



## TUESDAY, 2 MARCH 2010

### SESSION 1. EXPLORATION AND EXPLOITATION "Salón Europa" (Plenary Room)

#### 15.30 h. Integral and Sustainable Use of Industrial Mineral & Rocks: Natural Stone

*Mr. Salvador Ordóñez Delgado*

*Rector of Menéndez Pelayo International University*

#### 16.00 h. Paper Presentations

**S1-01** Evolution of a marble quarry: from open cast to underground exploitation

*Nicola Careddu, Giampaolo Siotto, Andrea Tuveri*

**S1-02** Granite dimension stone potential of Turkey and unexpected geological factors effective on the quality of granite

*Osman Serkan ANGI*

**S1-03** Some important facts for estimation of natural stone deposits during the exploration

*Ivan Tomašića, Ana Kršinića*

**S1-04** Suggested guidelines for sampling dimension stones for laboratorial tests

*Fabiano Cabañas Navarro*

**S1-05** Quarrying planning for the local productive cluster of limestone of the cariri region – state of ceará, northern Brazil.

*Carlos Cesar Peiter, Nuria Fernández Castro, Edson Farias Mello,  
Francisco Wilson Hollanda Vidal,*

**S1-06** "Schistose" rocks as a resource

*Fernando Noronha, Mónica Sousa, Cristina Carvalho, António Casal Moura,  
João Farinha Ramos, Rui Moura*

**S1-08** Utilización de los sistemas de información geográfica (sig) para seleccionar la mejor ubicación de una cantera de roca ornamental en un yacimiento, en función del impacto visual

*Antonio Espín de Gea*



17.45 h. **Roundtable**

*Moderated by Mr. Björn Schovenborg*

*PhD In Mineralogy & Petrology*

*Co-ordinator of EU-activities CBI (Swedish Innovation Centre for Rock and Stone in Construction)*

## WEDNESDAY, 3 MARCH 2010

### SESSION 2. MANUFACTURING & PROCESSING “Salón Europa” (Plenary Room)

09.30 h. **Emerging Trends and Challenges in the Stone Processing Industry**

*Mr. Luis Guerra Rosa*

*Professor Materials Engineering, Tech. University of Lisbon*

10.00 h. **Paper Presentations**

**S2-01** Inducing energy storage properties in white dolomitic marble tiles – Industrial tests and property evaluation

*M.A. Founti , I. Mandilaras , M. Patronis and K. Laskaridis*

**S2-04** New standard methodologies to classify the efficiency of diamond cutting discs

*C.A. Anjinho , A. Coelho , P.M. Amaral , J.C. Fernandes , L.G. Rosa*

**S2-06** Processing characteristics of “Bege Bahia”, a Brazilian travertine-like limestone

*Maria Heloisa Barros de Oliveira Frascá , Fabiano Cabañas Navarro*

**S2-20** Portuguese natural stone cluster – the secure base for the success of portuguese natural stone

*António Costa Dieb , Marta Peres*

11.00 h. **Coffee-break.**



## 11.30 h. Paper Presentations

**S2-19** Process and Tool Design for High Speed Cutting of Granite

*Denkena, Berend; Bockhorst, Jens; Seiffert, Florian*

**S2-11** Surface treatment of stone elements by water jets

*A. Bortolussi , N. Careddu, R. Ciccu , G. Costa*

**S2-12** A comparison between different cutter systems for Mahallat travertine dimension stone

*Asgar Laderian*

**S2-15** Process Analyses in Cut-off Grinding of Stone Compound Material

*Denkena, Berend; Konopatzki, Benjamin; Buhl, Josef-Christian; Robben, Lars*

**S2-16** Performance assessment of water jet cutting in reference to depth and width of cut for Sardinian basalto

*Ozcelik, Y., Gursel, M., Ciccu, R., Costa, G., Bortolussi, A.,*

**S2-02** Computer vision applied to classification of macael white Marble

*P. García Carricondo, A.J. Cortés Izurdiaga, L. Gonzalez Teruel, M.A. Muñoz*

## 13.00 h. Roundtable.

*Moderated by Mr. Carlo Montani*

*Scientific Editorial Manager, Natural Stone Division, Il Sole-24 Ore Business Media*

## 13.30 h. Lunch

### SESSION 3. ENVIRONMENT "Salón Europa" (Plenary Room)

15.30 h. **Sustainable development of indicators for the stone sector: what really matters**

*Mr. Carlos Peiter,*

*Planning and Management Coordinator, Centre for Mineral Technology CETEM, Brazil*



## 16.00 h. Paper Presentations

**S3-06** Environmental considerations of marble products

*Obis Sánchez, Joaquín, Pérez Lorenzo, Agripino, Díaz Rubio, Roberto*

**S3-09** Best practices in Umbria region for rehabilitation of quarry and mine areas.

*Michele Cenci, Andrea Monsignori, Endro Martini, Giovanni Natale*

**S3-13** Frits from natural stone wastes for obtention of composites applied as construction materials

*J. Ma. Rincón, M. Romero*

**S3-01** Recovery and reuse of marble powder by-product

*Graziella Marras, Nicola Careddu, Claudia Internicola, Giampaolo Siotto*

**S3-15** IDStone

*S. López, V. Martínez, J. Peñataro*

**S3-03** Environmental Management Aspects for Energy Saving in Natural Stone Quarries

*M.A. Founti, D. Giannopoulos and K. Laskaridis*

## 17.30 h. Coffee break

## 17.45 h. Paper Presentations

**S3-05** Reclamation of contaminated mine ponds using marble wastes and organic amendments

*Angel Faz; D.M. Carmona, R. Zornoza, J.A. Acosta, S. Martínez-Martínez, E. López, F. Cortés*

**S3-04** Rapid Prototyping techniques for use in conjunction with natural stone powders and aggregates

*S. Theodoridou, K. Savidis, K. Laskaridis, M. Founti*



**S3-08** The show room of change

*J.C. Diosdado, F.J. Cruz, C. Bendala, F.J. Martínez, M. García*

**S3-07** Reuse of carbonated mud to eliminate heavy metals from acid water

*M. Sánchez Polo, L. Sánchez Bajo, A. Ruiz Sánchez, M.J. Ruso Martínez*

18.45 h. **Roundtable**

*Moderated by Mr. Antonio Costa Dieb*

*General Director CEVALOR- Centro Tecnológico para o Aproveitamento e Valorização das Rochas Ornamentais e Industriais*

## WEDNESDAY, 3 MARCH 2010 (Parallel Sessions)

### “Salón Almirante”

10.15 h. The Sound of Stone,

Mr. Iván Larrea

Stone Organs Constructor

11.30 h. Paper Presentation (*Topic session 4- Natural Stone in Architecture*)

**S4-02** Partial Safety Factors in Dimensioning Stone Design

*José Lello, Rui Camposinhos*

**S4-04** “Azul Valverde” slabs applied on exterior cladding – degradation and alteration study

*J.A.R. Simãoa, C. Galhanoa, Vera Piresb, P.M. Amaralb*

**S4-07** Consolidation of ornamental stone by microbial carbonatogenesis

*Fadwa Jroundi, Eulogio J. Bedmar, Carlos Rodriguez-Navarro, Maria Teresa González-Muñoz*

**S4-14** Efflorescence occurrence in Crema Marfil Marble

*JM Cuevas, C. Guillem, R. Correoso, AM López-Buendía*

12.30 h. Paper Presentation (*Topic session 5- Characterization and New Products*)

**S5-05** evaluation of mortars by UV-VIS-NIR diffuse reflectance



M. Serrano, L. Sánchez, I. Martínez, A. Romerosa, J.M. González

**S5-16** Determination of radioactivity levels and hazards of ornamental stone samples in Extremadura region

J.M. Ávila Macías, C. Pacheco Menor, JM Meneses Rodríguez and C. Miró Rodríguez

**S5-14** Improvement of surface properties of natural stone by means of acrylic-siloxane hybrid treatment

V. Forrat-Pérez, C. Guillem-López, N. Baeza-Baeza, A.M. López-Buendía, M.D Romero Sanchez

**S5-08** Serpentinite: a fascinating and complicated rock

Dolores Pereira, José António Blanco, Mercedes Peinado, Juan José Tejado, Óscar Ercilla, Mariano Yenes, Serafín Monterrubio

## 13.30 h. Lunch

16.00 h. Paper Presentation (*Topic session 2- Manufacturing and Processing*)

**S2-05** Customised stone surface quality classification procedure

A.S. Marques, P.M. Amaral , L.G. Rosa , J.C. Fernandes , C.A. Anjinho

**S2-10** Automatic tone grading system for granite tiles

Juan Carlos Catalina, Gonzalo Fernández Ramón

**S2-14** Improved toughness and stiffness of marble tiles by thin coatings of unsaturated polyester resin filled with natural nanoclay

Verónica Morote-Martínez, Rafael Torregrosa-Coque, José Miguel Martín-Martínez

**S2-17** Performance analysis of a diamond bead in its lifetime by using single bead test machine

Ozcelik, Y, Yilmazkaya, E.

## 17.00h. Coffee Break

17.15 h. Paper Presentation (*Topic session 2- Manufacturing and Processing*)

**S2-21** Parallel Robot Optimization for Marble Processes Treatment

J.M. Rodes, J.M. Sabater, V. González, J. Martínez

# Global Stone Congress 2010



2 - 5 / MARCH / 2010 Alicante (Spain)

**S1-07** Embodied Energy of quarrying and manufacturing: Its value in promoting natural stone

*Thomas P. Simpson, Barry J. Cooper and Stephen Pullen*

**S2-18** Experimental industrial plant

*A. Cortés Izurdiaga, L. González Teruel, L. Pérez Zamora, S. López Molina*

**S2-22** Prospects for natural stone from Spain in 2010: identifying new paths of growth

*R. Porcar Guerrero, L. Irusta Aguirre*

*END OF PARALLEL SESSION 18.15*



## THURSDAY, 4 MARCH 2010

### SESSION 4. NATURAL STONE IN ARCHITECTURE "Salón Europa" (Plenary Room)

#### 09.30 h. **Rock, Paper and Scissors**

*Ms. María José de Blas and Mr. Rubén Picado*

*Architects and Professors of Projects at UPS-CEU, Madrid*

#### 10.00 h. **Paper presentations**

##### **S4-16** Stone Solutions for Exterior Applications: Mediterraneo & Urban series

*D.García*

##### **S4-01** Prestressing stone – an innovative cladding façade system

*José Lello ,Rui Camposinhos*

##### **S4-03** 3D stone simulator - possibilities of interface and results

*Zampirolli, Ludson Moulin , Silva, Eduardo Conzendey, Zampirolli, Yuri Moulin*

##### **S4-10** Ventilated façades with stone cladding. Mechanical behaviour, constructive and formal factors, durability and damages

*Carlos Pérez Carramiñana, Mónica Mateo García, Beatriz Piedecausa García*

#### 11.00 h. **Coffee break**

#### 11.30 h. **Paper presentation**

##### **S4-06** Granites with discolouration - How to avoid them

*Björn Schouenborg , Bent Grelk, Magnus Döse , Jan Erik Lindqvist & Urban Åkesson*

##### **S4-08** Expert system for dimensioning of façade cladding

*Lars Jacobsson , Mathias Flansbjer, Björn Schouenborg , Bent Grelk & Arwen Smits*

##### **S4-15** Energy efficiency contribution of the natural stone: approach in processing and application

*AM Lopez-Buendia, MD Romero, JM Rodes*



**S4-13** Chromatic degradation of white marbles

*Paolo Davini*

**S4-11** System of ventilated facades with granite of low thickness

*Mota, M.I.; Gavilán, M.; Pérez, C.*

**S4-09** Ventilated façade of stone: factors that influence in the colonization of granite

*Francisco Javier López Rivadulla, Patricia Alonso Alonso*

13.00 h. **Roundtable**

*Moderated by Mr. Marcantonio Ragone*

*Architect, Internazionale Marmi e Macchine Carrara*

13.30 h. Lunch

## SESSION 5. CHARACTERIZATION AND NEW PRODUCTS "Salón Europa" (Plenary Room)

15.30 h. **The Properties of Natural Stone for Architecture, Some Reflections on its Current Problematic and Approaches of**

*Mr. Fernando López G-Mesones*

*Dr. Ing. Mining, Professor of Polytechnic University of Madrid*

16.00 h. **Paper Presentations**

**S5-06** Slate flexural and anchorage strength considerations in cladding design

*V. Pires, P.M. Amara, L.G. Rosa, R. Camposinhos*

**S5-01** AGA- The method to demonstrate the relationship between microstructure and bowing properties of calcite marble claddings

*Urban Åkesson, Jan Erik Lindqvist and Björn Schouenborg*

**S5-07** Analysis of thermal effect on the mechanical behaviour of natural and engineered Stones

*J.P. Lam dos Santos, P.M. Amaral, L.G. Rosa*



**S5-12** Natural Stone classification and specifications review

*Joaquín Bastida , Angel López Buendía , Mar Urquiola*

17.00 h. Coffee break

17.15 h. **Paper presentations**

**S5-03** Technological characterization and recommendations for use of two ithoarenites from the Pyrenees (Spain)

*Oscar Buj Fandos , Josep Gisbert Aguilar*

**S5-04** Characterization and distinction of macael white Marble

*L. Sánchez Bajo, A. Romerosa Nieves, M. Serrano Ruiz, I. Martínez Soler*

**S5-13** Phase Change Materials as thermal energy storage incorporated to natural stone

*M.D Romero Sanchez, N. Baeza-Baeza, J.M. Cuevas-Castell, A.M. López Buendía*

18.00 h. **Roundtable**

*Moderated by Ms. Paola Blasi*

*Dra. Geologist, Internazionale Marmo e Machine Carrara*

18.30 **Official Closure of the Congress**