TABLE OF CONTENTS

Foreword

Organizing Body

I. Keynote Lectures

KP01 Historic Cairo Conservation Project
 Ayman Abdul Mun'im
 KP02 The Arab Contractors Experience in the Conservation of the Built Heritage in Egypt
 Ibrahim Mahlab
 KP03 Integrating Sustainability and Compatibility in Conserving the Darb al-Ahmar and Cairo's Eastern Ayyubid Fortifications
 Frank Matero

KP04 The Difficult Choice of Materials Used for the Repair of Brick and Stone Masonry Walls

Luigia Binda

KP05 Structural Restoration of Monuments:

Recommendations and Advances in Research and Practice

Paulo B. Lourenço

II. Materials

P01 Bond Behavior of Near Surface Mounted FRP Composites with Unreinforced Masonry

El-Sayed A. Nasr, Ayman A. Embaby, Hany M. Elshafie and A. Rashad

P02 Development of a New Accelerated Crystallization Test to Assess the Durability of Restoration Plasters

Tomas J. Wijffels and Barbara Lubelli

P03 **Durability of Historic Brick Masonry**

Ahmad A. Hamid and Mona Orphy

P04 Modelling of Historical Brickwork Masonry Strengthened by Composite

Materials

Roberto Capozucca and Giuseppe Pace

P05 Normal/Shear Cracking of Brickwork Masonry

E. Reyes, M.J. Casati and J.C. Gálvez

P06 The Use of Fiber Reinforced Polymers in Preserving Masonry Heritage

Structures

Bahira A. Abdul-Rahman, Nasser F. El Shafey and Wael M. El Degwy

III.	Assessment
P07	Multiple-Path Diagnosis for Restoration
	David T. Biggs
P08	NDE for Assessment and Rehabilitation of Ancient Masonry Structures - a State of the Art
	K. M. A. Hossain and M. Lachemi
P09	Non Destructive Techniques Applied to the Pillars of the Syracuse Cathedral iIn Sicily
	Luigia Binda, Lorenzo Cantini, Antonella Saisi and Luigi Zanzi
P10	On Site and Laboratory Investigation on Some Churches Hit by a Recent Earthquake, in Order to Assess the Damages to Materials and Structures
	Binda L., Anzani A. Cantini L. Cardani G. Tedeschi C. and Saisi A
P11	Structural Assessment of the Hoist Tower of the Arsenale of Venice
	Maria Rosa Valluzzi, Filippo Casarin, Claudio Modena and Giovanni Zarotti
P12	Vulnerability Assessment of Masonry Building Typologies in Seismic Area and Proposals for Suitable Structural Improvement
	Claudio Modena, Maria Rosa Valluzzi, Luigia Binda, Giuliana Cardani, Antonella Saisi and Luciano Marchetti

IV. Performance

	- VV
P13	An Expert System for Restoration of Infra-Structure of Historical Buildings
	Walid Abdel Latif Attia and Adel Abdel-Mohsen A.
P14	Environment: A Mode of Thinking for Sustainable Heritage
	Ali O. Mikkawi
P15	Evaluation of Safety Coefficient of Axi-Symmetric Masonry Domes with Variable Profile, Carrying its Own Weight Only
	C. Anselmi, E. De Rosa, F. Galizia and D. Maniello
P16	Evaluation of the Dynamic Characteristics of the Cairo Aquifer Wall
	Mohamed A. Zaki, Mhamed A. Abdel-Mooty and Sherif A. Mourad
P17	Geotechnical Studies for the Rehabilitation of the Islamic Museum in Cairo
	Amr M. Radwan and Mona B. M. Anwar
P18	Practices of Brick Masonry Construction in Turkey and their Seismic Behaviors during Earthquakes
	Ali Ural, Adem Doğangün

V.	Retrofit
P19	Contribution of Joint Mortar Thickness on Seismic Hazard Mitigation of Heritage Masonry Structures
	María Josefa Cassinello Plaza
P20	Dynamic Analyses and Seismic Retrofit of the Canadian Museum of Civilization Digester Tower
	Wael W. El-Dakhakhni, Robert G. Drysdale and Heinz Keller
P21	Heritage Masonry Buildings and Seismic Risk: Slovenian Experience Miha Tomaževič
P22	Probabilistic Approach to the Rigid Body Rocking Problem Mohamed A. ElGawady, Quincy Ma, John Butterworth and Jason Ingham
P23	Rehabilitation of Masonry Arches
	Pardeep Kumar and N. M. Bhandari
P24	Retrofitting Historic Stone Masonry Walls: the Egyptian Experience
	Tarek A. Elsayed, Gouda M. Ghanem, Amr Ezzat Salama and Ahmad A. Hamid
VI.	Analysis
P25	Bam Citadel: Action Plan for Restoration
	Mehrdad Hejazi and Wolfram Jaeger
P26	Macro-Micro Seismic Damage Assessment Procedure for Heritage Building Components
	Samir E. Chidiac
P27	Modal Identification for the Historical North Wall of Old Cairo City from Ambient Response
	Ashraf Osman, Mohamed A. Zaki, and Ahmad F. Hassan
P28	Stone Masonry Arch Bridges in Turkey and Analysis of a Sample Bridge Including Nonlinear Behavior
	Ali Ural, Adem Doğangün and Selçuk E. Görkem
P29	The Restoration of the Knights Tower at Krak des Chevalliers in Syria

The Structural Analysis of the Cathedral of León Based on the Classical Methods

Wolfram Jäger, Dassar Ghanem, Toralf Burkert, Beate Boekhoff

and Eyas el-Khateeb

M.J. Casati and J.C. Gálvez

P30

VII. Case Studies

P31	Experimental Investigations on Dry stone Masonry Walls
	G. Vasconcelos; P. B. Lourenço; H. Mouzakis and L. Karapitta
P32	Performance of Masonry Minarets against Earthquakes and Winds in Turkey Adem Doğangün, Ramazan Acar, Ramazan Livaoğlu and Ö.İskender Tuluk
P33	The Conservation of Az-Zahir Baybars Al Bunduqdari Mosque Tariq Al Murri and Akram Awad
P34	Traditional Turkish Minarets on the Basis of Architectural and Engineering Concepts
	Adem Doğangün, Ö.İskender Tuluk, Ramazan Livaoğlu and Ramazan Acar
P35	Transportation and Relocation of Ramsis II Statue
	Ibrahim Mahlab, Wagdi Hmada, Nasr el-deen Mahmoud Abdalla and Ahmed Shawky

Authors Index