



4th ICCH, Program

Tuesday 3 July, 13:00-16:15

Malaquais Site

13:00-14:00 **Registration-Welcome** (Palais des Etudes)

14:30-15:15 **Introduction** (amphi Binet)

15:15-16:15 **Keynote Lecture** (amphi Binet)

Dominique Barjot, Université Paris-Sorbonne, France

Why the World Construction Industry was Dominated by European Majors?

Sessions

Tuesday 3 July, 17:00-19:00

Malaquais Site

401. Construction History, Epistemology & Historiography

Knut STEGMANN, Institute of Historic Building Research and Conservation, ETH Zurich, Switzerland

Analysing Historical Timber Structures – A Case Study on Ernst Gladbach [1812–1896] and his Research on the “Swiss Style”

João MASCARENHAS-MATEUS, CES – Univ. of Coimbra, Portugal

Ethnographic Studies and their Contribution to Construction History in Portugal

Torsten MEYER, Institute of Historic Building Research and Conservation, ETH Zurich, Switzerland

The Science of Building as a Polytechnic Discipline in the 19th c.

Sascha ROESLER, ETH Zurich, Switzerland

Architectural Anthropology: A Knowledge-Based Approach

404. Architectural & Structural Design 1

Richard A. ETLIN, School of Architecture, Planning, and Preservation, Univ. of Maryland, College Park, MD, USA

Toward an Iconography of Stereotomy

María ANTÓN BARCO, Eva J. RODRÍGUEZ ROMERO, Juan TEJELA JUEZ, CEU San Pablo Univ., Inst. of Technology [EPS], Madrid, Spain

Builders’ Inventiveness in Madrid’s Baroque Convents: Construction Invariables

Dominic BOULERICE, York University, Toronto, ON, Canada

The Narthex Vaults of the Church of Saint-Germain-l’Auxerrois in Paris

James W.P. CAMPBELL, University of Cambridge, Great Britain

The First Complete List of All the Models Made for the Construction of St Paul’s Cathedral, London 1675-1720

411. Transfer of Knowledge: the Colonial Situations 1

Benjamin IBARRA-SEVILLA, School of Architecture, Univ. of Minnesota, MN, USA

Transmission of Building Technology from Europe to the Americas: Underlying Geometry and Stereotomy Studies of Three Ribbed Vaults Constructed in Mexico between 1535 and 1575

Randall BIRD, School of Architecture and Planning University of the Witwatersrand, Johannesburg, South Africa

The Transformation of Architecture and Construction Technology of the Merina Kingdom in Highlands Madagascar, 1820-1880

Alexandra QUANTRILL, Columbia University, New York City, NY, USA

Technical Supremacy: Tropical Architecture and Technologies of the British State

Bo-Hsun YAO, Min-Fu HSU, Dep. of Architecture, National Cheng Kung Univ., Taiwan

The Developmental Procedure of the Traditional Architectural Woodworking Tools in Taiwan

415. Craftmanship, Gender, Individuals & Communities

Shelley E. ROFF, Univ. of Texas at San Antonio, TX, USA

Building Construction in Medieval Spain: The Female Perspective

Nina BAKER, Univ. of Strathclyde, Glasgow, Scotland

Who Paints the House? Scotswomen as Housepainters and Decorators from 1820

Gemma DOMÈNECH CASADEVALL, Catalan Institute for Cultural Heritage Research, Girona, Spain

Building Trades in Catalonia during the Modern Era: The Case of Immigration to Girona City

Cristina GONZÁLEZ-LONGO,

Dimitris THEODOSSOPOULOS, Architecture, Univ. of Edinburgh, GB

From Master Mason to Architect: James Smith's Construction Techniques at the End of 17th c. in Scotland

420. The Real Estate Market, The Cost of Construction

Virginie MATHÉ, Univ. Ch. De Gaulle-Lille 3, France

How Much did Greek Temples Cost? Economic Issues of Construction in Greek Cities (4th-3rd C. B.C.)

Arnaldo MELO, Maria DO CARMO RIBEIRO, Univ. of Minho, Braga, Portugal

Construction Financing in Late Medieval Portuguese Towns [14th-16th c.]

Michela BARBOT, IDHE (Institutions et Dynamiques Historiques de l'Economie), Ecole Normale Supérieure de Cachan, France

Between Market and Architecture: The Collegio degli Architetti and the Real Estate Pricing in 16th-18th c. Milan

Gema RAMÍREZ PACHECO, Federico GARCÍA ERVITI, Faculty of Architecture at the Polytechnic Univ. of Madrid [ETSA UPM], Spain, María Jesús PEÑALVER MARTÍNEZ, Juan Francisco MACIÁ SÁNCHEZ, Faculty of Architecture at the Polytechnic Univ. of Cartagena [ARQUIDE UPCT], Spain

Building Expropriation Process for the Construction of the New Dock at the Port Of Cartagena [Spain] in the 18th c.

423. Brick & Tile

Gerold EßER, Vienna University of Technology, Austria

Masonry Constructions as Built Archives: An Innovative Analytical Approach to Reconstructing the Evolution of Imperial Opus Testaceum Brickwork in Rome

Moses JENKINS, Historic Scotland and the Univ. of Dundee, Scotland

Three Key Aspects of the History of Brick Construction in Scotland

Sara WERMIEL, Independent Scholar, Boston, MA, USA

Against Replication: Carved Brick at the Dawn of the Terracotta Age

Miles LEWIS, University of Melbourne, Australia

The Marseilles Tile

440. Industrialization & Rationalization

Kinda FARES, CNAM-HTTP, Paris, France

The Dismantled War: Barracks and Industrialization of Light Construction [1914-1918]

Vanessa FERNANDEZ, ENS Architecture Toulouse / CNAM-HTTP, Paris, France

The Simplification of the Frame: Window Experiments in the Work of Le Corbusier in the 1920s

Rafael HERNANDO DE LA CUERDA, School of Architecture, Univ. de Alcalá ETSA-UAH, Madrid, Spain

Rationalization of Systems and Materials in Construction in the Spanish Modern Movement: Fernando Garcia Mercadal, 1921-1937

Leda DIMITRIADI, ENS Architecture Paris-Malaquais, France

Post-war Industrialized Construction Processes in France and Architectural Flexibility

Wednesday 4 July, 9:00-10:15

Malaquais Site, amphi Binet

Keynote Lecture :

Ledlie Klosky, Professional Engineer, United States Military Academy, West Point, NY, USA

Men of Action - French Influence on the Founding of American Civil and Military Engineering

Sessions

Wednesday 4 July, 11:00-13:00

Malaquais Site

402. Construction History, Education & Diffusion

José Carlos PALACIOS GONZALO, Sandra Cynthia BRAVO GUERRERO, Univ. Politécnica de Madrid, Spain

Construction of a Pendentive Grid Crossing Vault

Denis ZASTAVNI, Univ. catholique de Louvain [UCL], Louvain-la-Neuve, Belgium

Maillart's Practices for Structural Design [ETH-Bibliothek's Virtual Exhibition]

Tullia IORI, Sergio PORETTI, Università di Roma Tor Vergata, Italy

The Nervi System: A Model-Game to Understand

Werner LORENZ, Roland MAY, BTU Cottbus, Germany

CH.ESS: European Summer Schools on Construction History

405. Architectural & Structural Design 2

Laurent KOETZ, CNAM-HTTP, Paris / LHAC-ENS Architecture Nancy, France

Nineteenth Century Invention under Scrutiny: Louis Auguste Boileau's Frame Construction Systems of around 1850

Ralph GHOICHE, Columbia Univ., New York City, NY, USA

The Science of the Beautiful: S.C. Constant-Dufeux and the Parabola as Constructive and Symbolic Form

Bill ADDIS, Co-editor, Construction History, Great Britain

The Development of Design Charts and other Graphical Calculation Tools for Use by Building and Civil Engineers up to the Early 20th Century

Ana RODRÍGUEZ GARCÍA, School of Architecture, Univ. de Alcalá ETSA-UAH, Madrid, Spain

Modern Interpretations of the Vernacular Tradition in the Work of J.A. Coderch 1940-1964

416. Contractors

Joëlle PETIT, CNAM-HTTP, Paris, France

Private Archives of the 18th and 19th Centuries: Sources for the History of Marble-Working in Belgium

Koen VERSWIJVER, Inge BERTELS, Ine WOUTERS, Quentin COLLETTE, Vrije Universiteit Brussel, Brussels, Belgium

The Development of Belgian Ironworks in the 19th Century: Case Studies and Reflections on Sources and Historiography

Maria Luiza de FREITAS, Federal Univ. of Pernambuco [UFPE], Recife, Brazil

Architecture and Reinforced Concrete in Brazil: The Action of the Largest Construction Companies in Brazil, Christiani & Nielsen and Wayss & Freytag

Javier MARTINEZ-GONZALEZ, Marta GARCIA-ALONSO, Sc. of Architecture, Univ. of Navarra. Pamplona, Spain

Building Modern Spain: Some Notes on Huarte y Cía

424. Structural Bricks & Tiles

Jennifer ZESSIN, John OCHSENDORF, MIT, Cambridge, MA, USA

Efficiency in Form: Thomas Jefferson's Serpentine Walls at the University of Virginia

Esther REDONDO MARTÍNEZ, Department of Building Technology, Universidad Europea de Madrid, Spain

Test on Tile Vaults in France in the 19th Century

Nan-Wei WU, University of Edinburgh, Edinburgh, Great Britain

Structural Morphology Presented on Surface Cladding: From Structural Brick to Ornamental Tile in the Westernised Far East

Gemma MUÑOZ SORIA, Universitat Politècnica de Catalunya, UPC, Spain

Load-Bearing Wall Structures in the Works of Lluís Nadal

432. Vaults & Stereotomy 1

Ursula QUATEMBER, Austrian Archaeological Institute, Vienna, Austria

Opus revinctum in Dome and Barrel Vault Constructions in Roman Asia Minor

Enrique RABASA DÍAZ, Miguel Ángel ALONSO-RODRÍGUEZ, Tomás Gil LÓPEZ, Ana LÓPEZ-MOZO, Univ. Politéc. de Madrid, Spain, José CALVO-LÓPEZ, Univ. Politéc. de Cartagena, Spain, Alberto SANJURJO ÁLVAREZ, Univ. San Pablo-CEU, Madrid, Spain

The 100 Ft Vault: The Construction and Geometry of the Sala dei Baroni of the Castel Nuovo, Naples

Marina ŠIMUNIĆ BURŠIĆ, Univ. of Zagreb, Faculty of Architecture, Croatia

Construction of Early Rib-Vaults in Croatia

Alberto SANJURJO ÁLVAREZ, Univ. CEU-San Pablo, Madrid, Spain

The Chambiges and the Construction of Vaulted Stone Spiral Staircases

436. Wood Structures 1

Silvia DANDRIA, Politecnico di Milano, Verona, Italy

Commercial Categories and Applications of Construction Timber in the Trentino-Verona Area [14th-16th Centuries]

Giuseppe ROCIOLA, ICAR Department, Polytechnic of Bari, Italy

Wooden Embankments in the Lagoon Territory of Capitanata between the 18th and 19th Centuries

Anja WÜNNEMANN, Stefan M. HOLZER, Univ. der Bundeswehr München, Neubiberg, Germany, Clemens VOIGTS, Deutsches Archäologisches Institut, Rome, Italy

Wooden "Italian" Wide-Span Roofs of German 19th Century Theatre Buildings

Stephen BUONOPANE, Bucknell Univ., Lewisburg, PA, USA, Sarah EBRIGHT, Univ. of Wyoming, Laramie, WY, USA,

Alex SMITH, Arup, New York City, NY, USA

The Timber Trusses of R.W. Smith: History, Design and Behavior

441. Prefabrication 1

Francis GUILLEMARD, CNAM, Paris, France

Charles-Henri Besnard de Quelen: A Precursor of Prefabricated Construction (provisional title)

Rafael GARCÍA GARCÍA, Universidad Politécnica de Madrid, Spain

Concrete Meccanos: Precast Constructions after the Second World War in the Netherlands

Hernando VARGAS, Universidad de los Andes, Bogotá, Colombia

RetCel: The Development of Floor and Roof Assemblies of Precast Concrete Cells in Colombia, 1949-1989

Laura GRECO, University of Calabria, Cosenza, Italy

The First ENI-SNAM Headquarters in San Donato Milanese: Some Features of Industrialization in Construction Techniques Applied to Office Buildings in the Post Second World War Period in Italy

443. Hydraulics

Anna DECRI, Institute for the History of Material Culture [ISCUM], Genoa, Italy

The Historical Aqueduct of Genoa: Materials, Techniques and History: A Way to Know

Yasuhiro HONDA, Miyazaki, Japan, Keiko NAGAMURA, Ichiro KOBAYASHI, Graduate School of Science and Technology of Kumamoto Univ., Japan

Construction Process of the Tsujunkyo Aqueduct Bridge [1854] – A Case Study of Japanese Bridge Construction in the Edo Period

Naoto TANAKA, Center for Policy Studies, Kumamoto University, Japan

The Role of the Tsujun Irrigation Canal's Construction and Maintenance in the Creation of a Cultural Landscape (Shiraito Plateau, Kumamoto, Japan)

Carlo TOGLIANI, Polytechnic University of Milan, Italy

Water Pumping Plants for Land Drainage in the Po Valley, A Case Study of The Mantua Region [1866-1940]: People, Techniques, Materials

Sessions

Wednesday 4 July, 14:30-16:30

Malaquais Site

403. Construction History, Heritage & Restoration

Ishanlosen ODIAUA, Univ. Paris 1, France, Abraham A. TAIWO, Rosemary AJAYI, D^t of Architecture, Federal Univ. of Technology, Akure, Nigeria

Use of Modern Materials in the Conservation of Traditional African Buildings

Damiana Lucia PATERNÒ, Politecnico di Milano, Italy

The Interpretation of Palladio's Building Techniques: Palazzo Chiericati and the Restorations of the 19th c.

Tom F. PETERS, Lehigh Univ., Bethlehem, PA, USA

Conceptual Problems in the Restoration and Adaptive Reuse of Historical Structures: The Rhaetian Railway Bridges in Switzerland

Franz GRAF, Univ. della Svizzera Italiana and Ecole Polytechnique Fédérale de Lausanne, ENAC – IA- TSAM, Switzerland

Material History and Conservation of Contemporary Building Fabric

406. Applied Sciences 1

Sara FRANCESCHELLI, Univ.de Lyon, ENS de Lyon, Rhône-Alpin Institute of Complex Systems, Lyon/Ensadlab, ENSAD, Paris, Antonella MASTRORILLI, ENS Architecture Lyon, LAF, France

Firmitas and the Status of the Laws of Statics and Mechanics

François FLEURY, ENS Architecture Lyon, France

Some Aspects of John Wallis's Structural Mechanics

Patricia RADELET-DE GRAVE, Univ. catholique de Louvain, Louvain-la-Neuve, Belgium

Newtonian Scientists on the Relation between a Catenary Curve and an Arch Supported by its own Weight

Luc TAMBORERO, ENS Architecture Paris-Malaquais-GSA, France

Curves Mastery at the Royal Academy of Architecture: The Case of Jules Hardouin-Mansart

413. Transfer of Knowledge: Political Initiatives

Francisco PRADO, María F. VARGAS, Univ. Católica de Chile, Santiago, Chile, Renato D'ALENÇON, Daniel KORWAN, Johanna MOSER, Technische Univ. Berlin, Germany

Traces of Construction Following Migration: Transverse Gable; Massive Timber and Carpenter's Marks in the Houses of the 19th Century German Settlers in Southern Chile

Martin TRAUTZ, RWTH Aachen, Germany, Friedmar VOORMANN, Karlsruhe Institute of Technology, Germany

Early Iron Bridge Construction for the Grand Duchy of Baden and for Central Europe

Hilal Tuğba ÖRMECİOĞLU, Akdeniz Univ. FFA, Dep. of Architecture, Antalya, Turkey, Bilge KÜÇÜKDOĞAN, Gazi Univ. NIKER-TR Project Office, Ankara, Turkey, ASLI ER AKAN, Ministry of Science, Industry and Technology, Ankara, Turkey

The Roots of Foreign Effects in Development of the Turkish Construction Sector [1719-1933]

Riichi MIYAKE, Fuji Women's University, Sapporo, Hokkaido, Japan, Michiko MAEJIMA, Keio University, Tokyo, Japan

A Study of Military Facility Planning from the Viewpoint of Technological Transfer from France to Japan

417. Organization of the Construction Site

Lia BARELLI, Sapienza Università di Roma, Italy

Construction Methods in Carolingian Rome [Eighth-Ninth Centuries]

Andrea BONAVIDA, Università Iuav di Venezia, Italy
Building the New Prisons of Venice and their Bridge [1591-1604]

Matthieu PINON, ENS Architecture Paris-Malaquais - GSA, France
The Building of the Arsenal of Le Havre in the 17th and 18th Centuries

Anne CONCHON, Univ. Paris 1-IDHE, France, Katherine McDONOUGH, Stanford Univ., CA, USA
Road Construction Sites in 18th-Century France: Labor and Administration in Action

425. Stone

Dimitris THEODOSSOPOULOS, Univ. of Edinburgh, GB, John BARBER, Graeme CAVERS, Andy HEALD, AOC Archaeology Group, Loanhead, Midlothian, GB
The Achievement of Structural Stability in the Drystone Iron-Age Broch Towers in North Scotland

Turgut SANER, Kaan SAĞ, ITU Istanbul, Turkey
The Aeolian-Style Polygonal Masonry in Larisa [Buruncuk] and its Regional Context

Wido J. QUIST, TU Delft, the Netherlands, Timo G. NIJLAND, TNO, Delft, the Netherlands
A Mining Engineer in Heritage Land: A.L.W.E. Van der Veen and Early Research on Natural Stone for the Netherlands State Commission on Conservation [1920-1936]

Angelo BERTOLAZZI, D^l. of Architecture, Univ. of Padua, Italy; ENS Architecture Paris-Malaquais- GSA, France
Stone Cladding Techniques in French Modern Architecture [1920-1940]

433. Vaults & Stereotomy 2

Rosa SENENT DOMÍNGUEZ, Miguel Ángel ALONSO RODRÍGUEZ, Enrique RABASA DÍAZ, Polytechnic Univ. of Madrid, Spain, José CALVO LÓPEZ, Polytechnic Univ. of Cartagena, Spain
The Irregular Ribbed Vault of the Sacristy of the Cathedral of Saint-Jean Baptiste in Perpignan

Rafael Martín TALAVERANO, Carmen PÉREZ DE LOS RÍOS, Rosa SENENT DOMÍNGUEZ, Polytechnic Univ. of Madrid, Spain
Late German Gothic Methods of Vault Design and their Relationships with Spanish Ribbed Vaults

Stefania PETRALLA, Fac. di Architettura, Politecnico di Bari, Italy
Safavid Ribbed Vaults as a Masterpiece of Iranian Construction Techniques

Giuseppe FALLACARA, Fac. di Architettura, Dipart. ICAR, Politecnico di Bari, Italy
The Lecce Vault: History, Construction Techniques and New Design Perspectives

444. Infrastructure & Public Works, Bridges

Ivan FERRARI, Univ. of Salento, Lecce, Italy
The Roman Bridges of the Via Traiana: An Innovative Building System

Stefan M. HOLZER, Anja WÜNNEMANN, Universität der Bundeswehr München, Neubiberg, Germany
Innovation in 19th Century Vaulted Bridge Construction

Dario A. GASPARINI, Case Western Reserve University, Cleveland, OH, USA
Sunderland, Birdsall and the Roebling Co: Development and Diffusion of Construction Technologies for Suspension Bridges, 1928-1952

Eberhard PELKE, Hessen Mobil – Roads & Traffic Management, Wiesbaden, Germany, Karl-Eugen KURRER, Ernst & Sohn, Berlin, Germany
The Development of Multi-Cable-Stayed Bridges

306. Rules & Standards: Building Regulation Compared

Julien PUGET, UMR 6570 TELEMME – MMSH, Aix-en-Provence, France
Construction Market Organization in the 17th century: Norms, Actors and Practices Examples of Extension Plans in Aix and Marseille

María Teresa PALIZA MONDUATE, University of Salamanca, Salamanca, Spain
Limitations Stemming from the Legal Regulation of Designs of Foreign Architects in Spain in the 19th Century and their Consequences on the Building Process. The Case of the Basque Country: Origin, Development and Construction of English, French and Belgian Designs

Robert CARVAIS, CNRS-Univ. Panthéon-Assas, Paris / ENS Architecture Versailles, France
For a Comparative Study of Construction Law

Wednesday 4 July, 17:30-18:30

Keynote Lecture :

Shigeru Ban, Architect, Tokyo, Japan

Works and Humanitarian Activities

CNAM Site

Sessions

Thursday 5 July, 9:00-11:00

La Villette Site

410. Structural Analysis & Modelling 1

David WENDLAND, TU Dresden, Germany

Arches and Spirals: The Geometrical Concept of the Curvilinear Rib Vault in the Albrechtsburg at Meissen and Some Considerations on the Construction of Late-Gothic Vaults with Double-Curved Ribs

Maurizio BROCATO, Lucia MONDARDINI, ENS Architecture Paris-Malaquais-GSA, France

An Insight into Abeille's Flat Vault through Numerical Analyses

Thierry CIBLAC, ENS Architecture Paris La Villette / CNRS MAP-MAACC, Paris, France

Analysis of Philippe de la Hire's Arch Theory Using Graphic Statics

Santiago HUERTA, Univ. Politécnica de Madrid, Spain

Structural Analysis of Thin Tile Vaults and Domes: The Inner Oval Dome of the Basílica de la Virgen de los Desamparados in Valencia

414. Technical Literature, Images & Representation

Maria Grazia D'AMELIO, Univ. Tor Vergata, Rome, Italy, Fabrizio DE CESARIS, Univ. La Sapienza, Rome, Italy

Moving St. Peter's Obelisk as Seen in the Engravings of Giovanni Guerra and Natale Bonifacio: A Transmission of Knowledge, or Pure Propaganda?

Jean-Sébastien CLUZEL, Institut national d'histoire de l'art, Paris, France

Hokusai Manga as a Reference Construction Book

Javier GIRÓN, Univ. Politécnica de Madrid, Spain

A Review of the Depiction of Ancient Construction by Charles Chipiez in L'Histoire De l'Art

Hilary BRYON, School of Architecture+Design, Virginia Tech, VA, USA

Construing Construction with Drawings: Robert Willis' and Auguste Choisy's Axonometric Representations of Vaulted Structures

418. Scaffolding and Machines

Lorena FERNÁNDEZ CORREAS, Univ. of Valencia, Spain

The Study of Medieval Lifting Machines Thanks to Iconography: An Example in Mediterranean Machinery

Inge BERTELS, Vrije Univ. Brussel / FWO & Univ. Antwerpen, Brussels / Antwerp, Belgium

Scaffoldings: 19th Century Discourses on Innovative Scaffolding Techniques within Architecture and Construction Journals

Richard C. RYAN, Univ. of Oklahoma, Norman, OK, USA

Development and Use of Mechanized Heavy Construction Equipment in the United States

Nicoletta MARCONI, Univ. of Rome Tor Vergata, Italy

Innovation and Tradition in the Reconstruction of the Basilica of St. Paul Outside the Walls in Rome [1825-1928]: Technologies, Procedures, Protagonists

426. Reuse & Recycling

Stéphane BÜTTNER, Centre d'études médiévales d'Auxerre, CNRS/Univ. de Bourgogne, Auxerre, France

The Use of the "Already There": Reuse and Recycling for Monumental Building in the West in Late Antiquity and the Medieval Period

Emanuela MONTELLI, Università degli Studi "Roma Tre", Rome, Italy

The Reuse of Granite Columns in Rome, 15th-16th Centuries

Martin BACHMANN, German Archaeological Institute, Istanbul, Turkey

The Revival of Classical Building Techniques in Late Ottoman Architecture in Bergama, Turkey

Sachiko OKADA, Ichiro KOBAYASHI, Dep. of Civil and Environmental Eng., Graduate School of Sc. and Tech., Kumamoto Univ., Japan, Koichi NAKAMA, Dep. of Civil Eng., Graduate School of Tech., Kyushu Inst. of Tech., Kitakyushu City, Japan

A Study on Distribution and Reuse of Tram Line Paving Stones in Japan

427. Earthen & Plaster Structures

Annick DANEELS, Univ. Nacional Autónoma de México, Mexico City, Luis Fernando GUERRERO, Univ. Autónoma Metropolitana Xochimilco, Mexico City, Mexico

Earthen Building Techniques in the Humid Tropics: The Archaeological Site of La Joya, Veracruz, México

Anna ANTONINI, Politecnico di Milano, Italy

Persistence of the Perishable. Wattle-and-Daub Architectures in the Roman Period: A Census of the Archaeological Findings in Gallia Cisalpina and the Case of Mediolanum

Fernando VEGAS, Camilla MILETO, Maria DIODATO, José GARCÍA SORIANO, Carles GRAU GIMÉNEZ, Univ. Politècnica de València, Spain

Traditional Structures Made with Gypsum Pillars: A Reasoned Hypothesis

Luca BOIARDI, Maria Regina TEDESCHINI, Riccardo GULLI, Bologna Univ., Italy

History and Technique of Italian Wooden Floor System Based on Reeds and Gypsum Plaster Frame: The Case of Reggio Emilia

434. Shell & Thin Vaults

Ciarán CONLON, University College Dublin, Ireland

James Hardress de Warrene Waller and his Contribution to Shell Roof Construction, Concrete and Fabric Formwork Technologies

Pepa CASSINELLO, Polytechnic Univ. of Madrid, Spain

Pioneer Concrete Shells in Spanish Architecture: The Innovation System-Design of Ildefonso Sánchez del Río

Roland MAY, BTU Cottbus, Germany

Shell Wars: Franz Dischinger and Ulrich Finsterwalder

Maris SUITS, Estonian Academy of Arts, Tallinn, Estonia

Reinforced Concrete Shells in Estonia during the Soviet Period: Science and Practice

442. Natural & Technical Risk, Earthquake Design

Hélène DESSALES, Ecole normale supérieure, AOROC, Paris, France

Not Built in a Day: Awareness of Vulnerability and Construction Techniques in Roman Times

Giovanni FATTA, Tiziana CAMPISI, Calogero VINCI, Dipartimento di Architettura [DARCH], Univ. degli Studi di Palermo, Italy

Tiled Vaults in Western Sicily: Originality and Continuity of an Imported Building Technique

João CALDAS, Rita LISBOA, Instituto Superior Técnico–Universidade Técnica de Lisboa, Portugal

The Use of Vaults in the Reconstruction of Pombaline Downtown Lisbon

Akio SASSA, RFR Engineers, Paris, France

The First Earthquake-Resistant Structures in Japan: Lessons from the Earthquake of Ischia [1883], Nobi [1891] and San Francisco [1906]

445. Infrastructure & Public Works, Transportation

Matteo PORRINO, ENSA Strasbourg/GSA ENSA Paris-Malaquais, Paris, France

Notes on Technological and Architectural Aspects of London Transport Power Stations and Substations, 1880-1915

Ted SHELTON, University of Tennessee, Knoxville, TN, USA

The Highway Comes to the American City: Automobility, Urbanity and the Functioning of City Streets

Evangelia CHATZIKONSTANTINOY, Paschalis SAMARINIS, National Technical University, Athens, Greece, Areti SAKELLARIDOU, Rheinisch-Westfaelische Technische Hochschule, Aachen, Germany

Road Construction in Greece during the Interbellum: The Makris Project

Yuji HOSHINO, Sachiko OKADA, Department of Civil and Environmental Engineering, Graduate School of Science and Technology, Kumamoto University, Kumamoto City, Japan, Daijiro KITAGAWA, The Agency for Cultural Affairs, Tokyo, Japan

Historical Research for Planning and Construction of Misumi Port

Sessions

Thursday 5 July, 11:30-13:00

La Villette Site

303. Transfer of Knowledge: the Colonial Situations 2

Jorge GALINDO DÍAZ, Univ. Nacional de Colombia, Manizales branch, Colombia

Barbetti Serafin: Builder of Vaulted Bridges in South-Western Colombia [c. XIX]

Hsin-Yao HSU, Graduate School of Engineering, Univ. of Tokyo, Japan

On the Construction Process of Government Buildings in Taiwan during the Japanese Colonial Period, 1895-1945

Hélène VACHER, ENS Architecture Nancy, France

French overseas territories in the 1950s and building development programs

304. Rules & Standards: Specifications

Beatrice Maria FRACCHIA, Politecnico di Torino, Italy

History of Construction in the 18th Century through the "Istruzioni" Written by Filippo Juvarra

History of Construction through the "Istruzioni" by Filippo Juvarra

Katie LLOYD THOMAS, Newcastle University, Great Britain

Describing Construction: Building Specifications and the 'Process-Based' Clause

Jeroen CORNILLY, Research Foundation Flanders [FWO]/Catholic University of Leuven, Belgium

Contractors of 19th-Century Public Works in Belgium: Looking for a Research Approach for the Rural Areas

310. Technical Literature, Publications

Dermot O'DWYER, Ronald COX, Dep. of Civil, Structural and Environmental Engineering, Trinity College Dublin, Ireland

George Semple and the Reconstruction of Essex Bridge in Dublin 1753-1755

Christoph RAUHUT, Institute of Historic Building Research and Conservation, ETH Zurich, Switzerland

Handbooks on Construction Site Supervision in the 19th Century

Emmanuelle MINAULT-RICHOMME, Bibliothèque du CNAM

Conservatoire Numérique des Arts et Métiers (CNUM): Constructive Literature Digitized (provisional title)

314. Deconstruction & Reconstruction

Philippe BERNARDI, CNRS-Lamop, Paris, France, Daniela ESPOSITO, Dip. di Storia, Disegno e Restauro dell'Architettura, Sapienza-Università di Roma, Italy

For a History of Deconstruction

Nick BEECH, Bartlett UCL, GB

Rescue, Recover! The demolition industry and its relationship to the London County Council Architect's Department in the Second World War

Richard BURT, Auburn University, Auburn, AL, USA

The Builder's Flying Squads: An Analysis of the Ministry of Works Special Repair Service Activities during WWII

316. Reinforced Concrete, The Hennebique Companies

Hermann SCHLIMME, Bibliotheca Hertziana, Max Planck Institute for Art History, Rome, Italy

François Hennebique's Patents as Applied on the Building Site: The Mercato Orientale in Genoa [1896-1899] and the Creation of a Local Construction Network

Mónica SILVA-CONTRERAS, Univ. Iberoamericana, México City, Mexico

Béton Armé in a Sinking City: Mexico 1902-1914

Stephanie VAN DE VOORDE, Ghent University/Centre for Flemish Architectural Archives [CVAa], Antwerp, Belgium,

Rika DEVOS, Ghent University/University College of St. Lucas Architectuur, Ghent and Brussels, Belgium

The 'Scientification' of Reinforced Concrete in Belgium during the Interwar Period: Development and Dissemination of Scientific, Theoretical and Technical Knowledge

317. Metal Structures 1

Lara SLIVNIK, Univ. of Ljubljana, Fac. of Architecture, Slovenia

A Prefabricated Cast Iron Three-Hinged Arch Bridge in Ljubljana

Volker WETZK, Brandenburg University of Technology, Cottbus, Germany

Five Historic Bridge Bearings: Material Research on Cast Steel

Bernard ESPION, Univ. Libre de Bruxelles, Belgium

The Viereendeel Bridge at its Heyday: Rational Design, Experiments and Brittle Failure

Thursday 5 July, 14:00-19:00

Visits

Friday 6 July, 9:00-10:15

Malaquais Site, amphi Binet

Keynote lecture :

Antonio Becchi, Max Planck Institute for the History of Science, Berlin, Germany

Looking for an Equilibrium Point: A Moonwalk with Vitruvius and Gyro Gearloose

Sessions

Friday 6 July, 11:00-13:00

Malaquais Site

407. Applied Sciences 2

Alberto GRIMOLDI, Politecnico di Milano, Italy

Guarini's Flat Vaults and Thin Vaults on Wooden Beams in the Duchy of Modena

Carlo BIANCHINI, Dip. di Storia, Disegno e Restauro dell'Architettura, Sapienza-Università di Roma, Italy

The Role of Stereotomy in Guarino Guarini's Space Research

Andreas KAHLOW, Univ. of Applied Sciences Potsdam, Germany

Theory and Practice in Timber Construction 1800-1830

Federico FOCE, Dip. di Scienze per l'Architettura, Univ. degli Studi di Genova, Italy

Same Title, New Contents: Saint-Venant's Revised Edition [1864] of Navier's Résumé Des Leçons Sur L'application De La Mécanique [1826, 1833]

408. Structural Analysis & Modelling 2

Jacques HEYMAN, University of Cambridge, GB

The Membrane Analysis of Thin Masonry Shells

Timothy COOKE, John OCHSENDORF, MIT, Cambridge, MA, USA

The Temple of Diana at Baiae: History and Structure of an Imperial Roman Dome

Alejandra ALBUERNE, Martin WILLIAMS, Dep. of Engineering Science, Univ. of Oxford, GB, Janet DELAINE, Fac. of Classics, Univ. of Oxford, GB

On the As-Built Geometry of the Vaults of the Basilica of Maxentius

Javier SUÁREZ, Laura CIRERA, School of Architecture, Univ. of Granada, Spain

Structural and Constructive Analysis of the Acequia Real Aqueduct in the Alhambra, Granada

419. Management of the Construction Site

Raúl ROMERO MEDINA, Univ. CEU-Cardenal Herrera, Spain, Manuel ROMERO BEJARANO, Univ. de Sevilla, Spain

Building during the War of Granada: The Project for Reconstructing Fuengirola in 1485

Catherine ISAAC, Univ. Toulouse II – Le Mirail, France

Reconsidering the "Considerable Expense" Involved in Building the Lavaur Bridge in Languedoc [1769-1791]

Kenneth F. ROBSON, Univ. of Oklahoma, Norman, OK, USA

Managing the Design and Construction of the Empire State Building: Are There Lessons for Today's Projects?

Camilo VILLATE, Brando TAMAYO, Univ. of Los Andes, Bogota, Colombia

The Avianca Tower: Practices Driving Technical Innovations in a Construction Firm in the 60s

421. Institutions

Malcolm DUNKELD, London South Bank Univ., London, GB

The Great Hall of the Institution of Civil Engineers Headquarters Building

Christiane WEBER, Karlsruhe Institute of Technology, Germany, Volker ZIEGLER, Universitätsarchiv Stuttgart, Germany

Construction Material Testing at MPA Stuttgart during the Third Reich

Alicja GZOWSKA, Institute of Art History, Univ. of Warsaw, Poland

An Institution for Structural Innovation: BISTYP [Office for the Study and Design of Industrial Building Types] in Postwar Poland

Ana Paula KOURY, São Judas Tadeu Univ., São Paulo, Brazil

Brazilian Construction Center: Initiative for Management of the Brazilian Housing Construction Industry [1969-1972]

428. Mortar

Frédéric DAVIDOVITS, Geopolymer Institute, Saint Quentin, France

Geological Origin of the Reagents Constituting Roman Mortar, According to Vitruvius

Reinhard HEINZ, Vienna, Austria

The First Verifiable Application of Cast Mortar in Prefabricated Construction in the Coffered Ceiling of the Early Hellenistic Mausoleum of Belevi

Barbara THUSWALDNER, Institute of History of Art, Building Archaeology and Restoration, Dep. for History of Architecture and Building Archaeology, Univ. of Technology, Vienna, Austria

The Use of Mortar in Late Hellenistic Construction: The Case of the Octagon in Ephesus

Marco COFANI, Politecnico di Milano – DiAP, Italy

The Knowledge and the Development of Mortars between the 18th and 19th Centuries: The Case-Study of the Verona Amphitheatre Restoration

429. Reinforced Concrete, Reception & Dissemination

Cédric AVENIER, Anne COSTE, Lab. Cultures constructives, ENS Architecture Grenoble, France

Auguste Perret: The Grenoble Orientation Tower – Architecture, Art and the Press

Edoardo CURRÀ, Dep. of Civil, Building and Environmental Engineering, Univ. of Rome Sapienza, Italy

Manual Abilities and Modern Constructive Techniques in a Building by Arturo Hoerner: The S. A. Supertessile Plant and the System Baroni-Lüling, Rieti-Italy, 1926

Andrew RABENECK, Imperial College, London, GB

The Transformation of Construction by Concrete

Jesús ANAYA DÍAZ, Universidad Politécnica de Madrid, Madrid, Spain

Reinforced and Prestressed Concrete in High-Rise Construction in Spain, 1950-1975: Technique and Innovation

435. Wood Structures 2

Zeynep ERES, Eylem ÖZDOĞAN, Istanbul Univ., Turkey

A New Approach in Studying the Structural Systems of Prehistoric Wooden Post Buildings: A Case Study from Aşağı Pınar in Eastern Thrace

Dietmar KURAPKAT, German Archaeological Institute, Berlin, Germany

A Roof under One's Feet: Early Neolithic Roof Constructions at Göbekli Tepe, Southeastern Turkey

Alexandra HARRER, Tsinghua University, Beijing, China

Fan-shaped Bracket Sets and their Application in Different Building Materials: A Discussion of the Chinese Fangmu Tradition and Jin-dynasty Tomb Architecture in Southwest Shanxi Province

Christof KRAUSKOPF, Brandenburg State Office for the Preservation of Monuments and Sites, Wünsdorf, Germany

Medieval Timber Structures in Eastern Germany: Archaeological Evidence from Eberswalde

438. Interior Environment, Heating

Lynne C. LANCASTER, Ohio Univ., Athens, OH, USA

Heated Vaulting in Roman Britain and the Invention of Hollow Terracotta Voussoirs

Rainer ATZBACH, Aarhus Univ., Denmark

The Stube: Constructive Evidence for the Concept of a Smoke-Free Heated Living Room between the Alps and Southern Scandinavia

Spyridon PAPAVALASILEIOU, Magdalini MAKRODIMITRI, James CAMPBELL, Univ. of Cambridge, GB

The Construction and Integration of Historic Heating Systems in Churches in the United Kingdom from the 17th to the Early 20th Century

Carlo MANFREDI, Politecnico di Milano, Italy

Comfort Versus Industry: Maintenance of the Royal Palaces of Milan during the 1860s

Sessions

Friday 6 July, 15:00-16:30

Versailles Site

302. Construction History, Sources & Methods 2

Pierre GUIBERT, Centre de Recherche en Physique Appliquée à l'archéologie, CNRS-Univ. de Bordeaux 3, France, et alii.

The Use of Dating Methods for Studying Building Materials and Constructions: State of the Art and Current Challenges

Rita VECCHIATTINI, Dep. of Sciences for Architecture, Univ. of Genoa; ISCUM – Institute of the History of Material Culture, Genoa, Italy, Giovanni L.A. PESCE, Dep. of Architecture and Civil Engineering, Univ. of Bath, GB /ISCUM – Institute of the History of Material Culture, Genoa, Italy

A Study on the Traditional Production of Lime: The Role of Oral Sources

Mariachiara FALIVA, Thornton Tomasetti, Inc., New York City, NY, USA

Integrated Methods for the Study of Construction Techniques

305. Rules & Standards: Architectural and Urban Norms

Juliette HERNU-BELAUD, Univ. of Nantes, Institut national d'histoire de l'art, Paris, France

The Architecture pratique by Pierre Bullet [1691] and the Normalisation of the Construction Process

Esperanza GONZÁLEZ REDONDO, Alcalá University, Madrid, Spain

The Structure of Houses in Madrid 1669-1900: Buildings and Documents

Silvia Amaral PALAZZI ZAKIA, Faculdade de Arquitetura e Urbanismo de São Paulo [FAU-USP], Brazil

The First Building Code of Campinas – 1934: A Legal Instrument of the Urban Modernization Process of the City

308. Training & Education 1, Engineers

Willemijne LINSSEN, Krista DE JONGE, Univ. of Leuven, Belgium

How Belgian Engineers Passed on Their Knowledge between 1830 and 1865: Education, Association and Publication

Mike CHRIMES, Institution of Civil Engineers, London, GB

Short of Education or Short of Engineers: British Civil Engineering 1890-1910

Simona TALENTI, Univ. of Salerno, Italy

The Italian Engineers' Architecture and Technique Training

309. Technical Literature, Manuscripts

Paola TRAVAGLIO, Politecnico di Milano, Italy

"De Fenestris": An Unpublished Treatise from the Mid 15th Century on the Construction of Windows and Stained Glass

Francesco MENCHETTI, Laura S. PELISSETTI, Fac. of Science and Architecture, Polytechnic of Milan, Italy

Guidobaldo del Monte as Architect and the Construction of Santa Maria degli Angeli in Pesaro

Marisa TABARRINI, Sapienza Università di Roma, Rome, Italy

An Unpublished Treatise on Waters by Vincenzo Della Greca, Civil and Military Architect of the Camera Apostolica: A Source of Carlo Fontana's Utilissimo Trattato Delle Acque Correnti

311. Craftmanship & Technical Tasks

Silke KAPP, Ana Paula BALTAZAR, Univ. Federal de Minas Gerais, Belo Horizonte, Brazil

Metropolitan Vernacular: On the History of Informal Construction in a Brazilian City

Gülşah ÇELİK, Fac. of Architecture, Middle East Technical Univ., Ankara, Turkey, Kemal Reha KAVAS, Dep. of Architecture, Akdeniz Univ., Antalya, Turkey

A Case Study of Local Builder's Carpentry Tools: Traditional Constructions of Ürünlü, Turkey

Elizabeth COOK, College of William and Mary, Williamsburg, VA, USA

Building Culture and Competence: Demonstrating Knowledge on Construction Sites in 18th-Century Virginia

315 Metal

Maxime L'HERITIER, Inst. de Recherche sur les Archéomatériaux-CNRS, Orléans, France, Philippe DILLMANN, LAPA IRAMAT CNRS, France, Arnaud TIMBERT, Univ. Lille 3 – CNRS, France, Philippe BERNARDI, Univ. Paris 1 – CNRS-LAMOP, Paris, France
The Role of Iron Armatures in Gothic Constructions: Reinforcement, Consolidation or Commissioner's Choice

Guillaume FONKENELL, Musée du Louvre, Paris, France
The Roof Frame of the Salon Carré

Paul DOBRASZCZYK, Univ. of Manchester, GB
A Victorian Ironworld: Cast Iron, Ornament and Brighton

320. Prefabrication 2

Yvan DELEMONTEY, Lab. of Techniques and Preservation of Modern Architecture [TSAM], Ecole Polytechnique Fédérale de Lausanne [EPFL], Switzerland

Flaine: Mountain City; The Building of a High Altitude Citadel

Maite PALOMARES FIGUERES, Jéscica MORENO PUCHALT, Veronica LLOPIS PULIDO, Polytechnic Univ. of Valencia, Spain
Architectural Expression in the 60s and the Prefabrication of Formwork

Sonja HNILICA, Markus JAGER, TU Dortmund, Germany
Competing Building Systems: Post-war University Architecture in the Ruhr Area

Sessions

Friday 6 July, 16:50-18:20

Versailles Site

301. Construction History, Sources & Methods 1

Amparo GRACIANI, Univ. of Seville, Spain
Mesopotamian Foundation Deposits in the Louvre Museum

Dirk BÜHLER, Deutsches Museum, Munich, Germany
The Collection of the Deutsches Museum: A Source for Research on the History of Construction

Carolina HELDT D'ALMEIDA, Instituto de Arquitetura e Urbanismo da Universidade de São Paulo [IAU-USP], São Carlos, Brazil
Analysis of the Construction Site as a Historical Document of its Production Process

307. Training & Education 2, Architects

Hélène ROUSTEAU-CHAMBON, Univ. de Nantes, France
Teaching Construction in the Académie Royale d'Architecture

Valérie NEGRE, ENS Architecture Paris-La Villette, CNAM- HTTP, Paris, France
Oral Transmission and the Use of Models in the Teaching of Architecture and Construction at the Turn of the 19th c.

Guy LAMBERT, ENS Architecture Paris-Belleville, CNAM- HTTP, Paris, France
"Purpose" and "Means" of Architectural Design: Construction in Julien Guadet's Teachings in Architectural Theory

312. Labor Market

Linda CLARKE, Charlie McGUIRE, Christine WALL, Univ. of Westminster, London, GB
The Significance of Building Labour to the Production of the Built Environment

Jörn JANSSEN, European Institute for Construction Labour Research, London, GB, Ernst-Ludwig LAUX, Industriegewerkschaft Bauen-Agrar-Umwelt, Mühlthal, Germany
Construction Work in Four German States: before, during and after the Cold War

Christine WALL, Linda CLARKE, Charlie MCGUIRE, Centre for the Study of the Production of the Built Environment [ProBE], Univ. of Westminster, London, GB
Concrete Constructors: Oral History Accounts of Building Work on a Large, Complex Site in 1960s Britain

313. Ownership of Property

Musa SROOR, Dep. of History, Birzeit Univ., Palestine

The Role of the Islamic Pious Foundations [Waqf] in Building the Old City of Jerusalem during the Islamic Periods [637-1917]

Clara PIMENTA DO VALE, Centre for Architecture and Urbanism, Faculty of Architecture, University of Porto, Porto, Portugal, Vítor TRINDADE ABRANTES, Faculty of Engineering, University of Porto, Porto, Portugal

Urban Dynamics and Horizontal Property: Case Study of the Boavista Axis, Porto, Portugal

Miguel ARTOLA BLANCO, Univ. Autónoma de Madrid, Spain

Changing Patterns in Residential Construction and the Real Estate Market: Spain, 1910-1960

318. Interior Environment, Lighting

Laura BALBONI, Paolo CORRADINI, Angelo LANDI, Politecnico di Milano, Italy

Artificial Light in the Aristocratic Palaces in the Po Valley between the 17th and 18th Centuries

Giulio SAMPAOLI, Accademia di Architettura, Mendrisio, Switzerland

Artificial Light in Architecture in France and Italy during the First Years of the 20th Century: From Gas Light to Electric Light

Giulia MARINO, EPFL-ENAC, Lab. of Techniques and Preservation of Modern Architecture – TSAM, Lausanne, Switzerland

The World Health Organization Headquarters in Geneva [1960-1966]: How Mechanical and Electrical Services are Integral to Reading Built Form

319. Saving & Recovery Energy

Kambiz MOSTHTAGHE GOHARI, ENS Architecture Paris-Malaquais-GSA, France

The Morphological Evolution of the Vertical Axle Windmill between the Second and the 18th Centuries A.D.

Daniel A. BARBER, Barnard COLLEGE, Columbia University, New York City, NY, USA

Constructing a Solar House, c. 1959

Samaher WANNOUS, CNAM- HTTP, Paris, France

The Thermal Insulation of Facades after the Oil Crisis of 1974 to the 80s

322. Infrastructure & Public Works

Carla Maria AMICI, Univ. del Salento, Lecce, Italy

A "Cloaca Maxima" in the Roman Town of Privernum, Lazio, Italy: The Project, the Plan, the Construction

Rosana MUÑOZ, Federal University of Bahia, Salvador, Brazil

The Most Important Construction in Bahia's 19th Century History: Salvador's Mountain Retaining Wall

Davide DEL CURTO, Francesco Carlo TOSO, Politecnico di Milano, Italy

Technical Systems and Networks for a Modern High Altitude Settlement: The Construction of the Sanatorium Village in Sondalo [1932-1946]

Friday 6 July, 18:40-19:40

Versailles Site

Keynote Lecture:

Robin Middletown, Department of Art History and Archaeology, Columbia University, New York City, NY, USA

Jean Rondelet's Pioneering Attempt to Write a History of Construction, 1801-02

Saturday 7 July, 9:00-10:00

Malaquais Site, amphi Binet

Keynote Lecture:

Susan Webster, Department of Art and Art History, College of William & Mary, Richmond, VA, USA
Constructing the Future, Consolidating the Past: Andean Builders in Colonial Quito

Sessions

Saturday 7 July, 10:30-12:30

Malaquais Site

409. Structural Analysis & Modeling 3

Paula FUENTES, Technical University of Madrid, Spain

The Islamic Crossed-Arch Domes in Cordoba: Geometry and Structural Analysis of the "Capilla de Villaviciosa"

Fouad GHOMARI, Aboubekr Belkaid University, Tlemcen, Algeria

The Minaret of the Mosque of Mansourah: A Half-Ruin Elucidated

Maria Teresa COMO, Univ. degli studi Suor Orsola Benincasa, Naples, Italy

Structural Devices Concerning the Progressive Outer Shell Construction in Brunelleschi's Dome

José Antonio GARCÍA ARES, Ignacio Javier GIL CRESPO, Polytechnic University of Madrid, Spain

The Ciborium or Lantern of Valencia Cathedral: Geometry, Construction and Stability

412. Transfer of Knowledge: Scientific Exchanges

Arturo ZARAGOZÁ CATALÁN, Academia de Bellas Artes de San Carlos de Valencia, Spain, José CALVO-LÓPEZ, Pau NATIVIDAD-VIVÓ, Univ. Politécnica de Cartagena, Spain

Stereotomic Exchanges between Iberia and France in the 16th Century: Benoît Augier, Valencian Stairways and the Escalier de Toulouse

Hentie LOUW, SAPL Newcastle University, GB

'Machine pour ouvrir une fenêtre par contre-poids': A Case Study Revealing the Nature of Invention and Innovation in Late-17th Century Northern European Architecture

Fabio TELLIA, Jose Carlos PALACIOS GONZALO, Escuela Técnica Superior de Arquitectura, Univ. Polit. de Madrid, Spain

The Squinch Vaults in Joseph Ribes' Llibre De Trasas De Viax Y Muntea

Linnéa ROLLENHAGEN TILLY, CNAM-HTTP, Paris, France

Knowledge of Architecture and Building Technologies in 18th Century Sweden

422. Politics & Policies

Roberto Eustaáquio DOS SANTOS, Pontificia Universidade Católica de Minas Gerais, Brazil

The Plot of Concrete in Brazil: A History of the Technology Diffusion of Reinforced Concrete

Ricardo TOLOSA, Jorge GALINDO DÍAZ, Universidad Nacional de Colombia, Manizales campus, Manizales, Colombia

Construction of Railway Workshops in Colombia during the First Half of the 20th Century: A National Engineering Triumph

Christel FRAPIER, Historienne de l'architecture, Paris, France

Conceiving the Industrialization of Construction in France in the 1950s

Felipe CONTIER, Renato L.S. ANELLI, Instituto de Arquitetura e Urbanismo da Universidade de São Paulo, São Carlos, Brazil

The Material Genesis of an Icon: The Construction of the Building of FAU USP [1961-1969]

430. Innovations in Reinforced Concrete

Armande HELLEBOIS, Yves RAMMER, Jean-Claude VERBRUGGE, Building, Architecture and Town Planning Dep., Ecole Polytechnique de Bruxelles, Univ. Libre de Bruxelles, Belgium

Concrete Piling: Major Developments in the Historical Practice of Pile Foundations

Alessandra BELLICOSO, Dep. of Architecture and Urban Planning, Univ. of L'Aquila, Italy

Technological Innovation and Traditional Building Methods in the First Application of Reinforced Concrete in L'Aquila: The "New Provincial Insane Asylum" [1903-1916]

John MCGUINNESS, Maidenhead, GB

Air Raid Shelters in the United Kingdom 1939-1945: An Initial Investigation

Pierre JARTOUX, Association Eugène Freyssinet

Eugene Freyssinet, Engineer: Inventor of Pre-Stressing (provisional title)

431. Foundations & Masonry

Francisco PINTO PUERTO, José María GUERRERO VEGA, Univ. of Seville, Spain

The Scaenae Frons of the Roman Theatre of Itálica: Notes on the Construction Process

Maud DE VOGHT, Krista DE JONGE, Univ. of Leuven, Belgium

Foundation Techniques in the Early Modern Low Countries [1600-1750]: A Problematic Case: St. Walpurgis in Antwerp

Philip S.C. CASTON, Neubrandenburg University of Applied Sciences, Germany

The Pentagon Ramparts and Bastions of Fortress Rosenberg in Kronach, Germany

Antonia BRAUCHLE, Technische Universität Berlin and Stiftung LEUCOREA, Wittenberg, Germany

Cellars: Construction and Insulation through the Beginning of the 20th Century

437. Metal Structures 2

Bernhard HERES, Brandenburg University of Technology, Cottbus, Germany

The Iron Structures in the Buildings of the State Hermitage St. Petersburg Erected 1838 – 1850: Forming Structures and Details in Early Structural Steelwork

Sergej FEDOROV, Karlsruhe Institute of Technology, Germany

Rebuilding St. Petersburg's Winter Palace in the Context of Early European Steel Structures 1838-1850s: Contemporary Sources and Documents

Donald FRIEDMAN, Old Structures Engineering, New York City, NY, USA, Brian BOWEN, Georgia Institute of Technology, Atlanta, GA, USA

Two Crystal Palaces: Constructive Technology and Practice; Great Britain 1851 – United States 1853

Ines PROKOP, Berlin University of the Arts, Germany

Wrought Iron and Steel Structures in Berlin in their Prime from 1875 to 1925, with a Focus on Buildings for the Arts

439. Interior Environment, Heating, Ventilation & Hygiene

Maike VAN DER TEMPEL, Ine WOUTERS, Filip DESCAMPS, Dorien AERTS, Department of Architectural Engineering [ae-lab], Vrije Universiteit Brussel, Belgium

Innovations in Ventilation: Wind Cowls in the 19th Century

Francesca TURRI, Emanuele ZAMPERINI, Building and Territorial Engineering Department, University of Pavia, Italy

The Military Engineers and Hygiene in Barracks in the Second Half of the 19th Century

Dirk VAN DE VIJVER, University of Utrecht, Utrecht, the Netherlands

Hygiene in Belgian Architecture: The Case of Victor Horta [1861-1947]

Emmanuelle GALLO, CNAM- HTTP, ENS Architecture Paris-Belleville, France

Scientific Developments of Heating and Ventilation Professional Unions and Learned Societies in France during the First Part of the 20th Century

**Saturday 7 July, 12:30 – 13:00 closing
Malaquais Site, amphi 2**