



## ■ TICCIH education and training workshop in Sweden

A workshop on training and research within the field of industrial heritage will be organized in Sweden on the 8-11 June 2008 in order to gather information about ongoing activities, and to discuss the need for future international co-operation in addition to the educational programmes that have already been set up. Participants are expected to be seriously engaged in Industrial Heritage courses and should also be prepared to share their knowledge and experience with other members of the workshop. The deadline for an application is 15th April and reports have to be submitted on May 1st at the latest. Costs including lodging and meals will be covered for a limited number of participants. Additional participants are welcome to join the workshop at their own expense; the cost will be around

The workshop is arranged by the Department of Science and Technology at the Royal Institute of Technology in Stockholm, TICCIH and the Swedish Industrial Heritage Association (SIM). Members of the programme committee are Prof. Maths Isacson, Prof. Marie Nisser, Dr. Dag Avango and Dr. Jan af Geijerstam. For further information and a full programme please contact the workshop coordinator Jan af Geijerstam (jang@kth.se) and James Douet (ticcih@gencat.net).

### ■Updated Internet site and on-line members Directory

The TICCIH web site is being revised and restructured. The new design will not look too different but the internal structure is being overhauled so that it has more information, and it is hoped greater value, for TICCIH members. Central to the new page is a section where members of TICCIH can find others with similar interests. The on-line Join TICCIH form will offer a selection of thematic and professional ambits, and a new Directory of members on the web site will be organised around those choices. Members can choose to include their e-mails or

websites so that it is easier to find, contact and be contacted by others with shared enthusiasms or professional scopes or services. A box will offer the option of not appearing in the Directory.

The database from which the Directory is derived will also be made automatic, so new members will appear as soon as they have filled in the form and paid their subscriptions. This will reduce the chance of errors creeping in and free-up time for the secretariat to attend to members needs.

The project is being financed by the Museu de la Ciència i de la Tècnica de Catalunya which obtained a grant to update the site as part of the revision of the museum's own webpage, www.mnactec.cat.

The new site is being tested now will go on-line in June.

### ■ TICCIH in Australia

Australia has a rich and diverse industrial heritage although it is often not immediately recognised by the public and the heritage system. Industrial heritage in Australia needs its own advocate making people aware of this heritage with both its positive and negative effects on our society and environment.

For several years those of us working in the field of industrial archaeology/heritage have discussed this situation and have looked to TICCIH with its goals of the study of industrial archaeology and the protection, promotion and interpretation of industrial heritage as a being the sort of advocate for industrial heritage needed in Australia.

Under the leadership of Helen Lardner consultation with potentially interested practitioners resulted in a meeting at the Opera House Bar (a world heritage item) to discuss matters. A group of people, mainly from ICOMOS, interested in forming an Australian branch of TICCIH decided to go ahead. We were aware that Aedeen Cremin had attempted this some years ago but the momentum had lapsed. We are now deciding on how best to establish TICCIH in Australia and have established a moderated discussion. group - TICCIH in Oz on Google groups.

The group can be found at http://groups. google.com.au/group/ticcih-in-oz/web?hl=en Anyone (including colleagues from overseas) is welcome to participate. We have members whose interests range from domestic hot water systems to Australia's role in the space age. Some files of relevant information can be downloaded from the site.

We are planning to have a formal launch of TICCIH in Australia during National Archaeology Week in May 2008 and are thinking about a conference focusing on Industrial Heritage in Broken Hill in 2010.

lain Stuart. JCIS Consultants

### ■ TICCIH Journal special offer

The Editorial Committee of TICCIH Journal Patrimoine de l'industrie/Industrial Patrimony, published by Koinetwork egei in partnership with ICOMOS, would like to take advantage of this special issue of TICCIH Bulletin in order to remind its readers that the Journal is also reaching its tenth anniversary in 2008, with the publication of the forthcoming issues n° 19 and 20.

On the same occasion, let us remind TICCIH members, both individual or corporate, that they enjoy a 20% discount on the subscription rates, the only condition that they have paid their TICCIH subscription. For details on subscribing to the TICCIH Journal, please see to the last page of issue n° 18, (January 2008) the Koinetwork website: to www.koinetworg.org or the link on the TICCIH web page.

Maria Teresa Pontois. Chief Editor

Thanks to all the contributors to this special issue of the Bulletin.

Photographs are by the authors unless stated otherwise.

Corrections: In the previous issue, the photograph with the canals article by Krsta Paskovic should have been entitled 'Centa water pumping station, 1908, photograph by the author'

Cover photograph: The Clot del Moro cement works, built in 1900, was a 'turn-key' factory, designed, equipped and put into operation by the American Allis-Chalmers company for a Spanish industrialist in the Pyrenees mountains. It was fitted with three of the first horizontal rotating kilns in Europe, the steel chimneys of which can be seen in the second

image. The 'model' factory, whose shape derived from the characteristic local tile vaulting system, proved a costly failure when portland cement kilns rapidly doubled in length and the second phase could no longer be fitted inside the planned building.

Limestone entered from the quarries at the top and descended, under gravity, through the

various processes of conversion into portland cement, which left in sacks by train at the bottom. The machinery was all operated by a series of Pelton turbines.

The ruins of the factory are now a museum that explains the construction and operation of this extraordinary site.

www.museuciment.cat

## **TICCIH Officers**

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Editor: James Douet, office of the President

dustrial archaeology, promoting conservation, research, recording and education in all aspects of industrial heritage. It holds a triennial conference and organises interim conferences on particular themes. Individual membership is £20, corporate membership £40, and student membership £10

Payment to TICCIH, Lloyds TSB Bank 27 Fore Street, Redruth, Cornwall TR15 2BJ, UK; Account No: 1351659, Bank Sort Code: 30 97 00.

There is an on-line membership form on the web page.

TICCIH is the world organisation for in- The TICCIH Bulletin welcomes news, comment and (shortish) articles from anyone who has something they want to say related to our field. The Bulletin is the only international newsletter dedicated to industrial archaeology and the conservation of the heritage of industrialisation. The TICCIH Bulletin is published four times a year and is sent to all members. If you have not received an issue, please contact the editor for a replacement. Back issues can downloaded as a pdf file from the TICCIH web site.

Opinions expressed in the Bulletin are the authors', and do not necessarily reflect those of TICCIH.

Editor: Articles and news of recent and future events should be send to the Editor, James Douet, Museu de la Ciència i de la Tècnica de Catalunya, Rambla d'Egara, 270, 08221 Terrassa, Spain, ticcih@gencat.net.

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■ Ten years ago when I was the TICCIH Executive President we were aware that this institution had completed an important stage. TICCIH had been one of the key players in a unique phenomenon, creating an international movement for the revaluing of a new sort of cultural heritage - that of industry. Few institutions at the international level can make such a proud claim.

A group of persons and organisations from different countries has grown up around TICCIH, working in this field, and thanks partly to our organisation their influence is felt all round the world.

Creating awareness of the cultural value of the material remains of industry has not been easy. and accepting that the assets of industry could be part of our cultural heritage of a country is not always obvious. There are even those who consider it as 'anti-heritage'. Industrial sites are rarely things of great aesthetic value, are not especially old, and nor are they always potent symbols of national identity, the three qualities generally associated with the idea of a monument.

Ten years ago TICCIH had still not grown out of the structure created by its founders, centred on strong personal relations between a relatively small group, and sometimes it was been hard for us to gain recognition beyond the confines of particular intellectual circles. It was felt that we had to get achieve a higher profile, creating new means of reaching more people. We adopted three strategies. Firstly,

## Ten years of the TICCIH Bulletin

Eusebi Casanelles TICCIH President

techniques, activities and projects in other countries. Finding the information and publishing it regularly has been a great achievement, especially, as we all know, when many periodicals never get past the third issue. This has not been my job but that of James Douet, whose dedication and effort has been crucial, tracking down new stories, soliciting and cajoling articles and reports and frequently translating contributions, such as the one you're reading now.

Today, TICCIH needs to make another effort to reflect and develop, just as it did ten years ago. The world has changed since then, with globalisation accelerating, and the growth of the industrial heritage in many countries has been a reality. Last week I saw a report on the heritage of Lithuania and the movement there to preserve a part of the country's heritage. To my surprise, it was illustrated with photographs of old factories, something that would have been unthinkable a few years ago.

One of the consequences of this revaluing has

nor has industrial archaeology taken its place within the universities, with a few notable exceptions. These must form part of our new strategic objectives for the next ten years: more guidance for ICOMOS, comparative studies across international boundaries, publications to spread our knowledge as widely as possible.

TICCIH must return to its origins, promote theoretical reflections and deepen understanding at the international level.

Two actions are already underway that are essential for our future. The first is a new web site which will permit more participation and become a real portal for industrial heritage, with both conceptual material and lists of the most significant examples of different typologies and sites. This should be ready in a short time. The second is the workshop planned in June in Stockholm on education and training in industrial heritage (see page 2) which will bring together the key figures in university education to examine our way forward.



institutions like TICCIH need logos, as countries have flags, so to identify them. To help us communicate internally we had to have a newsletter; and to reach out externally we needed a web site. At the same time the idea of creating a journal was born - Patrimoine de l'industrie / industrial patrimony, brilliantly directed by Louis Bergeron.

The Bulletin has been the most visible element, creating a link between the members who have received it, without a break, every three months. It has been the means whereby the members of TICCIH have discovered ideas.

been that many places have become World Heritage sites or are in the process of being added to UNESCO's list, and ICOMOS has regularly asked us to provide expert guidance on assessing new candidates. However, despite these and other efforts, we are still far from a global understanding of the heritage of industry, and an international perspective on many productive sectors is still far off. Nor can we claim to have a sound 'body of theoretical knowledge' about the best ways of conserving and restoring the industrial heritage, often achieved through adaptation and re-use, and

A meeting of the TICCIH Board in 2003 at the Museu de la Ciència i de la Tècnica de Catalunya in Terrassa. From the left: Stuart Smith, Marie Nisser, Ole Hyldtoft, Marie-Teresa Pontois Maiulllari, José Manuel Lopes Cordeiro, Louis Bergeron, Patrick Martin. Eugene Logunov, Olga Traganou-Deligianni, Eusebi Casanelles and Rainer Wirtz. Photo by Jaume Matamala



■ Towards the turn of the last century, TICCIH's march for the dissemination of the knowledge and enhancement of our industrial culture around the world has boldly stepped forward, up to the point where one is wondering whether the frontiers of the possible would have been reached or not.

Born within the limits of rather small geographical areas, industrial civilisation has extended by means of the internationalisation of overseas trade, in most cases due to the evolution of former colonial structures, and to a complex circulation of men and technology. Nonetheless, a number of areas in different parts of the world have been lingering behind in the construction of their own industrial structures, and less developed or poorer nations today have no means or even no idea of how to include the technical or built heritage of industry among their priorities.

At this point, TICCIH cannot keep from posing the question: does such a disparity allow the conservation of industrial heritage to rank among the values of a universal character? Or, using other terms, by which means and according to which arguments could it be presented as one among other elements of a common cultural heritage in some countries? This might be a first challenge to be considered.

■ Reflecting on the recent TICCIH railway heritage conference in Aguascalientes, Mexico, made me realise how far we have come in the last thirty years. The conference was based on old railway workshops that are now the subject of a major regeneration project, perhaps the largest on a redundant railway site in Latin America. Twelve countries were represented nine from Latin America - and the papers were of a universally high standard. Several stuck in my mind. Google Earth gave us detailed access to the railway roundhouses of Brazil (just look at the one in Sao Joao del Rei, MG, Brasil, now a railway museum); Jorge Tartarini's systematic survey of Argentina's railway heritage demonstrated the benefits of taking a strategic approach to understanding and priorities; and the challenges of the sell-off of railway properties for new but as yet undetermined new uses would be familiar themes in many parts of the world.

But there was an aspect of the Aguascalientes conference that represented in microcosm an issue endemic in TICCIH. Most of the efforts of TICCIH members are concerned with internal conversations. This is a problem widespread throughout archaeology. Because there is no internally generated demand to take the message to a wider public we tend to quietly forget it. It is, after all, an easier and more comfortable prospect to share thoughts and ideas with like-minded friends and colleagues. Scholarship is of course a legitimate end in itself and needs to be nurtured and refined through testing and debate.

But the real proof of TICCIH's effectiveness

# Industrial Heritage – and beyond?

Professor Louis Bergeron TICCIH Life President

However there are other challenges of a different kind to be taken into account. One of them is the fact that, due to a "at first look" simplified analysis, industry and industrial culture are too often classified as closed down chapters of the world's history. Contrary to such an appreciation, one can observe that countries (and not just the less important ones!) attempting to catch up on their lateness in economic growth are attempting to resume the steps and to reuse the "obsolete" equipments of the former "model western countries". Besides, in the fact that a tremendous shift has taken place within the traditional categories of industrial activity, to the advantage of a new frontline (tertiary, high precision, specialisation...), industrialised countries are involved in a tremendous search for new energy resources, for new mineral deposits, even for the riches of the undersea

levels (and even are building hypotheses on the possibility of exploiting resources on other planets). All that feverish activity stands in an obvious continuity with the most recent industrial past while, at the same time, generating new industrial devices and productions: Sustained activity in some specific industrial sectors will probably contribute also to the restoration and safeguard of the environment and to the cancellation of ancient wounds inflicted to it in the past centuries. Maybe, industrial technology and industrial heritage, together with scientific research, are the future of more stabilised human societies as much as the progress in transport means "society of and the frenzy of the communication". TICCIH members, in their privileged areas, should be attentive to all what is now generating the industrial heritage of the following century.

Let us look back, finally, to closer and more immediate challenges. Europe coming to be a single homogeneous space does not mean it has already elaborated all the instruments needed for a common discourse and practice regarding industrial heritage. Here probably lies the most immediate challenge to be faced by TICCIH, a challenge which TICCIH European Agency is constantly envisioning as a field of action.

## TICCIH today and tomorrow

Sir Neil Cossons
TICCIH Life President

must surely be the extent to which the industrial heritage is actually preserved and conserved, the design and technical standards to which that work is carried out, the sustainability of the financial and management solutions. These are themes we leave largely alone. But they are in fact central to successful achievements on the ground. So too are issues of protective legislation. Here there are real opportunities to spread the lessons of best practice from one country to another. The future value of TICCIH must be underscored by some serious strategic targets and their success measured by some visible outputs.

The Aguascalientes conference demonstrated that within TICCIH the knowledge and experience is there, ready to be tapped. When challenged at Aguascalientes, by the elected members of the municipality who – perhaps inevitably – had World Heritage aspirations, to endorse those ambitions, there emerged from within the conference a body of informed, mature and articulate knowledge and experience able to question vigorously their motives for wanting WHS status, to ask for the historical and archaeological arguments that might underscore those hopes, to emphasise

the need for a conservation-led approach and to request details of the management planning that would lie behind their realisation. The civic leaders were shocked and offended that the people who they had invited to Aguascalientes to see and applaud the - very excellent - work they had carried out should question them in this way. Why did we not provide the blank cheque that would demonstrate to the Mexican Government that they had international opinion them in their request Aguascalientes to have a place on the Tentative List? Two very robust lunchtime discussions followed, at the end of which I think we left our amiable and generous hosts thoughtful, wiser and under no illusions that if they were serious in their ambitions they needed a new, more informed and more strategic approach. Moreover, they needed to listen to people who had sound historical and archaeological understanding, who understood the wider context of heritage value, and were familiar with international comparators. We parted with mutual expressions of respect.

For me this was a moment when TICCIH showed its true worth. In a microscopic way it represented a coming of age. And, it is perhaps the direction in which we should be directing our attentions post-Nizhny Tagil; recalibrating the relationship with ICOMOS and UNESCO, more concentration on the arguments – social, landscape, contextual, economic and regenerative - that underscore the values attaching to industrial archaeological conservation; less descriptive, more analytical; and a greater understanding of the political and financial context.



■ The TICCH Bulletin reaches Number 40 and ten years of publication in its current incarnation with this issue. It was published at least as early as 1988 (the earliest issue in my collection) and edited by Barrie Trinder from Ironbridge and then Nene College through 1997. As a regular publication with timely news of interest to all those concerned with the industrial heritage, the Bulletin has been a critical source of information and opinion. Ably compiled and edited for the past several years by James Douet working out of TICCIH President Casanelles' offices at the Museu de la Ciència i de la Tècnica de Catalunya in Terrassa, the quality and breadth of the Bulletin's offerings has grown over time. Notices of publications and conferences from across the member states are available in a form and timeframe that is unavailable anywhere else. James has managed (with varying levels of success) to coax and cajole authors to submit conference reviews and opinion pieces about the full range of topics imaginable under the rubric of industrial heritage. This source of information is vital to everyone who is connected to the study, documentation, preservation, interpretation and/or management of cultural heritage related to industrial sites, object and landscapes.

The record of the *TICCIH Bulletin* is exemplary. A troublesome question remains, however: "How can we make the *Bulletin* and TICCIH reach more interested people and develop a strong and sustained impact?" The membership of TICCIH is small, and the readership of the *Bulletin* is limited. These are persons and institutions committed to the preservation of industrial heritage, no doubt,

■ The industrial heritage is directly related to the management and entrepreneurial success of companies which are born, develop and as part of their natural life cycle, disappear. These cycles signify evolution, development and generally progress for the society of which they find themselves a part. Through this economic

and social progress, companies contribute to the improvement of the quality of life of their

societies.

This life cycle obviously generates a material and immaterial heritage associated with the cultural changes to which they contribute during their productive life. This cultural heritage, of which the industrial heritage forms a part, is a side-effect or by-product of their business activities. From the analysis and study of this heritage arises the natural need to preserve a memory of what has been achieved.

It seems to me both interesting and fundamental that companies, before they disappear from their role as providers of goods and services, should both identify and protect their own cultural heritage. This positive and pro-cultural attitude is worth promoting and publicising, as in the case with the Chilean electricity company, Compañía Chilena de Electricidad Limitada, CHILECTRA.

# The TICCIH Bulletin and industrial heritage

**Professor Patrick Martin**US National Representative

but they are small in number. I am afraid that the number of subscriptions to Patrimoine de l'industrie, the handsome and informative journal published on behalf of TICCIH by former TICCIH President Louis Bergeron and his colleague Maria Teresa Maiullari-Pontois may be even smaller. While our leaders have been very successful in convincing various state-level and international organizations to take our concerns seriously, we have been less effective in recruiting converts to our cause. President Casanelles has achieved a great deal during recent years, putting the Bulletin on sound footing, raising our profile on the Worldwide Web, forging formal agreements with several of the state-level organizations that are affiliated with TICCIH, promoting a successful series of conferences and publications.

But nagging doubts remain in some minds about sustaining these achievements and broadening the impacts. Subscriptions and registrations do not fully pay for our expenses. TICCIH has been fortunate to benefit from the gratis work of many people and the generous support of several institutions; can we expect that to continue forever? In my opinion, TICCIH

must find a stable foundation that does not depend so heavily on institutional or individual subsidy. It must make itself relevant enough to a wider audience to generate the support necessary to sustain its existence. If TICCIH is to be a membership organization, rather than a committee, then it needs more members. To get more members, it must offer something of tangible value to them. Surely the TICCIH Bulletin has value, but apparently it is not sufficient to justify the cost to many people, or has not been presented to enough people to allow them to choose. And the TICCIH Board and leadership have certainly provided services of value, but those services either do not reach. enough people, or are too removed from valuation to be considered worthy of the cost of membership by enough people to be self-supported.

An alternative is to continue with a small membership, a strong central committee, and find more cost-effective ways to reach our constituents (and beyond) through technology. Perhaps the Bulletin will cease to be produced in print, but will exist only on the web. Maybe the same approach will make sense for *Patrimoine de l'industrie*. Even if these publications are not exclusively electronic, fully joining the digital revolution should make them more accessible to more people, and spread our message more widely.

I don't pretend to have the ultimate answers for these questions, but I expect that TICCIH must grapple with them seriously in the days ahead. Meanwhile, congratulations are in order to James Douet and Eusebi Casanelles for producing 40 issues of the *TICCIH Bulletin*. I look forward to reading the next 40 issues!

# Industrial heritage and photographic heritage

**Dr. Arq. Jaime Migone Rettig** President TICCIH-Chile



An image from the CHILECTRA archive

This private company generating and distributing electricity was born out of the fusion of the Chilean Electric Tramway and Light Co., founded in 1889 and the Compañía Nacional de Fuerza Eléctrica which operated in Santiago from 1919. The company grew and developed offering services up until our times.

From the initiative of the photographer Ricardo Pereira and the historian Gonzalo Leiva, CHILECTRA has organised and restored the archive of more than 10,000 glass pates and negatives that the company held. As a result of the Law of Cultural Donations, from 2000 this initiative resulted in the protection and conservation of this important heritage, with more than 5,000 of these images donated to the National Historic Museum.

Within this archive we find important images of the whole industrial process of electrification, principally in the city of Santiago, making it a document of considerable cultural and scientific value.

Many of the images can be viewed on the excellent web site www.nuestro.cl/chilectra/index.htm#, an important reference where the industrial heritage and the company which created it can be identified, conserved and disseminated.



■ The industrial heritage of the countries formerly beyond the Iron Curtain has specific significance in the World Heritage. It is well-known that the first industrial site on the World Heritage List, the Wieliczka Salt Mine, can be found in Poland, and has been joined on the List by the silver-mining towns of Banská Štiavnica in Slovakia and Kutná Hora in the Czech Republic by now. No doubt that the significance of the East European industrial heritage has been clearly demonstrated by the issue of the Nizhny Tagil Charter as well. Not only was the most important document for industrial heritage approved at a TICCIH conference in Russia in 2003 but also it was named after a prominent heavy industrial town in the Urals

However, after the abrupt change of the political system at the beginning of the 1990s, these countries were at a loss as to how to cope with their industrial heritage especially from the 19th and 20th centuries. Problems were due to rapid economic restructuring and extensive privatisation as well as to the lack of public interest. In addition, the industrial heritage from the modern period was generally considered cumbersome, its values were hardly recognised and appreciated.

Fortunately, in the past decade, there have been major developments in the study and protection of industrial heritage in the area. In order to discuss preservation problems as well as to raise public awareness of the industrial heritage, meetings came to be organised in several countries. First an intermediate TICCIH conference was held in Hungary in 1999 on the mining and iron-making heritage of East Central Europe with field trips to Slovakia.

## Going ahead. Industrial heritage in Eastern and East Central Europe

Dr Györgyi Németh

TICCIH Board Member with responsibility for Eastern Europe



Conference proceedings of the 1999 intermediate conference in Hungary. Copies can be obtained from the author.

The landscape of industrial heritage training and research has definitively changed over the past years. With its feet so firmly anchored in practical matters linked with documentation of industrial buildings and sites, conservation and adapted re-use, the field of studies has had difficulties being accepted within the university world as a discipline in its own right. The traditional academic disciplines were - with some exclusions - more theory-oriented and focused on one subject field. The industrial heritage studies normally searched for a broader context based on a multi-disciplinary approach with links to economic history, business history, geography, ethnology, sociology, history of art and architecture and urban planning. Almost the same situation occurred within the field of History of Technology some years ahead of Industrial Heritage studies, and facing the same difficulties to be recognized as a bona fide field of academic studies. The pioneering initiatives of Birmingham University and Ironbridge Institute to create a joint education program some thirty years ago were important in the field of training, and emphasized the importance of industrial heritage training as a joint commitment shared between a university and a museum organisation. It took however

# New Challenges for Training and Education

Professor Marie Nisser

long time got get any followers in other parts of the world.

The increasing demand for professional skill has, however, paved the way for an acceptance for our field of studies within the Academia. We have seen how the scope of training has expanded from a few scattered courses under the guard of history, economic geography, art history and architectural history. We have moved on from part-time training to full-time programs for a Master's degree and from being anchored in one discipline to taking further towards multi-disciplinary multi-national courses. We have also seen a trend to switch over from national training programs to joint international ventures covering full attendance for one or two full academic years. Since university organizations are like old flag-ships or vast cargo vessels,

Then, between 2001 and 2007, four international biennials entitled 'Vestiges of Industry' were organised in the Czech Republic, primarily in Prague, five workshops on industrial archaeology in Romania on changing locations, thirteen meetings in different parts of Poland, and three conferences in Rijeka, Croatia. In Velenje, Slovenia, the Mines and Quarries Section of TICCIH held a meeting in 2004.

Following the meetings actual work has also been started on the preservation of the industrial heritage in various countries of the former Soviet Bloc. Projects were initiated to identify industrial heritage sites and include them in databases, new museums were industrial heritage established, introduced, and the regeneration of industrial areas in decline came to be promoted through conservation. Yet, in spite of the promising initiatives and some spectacular results, we cannot declare that we have reached a real turning point in preservation. In order to overcome the special problems prevalent in the region, we should unite our efforts and improve the level of international cooperation. For this reason, a declaration has already been signed by the representatives of the Czech, Hungarian and Polish TICCIH committees and of the national chambers of engineers participating at the Third International Biennial in Prague. Fulfilment of the objectives expressed in the statement will not only promote the preservation of a common Eastern and East Central European industrial heritage but it will also define its unique features. Besides, those countries in the region which have not joined the work yet will be encouraged to get involved.

they tend to take their time turning in another direction. With that in mind, the speed of recognition with regard to industrial heritage studies is not bad at all. Industrial heritage studies as a teaching field in its own right has become an important actor in the academic world with a strong foothold in universities and technological institutes in places like Padova. Paris, Evora, Freiberg, Leicester, Stockholm and Houghton. In the TICCIH Directory of Training and Education, thirteen courses or programs are listed in industrial archaeology and heritage and certainly there are more courses than the ones that have been inscribed on that list. All those courses are important per se and will enable students to become professionals. They will acquire a skill to enable them to become actors in industrial heritage conservation, industrial culture heritage management, urban planning, adapted re-use and industrial heritage tourism. These new experts with an insight in industrial heritage matters are already upholders of industrial, technical and scientific culture and they will assist in increasing the understanding of the dramatic changes of industry and the transformation of industrial society that we have seen in the past decades. They will act in assessing the role that tangible as well as



intangible heritage of industry plays in today's society and will play in that of tomorrow. Since the field of activities is expanding in the wake of industrial transformation, the demand for skill and expertise in taking care of the industrial heritage has increased and will continue to do so for many years to come.

As teachers we have to recognize that we have a responsibility to build a firm platform for training and education in industrial heritage skills and awareness. We must be able to guarantee good-quality in teaching and practice. The internationalization of teaching in a multi-disciplinary context is a challenge and requires an overview of ongoing activities. What is the content in various courses? What knowledge and which abilities should be the

outcome of that education? Should there be a consensus about theories and methods to be used? Where do we find the good examples for field studies and for scientific case studies? Is there a need for a list of publications to be used for course readings? And should there be an agreement for credit requirements in an international context?'

It is now a good time to evaluate all the results achieved so far. We should also strive for an open discussion of future needs and developments in industrial heritage training and education. We have to recognize the essential need to keep industrial heritage focused on how to understand the meaning and relevance of material evidence and train the expertise necessary to achieve this. We

need to continue to build the knowledge base and skills by training and to make the agenda for appropriate training courses in order to meet the requirements. We must widen the discourse across a broader academy where it will be essential to define and redefine an understanding of the material and immaterial remains of the industrial past and make sure that these remains will continue to play a role in the society of today and tomorrow. This inheritance is, after all, the platform on which our society rests today.

Details of the TICCIH workshop on education and training organised by Professor Nisser in June are on the TICCIH web page. Ed.

■ Being brought up in the north of England in the textile district my early interests were science and particularly geology. I thought I would become a geologist but discovered in the 1960s that there were no jobs available for geologists, until someone discovered North Sea gas a few years later.

Having gone to London to study civil engineering, I soon switched to sociology and psychology together with all the technical subjects the University could offer in order to prepare us for the management of the 'white heat of the technical revolution'. During this time I developed a passion for archaeology, working mainly in the City of London, and discovered a new subject called 'industrial archaeology'. I subsequently took a Masters Degree at Manchester in the History of Technology. My first post was as Curator of Technology in Sunderland Museum in the north of England which was a town that was closing down. Its main industries of mining, ship building, rope making and ceramics were disappearing, and whilst I was rescuing objects for the museum itself, many of the larger exhibits and sites were being transported to the proposed open air museum at Beamish. After

## Museums and industrial heritage

Stuart B. Smith TICCIH Secretary

some time I realised that Beamish was destroying many of the industrial sites in the north-east, just to reinforce the idea that it was a regional museum.

In 1972 I moved to Ironbridge as the first Curator, where I had the fortunate experience of being able to restore and build almost every site and museum that the Trust controlled over a twenty year period. However, I do believe that Ironbridge was slightly introspective as it concentrated on everything that happened in the Gorge itself without giving due attention to industrial monuments in the rest of the new town of Telford.

Shortly after Ironbridge became a World Heritage Site, I was approached by the National Trust and Cornwall County Council to come to Cornwall in order to develop the

industrial museums in the county as part of their bid to become a world heritage site of Cornish mining. Fourteen years of intense activity created mining museums as well as those devoted to radio and submarine telegraphy communications, to tin processing and to china clay. Cornwall and the West Devon Mining Landscape is now a World Heritage Site.

I have now retired from The Trevithick Trust but I believe that my career reflects the changes in attitude to the industrial heritage. My first job was to preserve small objects which could be held in a local museum, and my voluntary job was to preserve larger objects which might be re sited in the open air museum at Beamish. My second job was to be Curator and then Director of the Ironbridge Gorge Museum which preserved the entire industrial landscape but on a very limited scale. My final job has been to be involved with the preservation of the industrial landscape of Cornwall, which is not only county-wide but also includes countries in every part of the world including north America, Mexico, Australia, South Africa, and Spain. This is perhaps the true perspective of international industrial archaeology.

■ It is not a coincidence that the period colloquially known to Britain as the 'industrial revolution' is contemporaneous with the ravages of European colonial expansion in Africa. The exploitation of Africa for resources, human and material, was critical to the development of industrialised Europe and North America. So why is Africa so overlooked by industrial archaeologists? Of course, Africa has its own industrial history, but archaeologists who have studied pre-colonial African ceramics, iron-making and gold production (for example the work of Plug and Pistorius 1999) have not defined their work as industrial archaeology. The material evidence of slavery, which played such a pivotal role in the development of many industrialised regions, is more usually considered the

## A view from the south

Dr David Worth South Africa National Representative

province of historical archaeologists. Africa supplied many of the raw materials on which the industrialisation of the colonial powers depended, yet the sites from commodities such as cotton, coffee, copper and rubber were sourced have been largely neglected Meanwhile, industrial archaeologists in Europe, North America and elsewhere, have devoted themselves to recording and analysing the processes for

these materials, manufacturing sites on which they were used. But it is clear that there is considerable potential for the study of industrial archaeology in Africa. Of the primary industries, agriculture is the most widespread and most economically important. Whilst much agricultural activity is at the level of local food production, there are also cash crop activities such as the production of cocoa beans, coffee beans and sugar cane, and forestry, the last particularly in areas such as the Democratic Republic of the Congo. Extractive industries are also widespread, with the mining of gold, diamonds, coal, copper and tin being recently supplemented by the tapping of natural gas and oil reserves, and salt has long been mined at Taodeni, in Mali. The nineteenth-century origins of South Africa's



diamond (Kimberley) and gold (Pilgrim's Rest) mining industries, together with early twentieth century tin mining (Jos, Nigeria) and copper mining (Democratic Republic of Congo and Zambia) would all be worthy subjects of research in this area.

Of the secondary industries, manufacturing in the African context may be usefully split into those industries processing agricultural products and mineral and other natural resources (such as sugar and grain milling; meat, fruit and fish canning; tanning and smelting), and those manufacturing goods to

substitute for imports (such as clothing, footwear, soap, soft drinks and small engineering items). Activities such as these have formed the backbone of industry in Sahelian countries such as Senegal and Maurentania. There is great potential for research into the material evidence of transport systems, such as Kenya's railways, Burundi's important reliance on Lake Tanganyika as an export route, and the use by the Democratic Republic of the Congo and other nations relying on the River Congo for transport.

Given that so little work has been done in this

area, it is clear that there is a considerable need for sustained research into the material evidence of Africa's modern industrial period. This would serve to mitigate a world-view that characterises Africa as wholly rural and non-industrialised, and facilitate comparison between continents, particularly among the developing regions. Particular focus needs to be given in such work to understanding how technologies and working practices have been created locally, or modified, in response to local conditions and local and traditional technologies and practices.

When enthusiasm for industrial archaeology began to extend outside the various hearths, birthplaces and cradles of industrialisation into later industrialising areas such as Spain, where I work, it was common for the local pioneers to prefer the term industrial heritage. This was partly a reflection of their backgrounds and interests. Many were engineers, others historians and geographers, who were nervous of the methodological implications of 'archaeology'. 'Heritage' was a more accessible concept, and easier to convey to a sceptical public and a hostile administration.

It is partly as a consequence of this early semantic divergence that professional archaeological interest in the remains of industrialisation has remained sporadic, not to say inert, in many of these countries.

Today, lots of us use IA and IH interchangeably. So is there an important difference?

To me it seems that it is worth maintaining a distinction because it has important consequences for the approaches of the different professionals who are dealing with the cultural property of industrialisation. You might draw a parallel with the work of gardeners and that of florists. Archaeologists are the gardeners. Their work extends to everything in the garden, the whole archaeological resource left bv industrialisation, sorting the weeds from the flowers in the search for significance and meaning. Those involved in the care and interpretation of the industrial heritage, on the other hand, are the florists. They choose the finest blooms, care for them and present them to the public so that their value can be appreciated. Here In Spain, I'd say that for the industrial period there are lots of excellent florists, but few serious gardeners.

Meanwhile, contracting archaeologists are being asked to carry out investigations, excavations or recording on historic industrial sites for which the skills and techniques they learned in university are not always the most pertinent ones.

As Marie Nisser points out elsewhere in this issue, there are a growing number of universities that include industrial archaeology courses, but in many countries there's still no specific training.

## **Gardeners and florists**

James Douet Editor, TICCIH Bulletin

The argument over how industrial archaeology relates to the overall field divides into three schools. The most integrationist would not distinguish the period of the industrial revolution from the whole of the modern era, merging industrial with post-medieval or historical archaeology and leaving detailed study of industrial subjects to factions like archaeo-metallurgists, mining historians o industrial anthropologists.

A second strand accepts the industrial revolution as a distinct chronological unit but sees no reason to separate industry and industrial production from the rest of the society created by industrialisation, including production and consumption. This perspective is burdened with the name 'archaeology of the late-Second Millennium'.

The traditional view is that industrial archaeology is a distinct sub-discipline of archaeology that is concerned with the



The core of this early 19th century textile mill near Barcelona is a medieval flour mill with horizontal water wheels. It was transformed into a fulling and finishing mill in 1820 and altered and adapted until sinking into insolvency in the 1950s. Before the architects start work on the project to convert it into a museum, there needs to be a good understanding of what is significant and which elements are more capable of withstanding the

Photo: Arqueociència Serveis Culturals

technology, workplaces and transportation systems of the industrial revolution. This position has been reinforced recently by the claim that a new industrial archaeology has emerged in the last decade which focuses on the process of transition from rural, pre-industrial societies to urban industrial ones based on manufacturing for their wealth and employment. This is the transition that began first in England in the late-18th century, which Spain experienced in the middle of the 19th century and which China, India and Brazil are going through now. It is a universal historical process the evidence of which, left in the archaeological record, we should study and understand. And there is a need for archaeologists equipped with relevant knowledge, methodologies and concepts to do just that. Their tools include traditional techniques, documentation excavation methods suitable for machinery, buildings and ensembles, photography, complemented by documentary research and oral recording. Emerging techniques might include landscape characterisation, a computer-based way of integrating information on historic landscapes, and process recording of complex industrial sites.

At the Michigan Technical University in America, Patrick Martin has developed graduate and post-graduate courses that integrate archaeological investigation of industrial sites with heritage management training. Martin argues that 'industrial heritage scholars should be knowledgeable in three core areas: the history of technology; the use of archaeological tools and the interpretation of artefacts; and the basic issues surrounding cultural resource management vis-à-vis industrial heritage.'

Integrated o not, we should acknowledge that there is a clear distinction between the material evidence left by industry and all its related activities, which is the archaeological resource, and the industrial heritage, which is that part which we try and conserve. To this we need both industrial archaeologists and industrial heritage experts, gardeners and florists, to identify and preserve what is significant.



■ Industrialisation came late to Russia. It was only in the last decades of the 19th century that the state itself and not private entrepreneurs (as in England) or banks (as in Germany) stimulated industrial development.

In the three decades before World War I, Russian industrial growth was one of the fastest in the world. Nevertheless, the country as a whole remained predominantly agrarian in terms of nearly all relevant parameters. So after the Russian Revolution, the new system "inherited" a sort of development that still followed the authoritarian patterns the Czar's reign had set in the second half of the 19th century.

Only at the end of the 1920s, under the auspices of the comparatively liberal "New Economic Policy - NEP", did Russia return to production and consumption levels of the pre-First World War period, but in the next ten years, from 1928 to 1938, the Soviet economy underwent its biggest industrialization spurt.

It is only with regard to this background that Moscow's and Russia's heritage of buildings and sites related to industrial-technical purposes over a period of more than 150 years can be interpreted.

It must be realized with regard to 20th century, that the "corridor" of possibilities to form and express the economic dynamism of the time in terms of buildings and sites was extremely short. And it must also be realized how breathtaking the achievements of a handful of highly gifted architects were under these circumstances, to bequeath a totally unique heritage to all mankind.

The city of Moscow itself occupies a prominent role in this process. In 1918 the young Soviet government moved from St. Petersburg to a city that had not been Russia's capital for more than two centuries. In the few years between the Bolshevik revolt and Stalinist terror the city became the largest, most productive, but also most risky laboratory of the Modern Movement. the formidable Although range post-1918-buildings erected in Moscow alone somewhat obscures the fact that in the whole of Russia breathtaking modern structures evolved, it is still true that the capital gathered together the most advanced talents and provided spectacular building tasks.

Based on the early-twentieth-century movements of Cubism, Futurism and Suprematism, the specific Constructivist and Rationalist architecture in this country was to become Russia's first and last contribution to the Modern Movement in the field of architecture. "Constructivism is Russia's only independent contribution to international architecture" says David Sarkisjan, director of the National Schusev Museum of Architecture in Moscow.

Industrial architecture was no small part of this overall atmosphere of departure towards an unheard of future.

Of course, Moscow is teeming with pre-revolutionary industrial buildings as well, such as F.O. Shekhtel's printing shop "Utro Rossij" of 1907. Centralization, inherent trait of all Russian developments over the centuries,

## "Move off with high speed into space" Moscow's industrial architecture threatened by neglect and ignorance

Dr Axel Föhl



Melnikov's 1933-1936 Intourist car garage. Photo: NVO

made the city from the 1890s on an important centre of manufacture and infrastructural features.

After the revolution however, huge organizations like "GOELRO", the state commission for the Electrification of Russia stimulated the construction of numerous modern power plants all over the country as a new building type that was in demand in great numbers.

In Moscow, across the river from the Kremlin, the prismatic steel-glass walls of the "MOGES" power plant, built by Ivan Zoltovskij on the Moskva shore in 1929 and forever frozen and idealized in Rodshenko's dynamic photographs, still represent today this post-World War I development, forever twinned to Lenin's famous definition: "Communism is the power of the soviets (communist councilors) coupled with the electrification of the entire country".

In a related branch of the electric technology, Moscow has produced Vladimir Suchov's outstanding "Sabolovka" transmitting tower, a 150 m structure in the tubular shape of a giant folding grill-like grid, built in 1919-22 and originally meant to be 350 m high. In 1927 this outstanding engineering genius erected numerous high-voltage transmission towers near Nischni-Novgorod on the banks of river Oka. Although scheduled as historic monuments, in June of 2005 the local power supply company decided to demolish one of them and has plans to destroy further Suchov towers.

#### The apotheosis of Modernity: Car travel

Suchov also accompanies us right into Moscow's Modernist period. He was involved in one of a whole group of buildings which probably caught the imagination contemporary architects like no other building type. Like for the Italian Futurists, the promised post-revolutionary automobile planners with a speeding-up of all forms of life as well as unlimited freedom of movement. Garage buildings count among the most original creations of 1920s Soviet architecture. In March 1926, Melnikov took over the design for a Moscow garage for over hundred Leyland buses the city had acquired from England. He developed a one-level parallelogram with seven portals at the narrow end. The very long structure avoids all monotony by the zigzagging ground plan that nevertheless followed the functional principles of traffic flow.

Today this dynamic-futuristic way of "moving with high speed into space" seems to have completely gone out of fashion. No chic Moscow nouveau-riche would dream of parking his four-wheel-drive in one of Melnikov's derelict garages. Contemporary citizens seem to look at the dwindling remains of their short-lived contribution to world architectural history with a certain shame or



The Rusakov club 1927. Photo: PD-RUSSIA

bashfulness. Constructivism is definitely not in fashion and it seems that the witnesses of the industrial and social movement of the 1920s cause especial embarrassment and are no reason to look back proudly.

Also the worker's clubs and dwelling houses so intimately linked to the rapid changes in the post-revolutionary society seem to carry a wealth of unwelcome associations with them. It will be decisive, whether the information, that constructivist architecture in Russia is unique on a world scale and that it is five past twelve for saving at least some of it, gets through quick enough to a sufficient number of people. One must be hopeful that the international April 2006 conference can be really helpful here.



## A wealth of re-use concepts for pre-Modernist industrial buildings

Unlike the difficult heritage of the 1920s, the pre-revolutionary factories of Moscow are increasingly estimed as thriving places of urban multi-purpose re-use possibilities.

About six years ago, the textile works of "Krassnij Tekstilschiki" (Red textile worker's factory) on the banks of the Vodootvodny canal have been successfully converted to the office center "Golutwinskaja Sloboda" to which the participants of the TICCIH 2000 congress were proudly invited by the investor. The feeling here was that "modernization" had gone a little far, but the project helps lowering the barrier to make use of former industrial buildings for modern purposes.

In an attractive no-more-not-yet-state are parts of the huge complex of the famous "Red

October" chocolate factory, urbanistically in a very prominent situation surrounded by water. Under the name of "ARTStrelka" - Art Headland" design, art, photography and fashion galleries have been set up in the former factory garages. Production will soon move away and there are ambitious development plans for what is called the "Golden Island" project that since some years is watched over by Zereteli's tasteless, grotesquely oversized statue of Peter the Great. It has to be seen whether high-grade projects for elite housing, office space and gastronomy will develop or if it shall be possible to more adequately work with the enormously attractive body of the gigantic chocolate factory.

There are thousands of structures within and outside of Moscow still awaiting discovery, inventorying and re-using. The wealth of unused architecture and historically prominent

buildings is nearly unlimited. Industrial structures are a considerable part of this total heritage. Western Europe has started to learn about the integration of this constitutive part of our Post-Industrial-Revolution history after the decline of traditional industries since the 1950s. There is hope that more and more possibilities arise to transfer this process both as learning and acting phase to Russia before it is too late. Let us hope that not the same mistakes will have been made that led to such intolerable losses such as the demolition of London's Euston Station, the Ruhrgebiet's Krupp administration building or Berlin's Art Nouveau mosaic factory Puhl&Wagner.

Should treasures like Melnikov's garages, the 1930s Moscow metro stations or the sites of the 1932-37 Moscow canal be demolished and forgotten the loss would be undescribable.



## World Heritage Science and Technology Expert Workshop London, 21-23 January 2008

## Dr. Stephen Hughes

■ This meeting is potentially of great importance for the development of our subject, and for TICCIH. It was in many ways a successor to the 1994 Canal Experts Meeting in Canada which resulted in the incorporation of the term 'technical importance' into the World Heritage Criteria. It was also a launch of the Global Strategy which has since raised the standing of TICCIH through its working with ICOMOS to produce a series of well received World Heritage Studies on Canals, Bridges, Workers' Settlement and Coalmines which are all accessible on-line (www.icomos.org/studies).

The recent London meeting took place in response to a request from the World Heritage Committee in 2007 for there to be a workshop on how to inscribe World Heritage Sites of Scientific Interest. This was partly in response to issues arising from the nomination of Charles Darwin's home and study-base at Down House in the United Kingdom. The meeting was attended by 45 experts from 15

countries and was jointly hosted by the United Kingdom government and UNESCO UK in London. At the insistence of Israel the remit of the meeting was enlarged to include Technology, as well as Science, and four members of TICCIH attended. These included TICCIH Board Member Professor Helmut Albrecht who gave a presentation and Life President Sir Neil Cossons who spoke on the session summing-up final recommendations of the meeting.

The majority at the meeting were practitioners of pure science. The 2003 Memorandum of understanding established in 2003 between UNESCO and the International Astromonical Union (IAU) was held-up as a model of what might be established in other subject areas. That agreement has resulted in the production of an on-line database of early observatories on the UNESCO website which is to be transferred to the IAU so that it can be expanded to include non World Heritage sites. Initially it proved difficult to have meaningful discussion of the TICCIH/ICOMOS World Heritage studies. One member of the international ICOMOS Board commented in the detailed workshops that what was required to carry forward the inscription of science and technology sites on the World Heritage List were not single-industry lists but an over-arching study of potential sites related to the major advances in science and technology.

However, Dr. Christina Cameron, Chair of the World Heritage Committee, and Sir Neil Cossons, with Dr. Barrie Trinder (TICCIH Honorary Life Member) and Dr. Michel Cotte, recognised the central role that the TICCIH/ICOMOS World Heritage Studies had in what had been achieved so far in inscribing canals and other types of industrial monuments and landscapes. Consequently the TICCIH single-industry list have been commended as exemplars in the final document produced by the meeting which goes to the next World Heritage Meeting to be held in Quebec in June 2008.

Among the recommendations being made to the World Heritage Committee is that extra finance is made available to the advisory bodies to produce a framework document identifying sites related to the major advances in science and technology. The need for further detailed studies in technology and science is to be investigated and proceeded with. There is also likely to be a review programme of the many sites already on the World Heritage List that have a substantial significance in terms of science and technology to see if there is a simple procedure to recognise this importance, possibly with additional criteria added to their inscription. The potential use of Criteria 6 for inscription on the World Heritage List will also be re-examined to see how sites associated

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with the significant discoveries of great engineers can be inscribed on the List. However, such inscriptions will need to relate to the locations and buildings that inspired such innovation, or where such discoveries took place, rather than simply birth- or dwelling-places.

This produces a major opportunity for TICCIH to participate in this revitalised process. The contextual studies for the World Heritage List on Canals etc need to be completed. At the London World Heritage meeting some reference was made to the piecemeal nature of the completion of the TICCIH studies produced so far. A good start has been made but studies for example on textile mills, the paper industry and non-ferrous mines need to be completed so that they can form part of this renewed World Heritage process. At the experts meeting there was substantial comment that the World Heritage List should be finite and that a small number of sites from each area of technical or industrial innovation should be identified, not very large numbers, and that the standard of World Heritage should not be lowered. If TICCIH cannot 'fill the gaps' in a finite period of time then such is the impetus now building in this process that this work will be done by others. Under such circumstances the TICCIH/ICOMOS co-operation that has done so much to contribute to the international standing of TICCIH will be put under strain and may collapse.

The general framework report on the key innovations in science and technology may also be an opportunity for TICCIH. In 1994 the TICCIH Board, in consultation with TICCIH National Representatives, produced a report on what they viewed as the 25 key industrial archaeological sites and landscapes from across the world. This went to the World Heritage Committee. It was felt at the time that this needed more contextual documentation and structure and so it was determined to progress this initiative by the single-industry lists or studies. However, the results of that initial consultation and prioritisation could have a renewed use as a substantial part of the intended framework document technological and industrial history.

There is little doubt that the clear recommendations produced by this recent expensive meeting of experts from across the world will be acted upon, both at and after the forthcoming World Heritage Committee at Quebec in June 2008. In the meantime there needs to be discussion on how TICCIH can participate in this renewed initiative to produce an adequate representation of science and technology on the World Heritage List.



## 1st International seminar of industrial heritage and railways culture

Aguascalientes, Mexico, February 20-22, 2008

## Belém Oviedo Gámez and Miguel Iwadare TICCIH Mexico

■ The 1st Seminar of Industrial Heritage and Railways Culture, organized by TICCIH Mexico and the Government of Aguascalientes, was held in the former locomotives workshop of the railways complex of Aguascalientes, in Mexico, with the assistance and participation of speakers from Germany, Argentina, Brazil, Costa Rica, France, England, Uruguay, Venezuela and several states of Mexico. For the first time, four congressmen from the Transport Commission of the Federal Congress participated in the Seminar and presented the conclusions of the 1st National Forum of Railroad Transportation.

The Seminar was divided into five topics: railway landscapes, railway culture and identity, knowledge of railway heritage, rescue and valuing railway heritage, and the origin and development of railway towns and cities.

The projects of rescue and reuse of old train stations and workshops presented in the Seminar were very well documented. Among these projects, the rescue plan of the former workshops of Aguascalientes Railways protruded due to the extension and importance of the site. Within this site we can find a Railway Museum, a Performing Arts Center and Convention Center, the venue for our Seminar.

The need to conceive of the railway heritage in its human and cultural concept as a whole was emphasised. There is a concern to rescue, know and preserve not only the buildings, machinery and tools, but also the worker's memory and the culture of railway towns and urban settlements, so that they can become a means of identity and integrity to the community.

One of the main worries was the lack of legislation regarding the conservation and management of industrial heritage in the world, as most of this heritage is neither inventoried or

The model of the Workshop Complex Master Project exhibited during the Seminar.

catalogued. It is important to work with local governments in order to promote understanding of this heritage in local communities and in government itself, and to raise awareness in order to protect it. One of the actions has to be directed towards the implementation of educational programs in local schools.

As part of the Seminar, the cooperation agreement between ICOMOS and TICCH signed in London in 2000 was ratified by Xavier Villalobos, president of ICOMOS Mexicano, and Belèm Oviedo, president of TICCIH Mexico. Sir Neil Cossons, life president of TICCIH, Gracia Dorel Ferrè, secretary of TICCIH Agriculture and Food section, and TICCIH Textile section, and Ernesto Becerril Miró, secretary of ICOMOS Mexicano, signed the document as witnesses.

Finally, with the signing of the agreement, the creation of a TICCIH railways section was announced. José Luis García Rubalcava will coordinate the works of this section and 15 members from 8 countries initially signed as its first members.



Luis G. del Muro (Government of Aguascalientes), Gracia Dorel Ferré (TICCIH France), Sir Neil Cossons (Life president of TICCIH), Miguel Iwadare (Ticcih Mexico), José Luis García (Secretary of the Railways Section of TICCIH), Xavier Villalobos (president of ICOMOS Mexicano), and Belém Oviedo (president of TICCIH Mexico) at the signature of the cooperation agreement between ICOMOS Mexicano and TICCIH Mexico.





#### Sweden

#### Workshop on Training and Education

Stockholm 8-11 June 2008

■ Department of Science and Technology at the Royal Institute of Technology and the Swedish Industrial Heritage Association (SIM).

Invited participants and a small number of delegates by application.

Info: Jan af Geijerstam (jang@kth.se) and TICCIH (ticcih@gencat.net).

#### China

### First Chinese International Conference on Industrial Heritage

Chengdu, 10-15 October, 2008 Free registration

For the latest information on the details of the conference, see the TICCIH web page. To atract more international participants, the organisers have reduced the cost of the meeting by making regisration free. Presentations

in English and Chinese. The final date for accepted papers is July 15th, 2008. Final registration by 1st August.

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#### Germany

## XIV TICCIH Congress: ' Industrial Heritage, Ecology and Economy'

30 August – 5 September, 2009

■ The triennial TICCIH congress focusses on the close connections between environmental, economic, technical, social and

historrical questions of the industrial heritage, in a classic region for the study of industrial change and technical development. Institute for History of Science and Technology, (IWTG) of the Technical University of Freiberg, in cooperation with TICCIH-Ozech Republic and TICCIH-Poland.

#### **Finland**

#### Joint international conference between TICCIH and ICOHTEC, the society for the history of technology

Tampere, 2010

■ Planning for this conference has just begun, following a proposal from the Museum Centre Vapriikki

(www.tampere.fi/english/vapriikki/i ndex.html).

Info: Helmuth.Albrecht@iwtg.tu -freiberg.de

# **World**Conferences

See the TICCIH web page for full conference news.

### Canada

## Black Gold: Oil Springs & Petrolia

ICOMOS Canada Industrial Heritage Committee Ontario, Spring 2008

■ A tour and symposium to mark the 150th anniversary of the first commercial oil well in North America.

Info: icomos.toronto@rogers.com

## The International Committee for the History of Technology ICOHTEC:

### 35th Symposium on Crossing Borders in the History of Technology

Victoria, 5-10 August

How technology influences and is influenced by the interaction over various types of boundaries. icohtec.uvic.ca icohtec@uvic.ca

### ICOMOS 16th General Assembly and International Scientific Symposium

September 29th- October 4th, 2008

### Germany

## IIIrd International Congress of Construction History

Cottbus. 20-24 May, 2009 Call for papers

## **Publications**

Bienes Culturales, El Plan de Patrimonio Industrial. Revista del Instituto del Patrimonio Histórico Español, 7, 2007



This special number of the Instituto del Patrimonio Histórico Español's conservation periodical presents a series of reflections around the national 'Industrial Heritage Plan' which has been developed by the Culture Ministry. It is the most direct way of finding out about the theoretical basis for the plan, including some quite unusual conceptions of the industrial heritage, and the actions for conservation and interpretation en-

visaged under the plan, followed by short summaries of twenty of the most outstanding industrial sites in the country written by the architects responsible for their preservation. These include the inventory of railway settlements, the royal metal, gunpowder and artillery factories, various industrial landscapes as well as the cement works featured on the front cover of this *Bulletin*.