise them. How and when was knowledge used to criticise infrastructure projects? When did the modelling of ecological impacts start to develop subversive potential? What other rationales – besides the ecological – were challenging infrastructures? When does this story start? Was it the environmental movement of the 70s that triggered ecological counter-narratives, or can earlier shifts be observed?

Submission procedure

Contributors are invited to submit a 500-word chapter proposal and a short CV by 15 January 2017. Authors of accepted proposals will be notified by 15 February 2017. Accepted contributors will present their paper in a workshop taking place in Munich on 15-16 September 2017. We will be able to offer travel grants to researchers without funding. Full chapter manuscripts are expected to be submitted by 15 October 2017. All submitted chapters will be reviewed on a double-blind review basis.

This volume is scheduled to be published in the series "Environment in History: International perspectives" (Berghahn).

Submissions should be emailed to both Martin Meiske (m.meiske@deutsches-museum.de) and Eike-Christian Heine (eike-christian.heine@tu-bs.de).

IV. Scholarships

2017-2018 Progams of Support from the IEEE History Center

The IEEE History Center offers two programs of support annually for scholars pursuing the history of electrical engineering and computing: An internship for an advanced undergraduate, graduate student, or recent Ph.D., and a dissertation fellowship for an advanced graduate student or recent Ph.D. The internship and the dissertation fellowship are funded by the IEEE Life Members Committee. The internship requires residence at the IEEE History Center, on the campus of Stevens Institute of Technology in Hoboken, New Jersey, USA; there is no residency requirement for the dissertation fellowship.

IEEE Life Member Fellowship in the History of Electrical and Computing Technology for 2017 – 2018

The Fellowship supports one year of full-time graduate work in the history of electrical science and technology or closely related field at a college or university of recognized standing, or up to one year of post-doctoral research for a scholar in this field who has received his or her Ph.D. within the past four years. Recipients are normally expected to take up the Fellowship in the July of the year that it is awarded. The stipend is $17,000, with a research budget of up to $3,000. The IEEE Fellowship in History of Electrical and Computing Technology is funded by the IEEE Life Members' Committee.

Candidates with undergraduate degrees in engineering, the sciences, or the humanities/social sciences are eligible for the fellowship. For pre-doctoral applicants, however, the award is conditional upon the candidate's good standing in an appropriate in an appropriate PhD granting graduate program. In addition, pre-doctoral recipients may not concurrently hold other fellowships, but they may earn up to $10,000 for work that is directly related to their graduate studies. Pre-doctoral fellows must pursue full-time graduate work and evidence of satisfactory academic performance is required. These restrictions do not apply to post-doctoral applicants. Post-doctoral applicants must be no more than four years from the award of their PhD on the date the application is due. The Fellow is selected on the basis of the candidate's potential for pursuing research in, and contributing to, electrical, engineering and/or computing history. Applicants pursuing technical topics should demonstrate they possess the necessary skills, for example: knowledge of programming languages or mathematical discipline. Such knowledge can be demonstrated through course work or experience.

Complete information and application forms are available on-line at http://www.ieee.org/web/aboutus/history_center/about/fellowship.html. The deadline for

completed applications is 1 February 2017. Inquiries can also be sent to ieee-history@ieee.org.

IEEE History Center Life Member Internship for 2017

Scholars near the beginning of their career studying the history of electrical technology and computing and related fields are invited to contact the Center to be considered for a paid Internship at the Center's offices on the campus of Stevens Institute of technology in Hoboken, New Jersey, USA.

The intern program seeks to provide research experience for young scholars (generally advance undergraduates or beginning graduate students) in the history of technology, while enlisting their help for the Center's projects. The Intern generally works full-time for two months at the History Center on a Center project that is connected to his or her own area of interest. This time is usually during the summer, but other arrangements will be considered. Interns are also encouraged to consult with the Center's staff and its associates, and guided to research resources in the area. The stipend paid to the intern is US$5,000. This internship is supported by the IEEE Life Members Committee, and was recently enhanced by a gift from Emerson Pugh. There is no formal application form. To apply, please email a *curriculum vitae* showing your studies in electrical history or related field, a three- to five-page page writing sample, and a cover letter describing the sort of project you would be interested in doing and why it would benefit from being conducted at the IEEE History Center. Complete information is available at

http://www.ieee.org/about/history_center/internship.html.

The Center can be contacted at: IEEE History Center, S. C. Williams Library 350, 1 Castle Point Terrace, Hoboken, NJ 07030, ieee-history@ieee.org, +1 732 562 5450

IEEE and Stevens Institute of Technology are AA/EO employers. Women and minorities are encouraged to apply for all positions. The IEEE History Center is cosponsored by the Institute of Electrical and Electronics Engineers, Inc. (IEEE)—the world's largest professional technical society—, and Stevens Institute of technology, The Innovation University (although the position is through IEEE). The mission of the Center is to preserve, research, and promote the legacy of electrical engineering and computing.

V. Miscellaneous

Playing with Technology

Artemis Yagou, member of the executive committee of ICOHTEC and book review editor of ICON, has been awarded a research grant by the German Research Foundation (DFG), to

continue her work on the history of construction sets. She will realise the project as a Research Associate of the Deutsches Museum, Munich, a museum of science and technology holding a fascinating collection of technical toys. The duration of the project is October 2016 to November 2021.

The project is entitled "How they played: Children and construction toys (c. 1840-1940)" and will focus on the neglected dimension of use. More specifically, the project aims to examine and analyse construction sets from the perspective of users, i.e. children, from the middle of the 19th century until the Second World War. The starting point is the fact that construction sets have been devised and developed by adults as educational tools for children; they have been designed to shape the future through specific play activities. Throughout their history, the role of construction sets has been oscillating between their pedagogical and their entertaining functions, with variations in different time periods depending on dominant mentalities and other socio-technical factors. The intentions of adults (parents, educators, designers, producers, retailers) in this process will be juxtaposed with the so far neglected and under-researched perspective of children. The project will illuminate children's relationship with construction sets, by studying their reactions and attitudes vis-à-vis adult intentions. The project is expected to contribute to the understanding of childhood and technology-inspired play. This is a crucial subject for our societies and their future, as technology-based play is nowadays a predominant element of childhood leisure, entertainment, and education. The technical nature of construction sets lies in the heart of my investigation and sets the framework for the historical analysis. The main research questions are whether children's play practices conformed to or contradicted adult ambitions and expectations, in what ways this was realised, and what were the consequences. The project is situated on the intersection of the history of technology, design history and the history of play.

For more information, visit www.yagou.gr or contact artemis@yagou.gr

Jose Echegaray, Engineer, Professor, Scientist, 1832-1916 – Exhibition in Madrid

The Madrid School of Civil Engineering has organised the exhibition *Jose Echegaray, engineer, professor, scientist, 1832-1916. It* will be open to the public until 21 December. He was a Spanish civil engineer, mathematician, statesman, and the leading Spanish dramatist of the last quarter of the 19th century. Along with the Provençal poet Frédéric Mistral, he was awarded the Nobel Prize for Literature in 1904. A professor of mathematics in his early life, he entered government service in 1868.

Please visit: http://www.juaneloturriano.com/docs/default-source/boletines_/boletin_114/exposicion_echegaray.pdf?sfvrsn=2&utm_source=Newsletter&utm_medium=newsletter&utm_campaign=Newsletter+114+December+2016

VI. Recently Published Books

Hermione Giffard, *Making Jet Engines in World War II*: Britain, Germany, and the United States.

Available online
at: http://press.uchicago.edu/ucp/books/book/chicago/M/bo24204781.html

Our stories of industrial innovation tend to focus on individual initiative and breakthroughs. With *Making Jet Engines in World War II*, Hermione Giffard uses the case of the development of jet engines to offer a different way of understanding technological innovation, revealing the complicated mix of factors that go into any decision to pursue an innovative, and therefore risky technology.

Hermione Giffard's account of the early history of the jet engine combines numerous sources in all three nations, to assemble the most complete and nuanced history of the early jet engine to date. She compares the approaches of Britain, Germany and the United States to the jet engine. Each country approached jet engines in different ways because of its own war aims and industrial expertise. Germany, which produced more jet engines than the others, did so largely as replacements for more expensive piston engines. Britain, on the other hand, produced relatively few engines—but, by shifting emphasis to design rather than production, found itself at war's end holding an unrivalled range of designs. The US emphasis on development, meanwhile, built an institutional basis for postwar production. Taken together, Giffard's work makes a powerful case for a more nuanced understanding of technological innovation, one that takes into account the influence of the many organizational factors that play a part in the journey from idea to finished product.

VII. Join ICOHTEC

An ICOHTEC membership makes you a member of the scholarly network of the UNESO-based International Committee for the History of Technology, ICOHTEC.

The membership includes:

- Reduced fees for ICOHTEC's conferences
- ICOHTEC's reviewed journal ICON (published annually, ca. 200 pages)
- Electronic access to back issues of ICON (published since 1995)
- ICOHTEC's electronic Newsletter (published monthly – available via mailing list and on the homepage)

Please share this form with a colleague who is not yet a member or ask your library to subscribe

ICOHTEC
International Committee for the History of Technology

Form for annual membership renewals / registration of new members

Annual membership includes subscription to ICOHTEC's refereed annual journal ICON, access to all back issues of ICON in electronic form via the ICOHTEC website, a monthly Newsletter, and special registration rates at the annual ICOHTEC symposium.

I wish to renew my membership / to become a new member in ICOHTEC. (Tick below the appropriate description/rate):
□ *An individual. Rate: (40 $ or 30 € or equivalent) per year*
□ *A student. Rate: (40 $ or 30 € or equivalent for two years)*
□ *An institution. Rate: (100 $ or 75 € or equivalent) per year*
□ *A library. Rate: (Europe: 36 €, Oversees 39 € or 52 $) per year*

Tick the years of membership to be paid: □ 2014 □ 2015 □ 2016 □ 2017

I submit the total amount: _____ €/$
Your first name and surname: _____
Email: _____
Postal address: _____
Country: _____

Tick the method of your payment:

□ Through the PayPal option on ICOHTEC website

□ Through international money transfer: Make international money transfer to:

"ICOHTEC" at Commerzbank Bochum (Husemannplatz 3-4, D-44787 Bochum, Germany):
IBAN: DE44 4304 0036 0390 2590 00; BIC: COBADEFFXXX

□ Through a cheque. Send the check with the appropriate sum made out to "ICOHTEC" and send to:

Dr. Lars Bluma Otmarstrasse 5, D-45131 Essen, Germany.

After filling the form, please scan and send by email to Dr. Yoel Bergman, ICOHTEC Treasurer at yoelb@protalix.com or, send a hardcopy by regular mail to Yoel Bergman, 20 Haatzmaut St., Herzliya 46789, Israel. Your filled form will facilitate sending ICONs and allocating access privileges.