

## The Setúbal Waterfront Polis Programme: Qualitative evaluation of the public space between 1900 and 2015

### Programa Polis para Frente Ribeirinha de Setúbal: Avaliação qualitativa do espaço público de 1900 a 2015

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#### **Abstract**

The public space is the fundamental element in the conversion of waterfronts as it allows the integration of the "new city" in the existing urban fabric and the city/river connection. In this paper is drawn up an analysis of the public space of the Setúbal waterfront in view of the appreciation of the same over the years and after the implementation of the Polis Programme. This research followed a qualitative methodology of analysis of four public spaces based on their physical characteristics, experiences and occupation of those spaces. It is noticed that the Polis Programme of the Setúbal waterfront synthesizes a number of proposals envisaged in previous plans, which most of these comes from the first detailed plan of the Setúbal waterfront in 1992. Given the analysis of four public spaces of the Polis, there is its contribution to the cohesion of the city with the river. However, the Luísa Todi avenue is presented as a visual barrier between the same connection. Through the qualification of existing public spaces and implementation of new public spaces, the Polis Programme contributed to the qualification of public space according to the philosophy of the European waterfronts, where priority is the city/river connection.

#### **Resumo**

O espaço público trata-se de um elemento fundamental na reconversão das frentes ribeirinhas, pois permite a integração da "nova cidade" na malha urbana existente e consequente perspectivas de ligação da cidade com o rio. No presente artigo é elaborada uma análise do espaço público da frente ribeirinha de Setúbal atendendo à valorização do mesmo ao longo dos anos e após a implementação do programa Polis. Seguiu-se uma metodologia qualitativa de análise de quatro espaços públicos com base nas suas características físicas, vivências e ocupação dos espaços. Percebe-se que o programa Polis da frente ribeirinha de Setúbal reúne um conjunto de propostas equacionadas em planos anteriores, onde grande parte provém do primeiro plano de pormenor da zona ribeirinha de Setúbal realizado em 1992. Perante a análise dos quatro espaços públicos do programa Polis, verifica-se a sua contribuição para a coesão da cidade com o rio. No entanto a avenida Luísa Todi apresenta-se como barreira visual entre esta mesma ligação. Através da valorização de espaços públicos existentes e implantação de novos espaços públicos, o programa Polis contribuiu para a qualificação do espaço público segundo a filosofia das frentes ribeirinhas europeias, onde se privilegia a ligação da cidade ao rio.

#### **Keywords**

waterfronts, conversion, public space, Setúbal

#### **Palavras-chave**

frentes ribeirinhas, reconversão, espaço público, Setúbal

## The Setúbal Waterfront Polis Programme:

Qualitative evaluation of the public space between 1900 and 2015

### Introduction

For many years Setúbal waterfront was condemned to abandonment and to physical and functional degradation. However the urban intervention strategies in Setúbal seek since the early '90s to overcome this situation. This paper shows the valorisation process of the public space of Setúbal waterfront over the years and especially after the implementation of the Polis<sup>1</sup> programme. This raised the hypothesis that the Polis plan contributed to the qualification of the public spaces of Setúbal waterfront according to the ideology of the major projects of European waterfalls, whose main objective is to establish a closer relationship between the city and the waterfront.

This research aims to study the conversion of the Polis programme of Setúbal waterfront, in order to understand its effects on the city's relationship with the river. Stressing the object of study in the city of Setúbal, this paper highlights the construction process of public space on the waterfront through: i) an analysis of the urban form of the Setúbal waterfront using the existing cartography and aerial photography (both past and present); and ii) a comparative assessment of the public space found in the cartography post 1900 against the reality and against the several proposals for the Setúbal waterfront; and iii) conducting a morphological and functional analysis of four public spaces, according to their characteristics and their use by the population.

This research followed a qualitative methodology based on a phenomenological analysis of public spaces, identifying the experiences, the procedures and the social life of the population [1] in the occupation of those spaces. The graphical and visual approach of the urban space, as proposed by Ochoa and Sampayo [2], was used to register the results. This methodology was based on Whyte investigations [3,4], and Ramalhete [5].

After the study of the different cartography of the city of Setúbal where the public spaces [6] of Setúbal waterfront were examined, the analysis focused on the larger dimension public spaces where their physical functional and social analysis explains their use by the population. The public spaces selected for analysis were: *Jardim Eng. Luís da Fonseca; Praça José Afonso; Jardim/Praia da Saúde, Parque Urbano de Albarquel and Av. Luísa Todi*. This phase was divided into three stages which comprise: i) **The construction of analysis sheets** (based on questionnaire on principles which are a good place (Project for Public Spaces, s/d): permeability, comfort and image; uses and activities and socialization); ii) **The observation on site** [7] (held in winter and summer. For the registration of the permeability, the uses and activities, a current cartographic base of each room was used for the registration of persons present on the respective locations the performed routes were registered, both recorded every hour); and finally iii) **the data interpretation** phase.

The waterfront concept used in this work corresponds to the area of land flanking the river Sado, whose function changed over time from harbour and developing into public space integrated with the city. These spaces exhibit characteristics of consolidated cities usually noticeable by the placement of public art in crucial spaces [7]. The definition of the limits of this waterfront area excludes the eastern region of Setúbal where numerous harbour infrastructures still subsist.

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<sup>1</sup> The Polis programme (Programa de Requalificação Urbana e Valorização Ambiental) launched in 1999 by the Ministry of Environment and Spatial Planning and formalized on May 15, 2000 (Resolução do Conselho de Ministros n.º 26/2000) aims to improve the quality of life in cities, making them more attractive and competitive.

## Setúbal/Polis's Waterfront

The relationship of the city and its waterfront has undergone major changes over time, from the most cohesive relation to the total withdraw [8].

The waterfronts that once established a strong relationship with the city, through the movement of goods and people, came later to the mid-twentieth century with the industrial period, to gain greater dimension through the port industry, landfills, railways, highways, bridges, piers, docks or airports becoming a barrier to economic activities that distanced the contact of the population with the water [9]. After the industrialization period, between the decades of 60 and 80, port structures are restructured and expanded to more distant areas of the city, resulting in high vacancy of these territories and the consequent emergence of empty spaces and buildings without activity. This lead to the implementation of city policies aiming to renew and recover those spaces [9,10].

Costa [11] refers to the importance of public space in many urban reconversion of the riverside front because it presents itself as a key element in establishing the integration of the "new city" with the existing urban fabric in order to unite the two territories and allow the reconversion to extend to the surrounding areas.

The city of Setúbal has developed and grown due to their main business, port exploration. In Setúbal succeeded over the centuries, the various stages of relationship with the port that Hoyle [8] states:

**i) City / port as unit:** Phase corresponding to the period of the first people staying in the territory of Setúbal because of the good condition of the port and resources that the river could offer. Mainly to the Roman people that was dedicated to the fishing activity and the production of salt.

**ii) Growth and detachment:** This phase refers to the second half of the XIX century when the city goes through the first period of great industrial development through the canning industry. Decades were the railways are introduced, embankments are built on the river for the construction of the Luísa Todi avenue and for the growth of the port, resulting in the depopulation of the city and consequent detachment of the waterfront.

**iii) Displacement and separation:** This step verifies up from 60 in the second period of high industrial growth with proportions nationwide. This period resulted from the installation of large industries outside of the city, contributing to its growth in suburban areas and along the banks of the river Sado. Given what happened, the city was forced to restructure the port. Industrial activity moved to the eastern side of the riverbank benefiting from the road to rail. The central area has lost the business function that previously owned.

**iv) Repositioning and integration:** Due to the growth and development of port activity Setúbal waterfront has undergone enormous changes, with consequent degradation and disqualification. Only with the creation of Administração dos Portos de Setúbal e Sesimbra (APSS) in 1989, this area received more attention regarding the planning of its spaces. Then, for a decade, they were elaborated various development plans of Setúbal waterfront, whose proposals have not been fully implemented due to constant disagreements and conflicts between entities (Setúbal's City Council and APSS) [12]. However, the proposals of these plans contributed greatly to the development of the strategic plan of Setúbal waterfront, written in 2001 by Quaternaire, during the candidature of Setúbal's City Council to the Polis Programme.

After approval of the Setúbal Polis programme in 2001, the Strategic Plan of the Setúbal's waterfront is reformatted by Parque Expo SA, the company responsible for the preparation and management of plans of the Polis Programme. In the same year, the Strategic Plan is put to public discussion and receives an alert of the population, about the high

construction proposed for the area of Fontainhas, requiring its revision. It is then given the responsibility of the detailed plan for Polis [*Plano de Pormenor da Frente Ribeirinha de Sétubal*] (2004) to the *Sociedade Sétubal Polis* which is awarded to *Atelier RISCO* by the Setúbal's City Council [13]. The plan was submitted to constant revision, getting the final approval in 2014 decided by the *Assembleia Municipal de Setúbal*. The detailed plan for Polis of Setúbal waterfront summarizes a series of proposals envisaged in previous plans, such as [13]:

- i) Implementation of an open-air auditorium in *Largo Jose Afonso*;
- ii) Construction of the urban park of *Albarquel*;
- iii) Rearrangement and alteration of road circulation of *Luísa Todi* avenue;
- iv) Relocation of the shipyards and workshops located on the beach of *Saúde*;
- v) Rehabilitation of the area surrounding *Doca do Comércio*;
- vi) Implementation of a bike path;
- vii) Construction of residential and commercial buildings;
- viii) Creation of new catering areas;
- ix) Revitalization of *Mercado do Livramento*, *Pingo Doce* and *Pluricoop*.

## Qualitative Analysis of Public Spaces

### Morphological Characterization of Public Spaces

The morphological characterization of the four areas selected for analysis on the intervention of the Polis on Setúbal waterfront (*Jardim Luís da Fonseca*; *Praça José Afonso*; *Jardim/Praia da Saúde*; and *Parque Urbano de Albarquel*) were analysed over time in diverse cartography and aerial photography from the archives: i) Administração dos Portos de Setúbal e Sesimbra, SA.; ii) Arquivo Distrital de Setúbal; iii) Biblioteca Nacional de Portugal; iv) Biblioteca Nacional de França; v) Câmara Municipal de Setúbal; vi) Gabinete de Estudos Arqueológicos da Engenharia Militar; vii) Instituto Geográfico do Exército; viii) Museu da Cidade de Setúbal; ix) Museu da Marinha e x) Torre do Tombo.

Nine important dates were chosen for the construction of the waterfront, four correspond to urban proposals (i) 1931 - Project of construction of the port of Setúbal; ii) 1943 - Setúbal plant that presents the main works executed and in progress in the years 1941 and 1942; iii) 1995 - synthesis plant of the proposed Plano de Ordenamento da Zona Ribeirinha de Setúbal; and iv) 2004 - Plano de Pormenor do Polis) and five related to construction phases (i) 1900 - first embankment on the river; ii) 1947 - aerial photography of Setúbal; iii) 1967 - aerial photography of Setúbal; iv) 1989 - aerial photography of Setúbal; v) 2013 - current aerial photograph of Google Earth). Studies of four public spaces of the waterfront registered in the nine plans are systematized in Figure 1.

Figure 1 shows that *Largo José Afonso* is the only public space in the first embankments of Setúbal waterfront, as seen in 1900, remaining until 2013. However, due to the construction of new buildings its area decreased progressively. In 2013 begins the proposal of the open-air auditorium in this Polis plan (2004), built in 2005. *Jardim Eng. Luís da Fonseca* is introduced into the plan of works of the port in 1931. In 1931 and 1943 this garden features an identical design, but however, space is implemented with another definition covering a larger area that remains similar to 2013. Regarding to the construction of *Parque Urbano de Albarquel* in 2013, it is shown that it is proposed in the 1995 plan and in Polis in 2004 (original proposal of detailed plan of 1992) to replace the campsite that existed. Finally, it appears that the area of *Jardim da Saúde*, proposed by Polis, already had a proposal on the 1995 Plan for a green space, though with smaller dimensions.

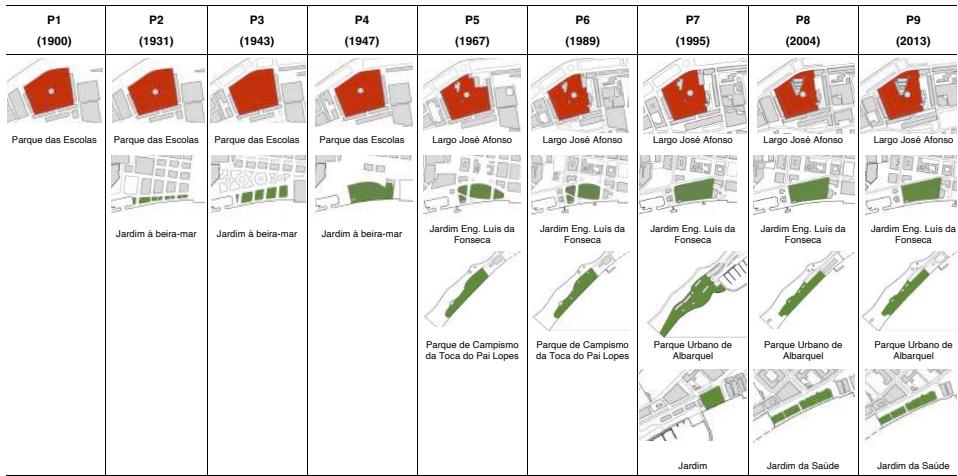


Figure 1 - Morphological characteristics form of non-linear public spaces.

### Avenida Luísa Todi

Figure 2 shows the impact that *Luísa Todi* avenue causes in the articulation of the city with the river. With the analysis of the various perspectives presented in Figure 2 it can be seen that *Luísa Todi* is generally the city's visual barrier to the river due, essentially, to the immense vegetation and decorative elements, which are found in her.

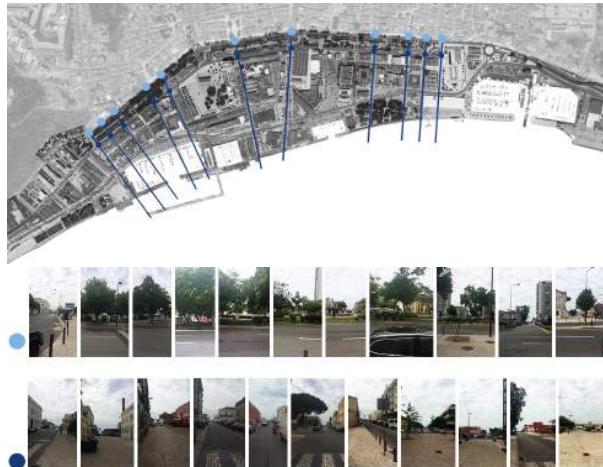


Figure 2- Axes and their photographs of the waterfront where the avenue establishes a visual relationship with the river

## Largo José Afonso

**Name:** Largo José Afonso.  
**Location:** Internal.  
**Shape:** Trapezoid.  
**Area:** 24300 m<sup>2</sup> (aprox.)  
**Average Height of Buildings:** 8 meters.  
**Emblematic Buildings:** None.  
**Business and Services:** Social Security, Youth Space and Cafes.  
**Structures in the Area:** auditorium José Afonso.  
**Urban Furniture:** Benches, trash cans, recycling containers and fire hydrants.  
**Lighting:** Street lamps and large projectors.  
**Public Art:** Graffiti on the West Wing of auditorium José Afonso e Fonte.

## Permeability

**Pedestrian access:** Easy pedestrian access. The west sidewalk is made of stone which slows down the traffic allowing greater security of the crossing of pedestrians.  
**Car access:** Connected to the northern city's main avenue, Avenida Luísa Todi, is limited by transit routes.  
**Public transport:** bus stop at the northern limit (Av. Luísa Todi).  
**Parking:** East and south in the far right of the public space.

## Comfort and Image

**Floor:** Consists mainly of dirt and limited by a sidewalk of earth  
**Vegetation:** The space is limited by trees. In the center there is a local vegetation and a fountain composed of large trees that provide a wide shade area.  
**Readability:** Easy to understand, but the Auditorium hinders the visibility of the entire space  
**Noise:** The dimensions can filter the car noise and provide a calm and peaceful environment.  
**Health:** Clean and the urban furniture is in a good condition.  
**Security:** Apparently safe due to the large opening to the Luísa Todi avenue.

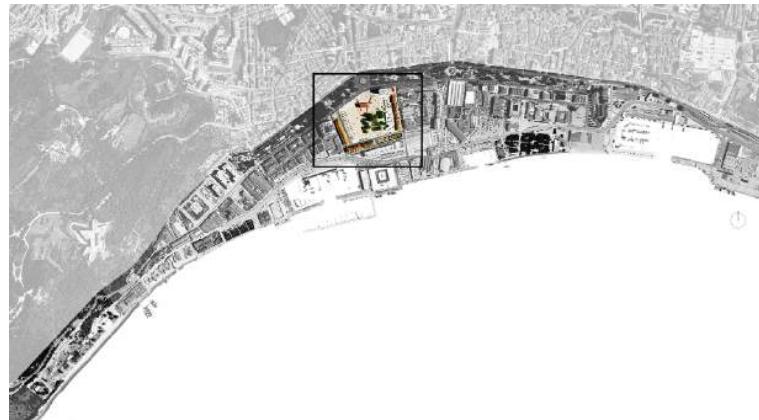
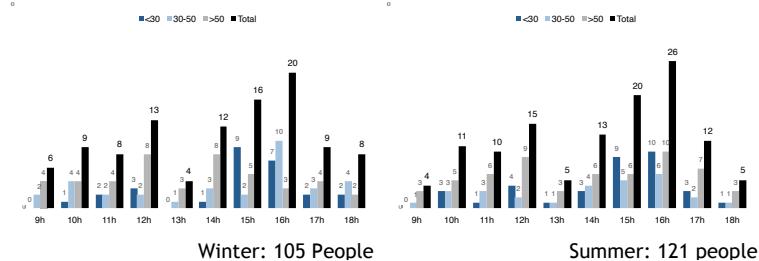


Figure 1 and 2 - Countdown of people during the day on Largo



Winter: 105 People

Summer: 121 people

The graphs represent the synthesis of a week in each season.

## Use and Activities



Main Uses: Zone most used by the population



Main Paths

## Jardim Eng. Luís da Fonseca

**Name:** Jardim Engenheiro Luís da Fonseca.

**Location:** Internal.

**Shape:** Rectangular.

**Area:** 17000 m<sup>2</sup> (aprox.)

**Average Height of Buildings:** 6 meters.

**Emblematic Buildings:** Customs, Fiscal Brigade - GNR, APSS, Captaincy of the port of Setúbal, Inatel, Reserva Nacional do Estuário do Sado.

**Business and Services:** Restaurant.

**Structures in the Area:** Closed Café, closed convenience stores.

**Urban Furniture:** Benches, picnic areas with tables and benches, infant furniture, garbage can and fire hydrants.

**Lighting:** Lamps.

**Public Art:** Statue, Saint, Vertical Element.

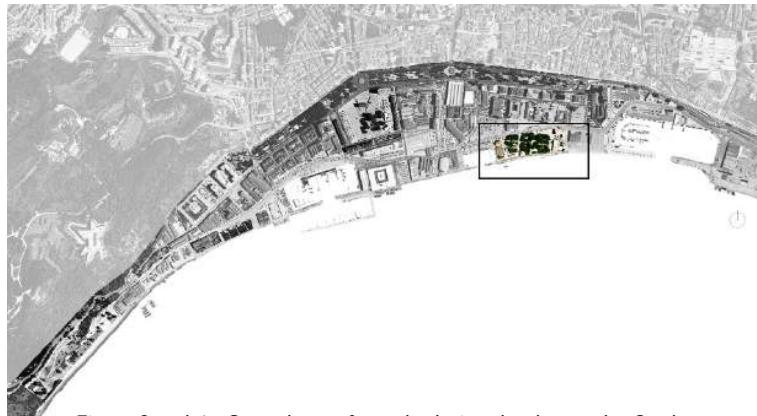
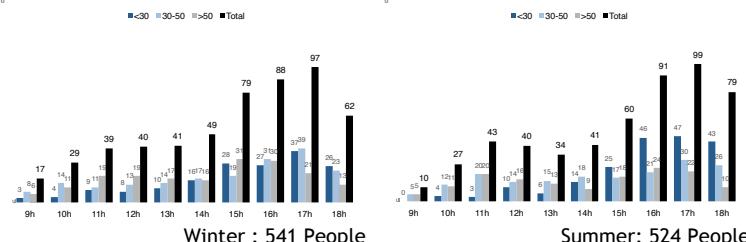


Figure 3 and 4 - Countdown of people during the day on the Garden



The graphs represent the synthesis of a week in each season.

## Permeability

**Pedestrian access:** Only accessible by the north and east sides.

**Car access:** The car access is made solely by Avenida Jaime Rebelo, located north of the garden.

**Public transport:** No bus stop. Near the catamaran that connects to Tróia.

**Parking:** Parking spaces to the north and west.

## Comfort and Image

**Floor:** the Garden is bordered by a sidewalk that extends to the interior, creating multiple paths between green areas.

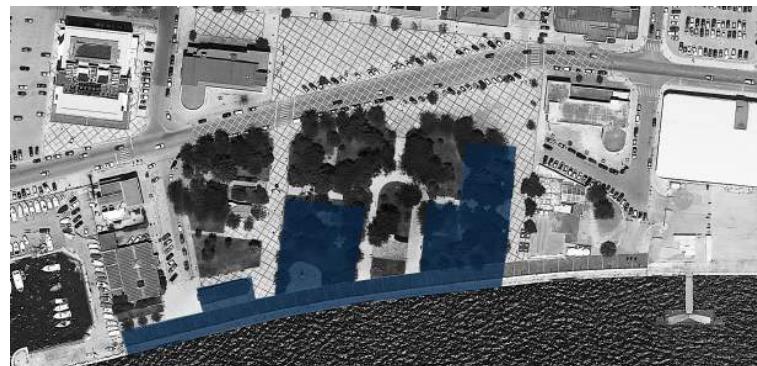
**Vegetation:** The garden consists mainly of trees that provide excellent shadow areas.

**Readability:** The immense vegetation makes for harder visibility of the entire space, however the adjacent streets and paths in the garden have good visibility.

**Noise:** The proximity of the river and the vast wooded area filter out the noise of the road in the southern garden limit.

**Health:** The space is clean and the equipment and urban furniture are in good condition.

**Security:** with the existence of the restaurant and the people moving around, the space does not appear to be an unsafe place.



Main Uses: Zone most used by the population



Main Paths

## Jardim / Praia da Saúde

**Name:** Jardim/Praia da Saude.  
**Location:** Internal.  
**Shape:** Reactangular.  
**Area:** 24000 m<sup>2</sup> (aprox.).  
**Average Height of Buildings:** 6 meters.  
**Emblematic Buildings:** Lota Building.  
**Business and Services:** A café.  
**Structures in the Area:** Café, public sanitation facilities  
**Urban Furniture:** The garden is equipped with several benches, tables, garbage cans.  
**Lighting:** Street lamps in the park that provide good lighting.  
**Public Art:** Two Statues.

### Permeability

**Pedestrian access:** Easy pedestrian access made by the north, east and west side.  
**Car access:** The space is limited by the northern transit route facilitating the car access.  
**Public transport:** there is no access by public transport.  
**Parking:** There is parking space along the northern boundary of the garden and the beach.

### Comfort and Image

**Floor:** sidewalk and grass in the garden area. In the path of the northern border there is a bike path with proper pavement.  
**Vegetation:** Trees along the bike path and denser vegetation in the garden.  
**Readability:** The shape of the space and little vegetation allow for a good understanding of the whole garden and the beach.  
**Noise:** Quiet space. The vegetation placed at the north end filters the noise from the road adjacent to the area.  
**Health:** The area is clean.  
**Security:** The area seems safe because of its openness to the way north.

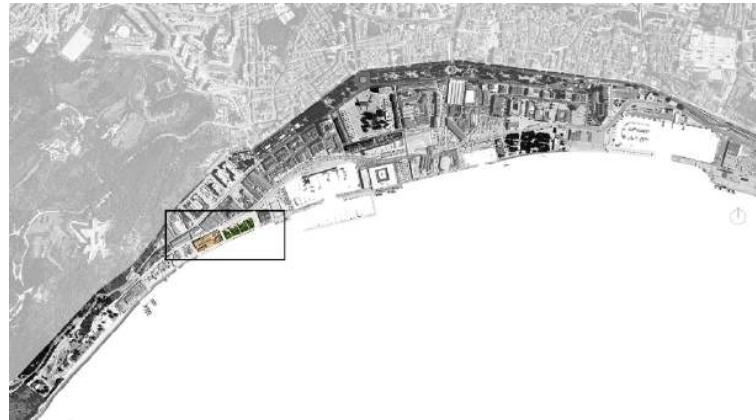
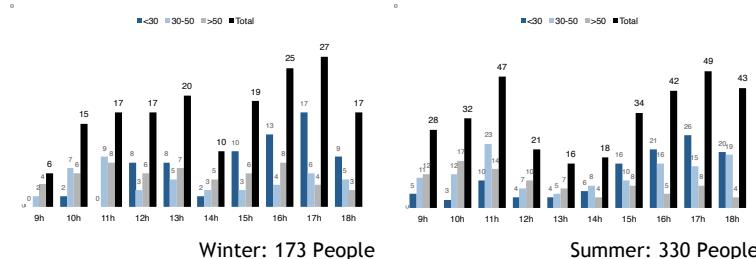


Figure 5 and 6 - Countdown of people during the day on the Jardim / Praia



The graphs represent the synthesis of a week in each season.

### Use and Activities



Main Uses: Zone most used by the population



Main Paths

## Parque Urbano de Albarquel

**Name:** Parque Urbano de Albarquel.

**Location:** External.

**Shape:** Reactangular.

**Area:** 19800 m<sup>2</sup> (aprox.)

**Average Height of Buildings:** Existence of just one vacant building of 4 meter high by the park entrance.

**Emblematic Buildings:** None Emblematic building.

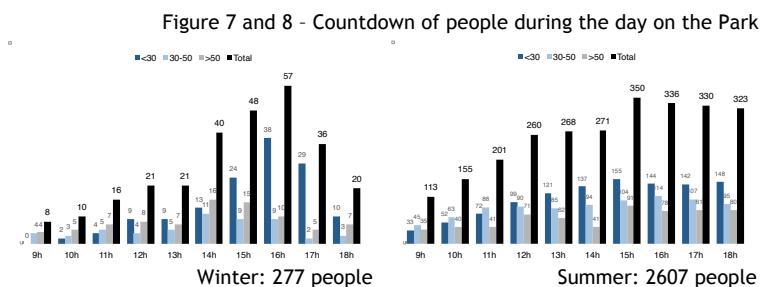
**Business and Services:** 1 Café and 1 Restaurant.

**Structures in the Area:** Café, public sanitation facilities, sailing club.

**Urban Furniture:** The Park is equipped with various benches, tables, infant structures, sports equipment and garbage cans

**Lighting:** There are several street lamps in the park that provide a good lighting.

**Public Art:** None.



The graphs represent the synthesis of a week in each season.

## Permeability

**Pedestrian access:** the space is easily accessible from the waterfront.

**Car access:** the car access is only made by the rising zone of the park.

**Public transport:** No public transportation connects to the park.

**Parking:** The Park has a parking space at the entrance.

## Comfort and Image

**Floor:** The Park consists of a sidewalk and grass.

**Vegetation:** The Park consists mainly of trees that provide excellent shadow areas.

**Readability:** The existence of lots of vegetation makes for harder visibility of the entire space, however, the park is easy to understand by those who enjoy it.

**Noise:** The proximity of the river and the vast wooded area surrounding the park provide a peaceful atmosphere away from the city's noise.

**Health:** the space is clean and the equipment and structures are in good condition.

**Security:** The space has no fixed security, but with the existence of a café and due to its movement, the space does not appear to be unsafe.



Main Uses: Zone most used by the population



## Final Considerations

*Largo José Afonso* has a low occupancy both in winter and in summer (Figure 3 and 4). The main route of this space is made along the side of *Luísa Todi* avenue meaning, in its limit. Albeit with a configuration in a plant that should provide the staying, the space is mostly used as a path rather than staying place. This is the largest staying place designed and rigorously implemented since the construction of the first embankments on the river. However, before the analysis made it is observed that this space is compared to the other three, the least used by the population. There were 105 people on a winter day and 121 people on a summer day in this space. Also *Jardim/Praia da Saúde* (Figures 5 and 6) has low usage numbers. It appears that most of the people who occupy it use the existing beach area, so the adjacent the garden remains fairly empty. There were 173 people in a day of winter and 330 people on a summer day.

In contrast, *Jardim Eng. Luis Fonseca* is quite lively both in winter and in summer. It accounted to 541 people on a winter day and 524 people on a summer day.

However, *Parque Urbano de Albarquel* is the most used space in the summer, reaching 2607 people at this time of year.

Thus, *Jardim Eng. Luis Fonseca* and *Parque Urbano de Albarquel* are the spaces where more people stay. Both feature greater variety of activities such as staying spaces, playground and eating-out, thus covering the different age groups.

With different occupations the four public spaces reviewed here reinforce the connection of the city to the river. However *Luísa Todi* avenue is a visual barrier between the city and the river. Situation that may resolve with future intervention rethinking the placement of public art and vegetation.

It was found that the Polis Programme carried out for the waterfront Setúbal synthesizes in a single plane a number of proposals envisaged in previous plans. Most of the proposals of Polis comes from the first detailed plan of the Setúbal waterfront drafted in 1992, of which stand out the reorganization of *Largo José Afonso*, the construction of *Parque Urbano de Albarquel* and the construction of residential and commercial buildings due to its finishing's after the implementation of the detailed plan for Polis.

As indicated in the working hypothesis the Polis plan contributed to the qualification of public spaces according to the philosophy of the European waterfronts [8, 14,15,16,17,18], where priority is given to link the city to the river.

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## ICEUBI2015 – Parallel Sessions

## ► 14H00-15H30- SESSION ICEUBI2015 - 1



## Air Transport 1

## Auditorium 8.1

**CHAIRMEN: Vasco Reis and Jorge Silva****ICEUBI2015-1.01- AIRLINES PERFORMANCE AND EFFICIENCY EVALUATION USING A MCDA METHODOLOGY. THE CASE FOR LOW COST CARRIERS VS LEGACY CARRIERS**

Miguel Miranda; Maria E. Baltazar; Jorge Silva

**ICEUBI2015-1.02- MCDA MODELLING OF AIRPORT IMPACTS DUE TO LCC's OPERATION**

Jorge Silva; Tiago Rosa; Maria E. Baltazar

**ICEUBI2015-1.03- AVIATION BUSINESS MODELS APPROACH TO BUSINESS WORLD MARKET EVOLUTION.**

Maria Emilia da Silva Baltazar; Jorge Miguel dos Reis Silva; Manuel Mendes Duarte

**ICEUBI2015-1.04- AIRPORT INFRASTRUCTURES AND PERSONS WITH REDUCED MOBILITY**

Sofia Gaspar; Sara Zorro; Jorge Silva

**ICEUBI2015-1.05- AIRPORT EMERGENCY PROTOCOLS FOR PASSENGERS WITH REDUCED MOBILITY: CONSTRAINTS AND POSSIBLE SOLUTIONS**

Cláudia Guerrinha Pires; Sara Zorro; Jorge Silva

**ICEUBI2015-1.06- AIRPORT FLEXIBILITY: A METHODOLOGY FOR ITS IMPLEMENTATION AND ASSESSMENT OF FLEXIBLE OPTIONS**

Liliana Magalhães; Vasco Reis; Rosário Macário

## ► 14H00-15H30- SESSION ICEUBI2015 - 2



## Health Care Economics and Management 1- Room 8.6

**CHAIRMEN: Magdalena Kludacz and Fernando Santos****ICEUBI2015-2.01- ATTITUDES OF MEDICAL STAFF TOWARDS THREATS TO A PATIENT'S LIFE AND HEALTH VERSUS ECONOMIC DILEMMAS OF HEALTH CARE IN POLAND**

Anna Pacian, Teresa Bernadetta Kulik, Monika Kaczoruk, Adam Gorgol

**ICEUBI2015-2.02- DISTRICT HEALTH CARE FACILITY EVALUATION FOR PRIVATIZATION PURPOSES USING MONTE CARLO METHOD**

Renata Walczak, Pawel Neumann

**ICEUBI2015-2.03- EVALUATION OF DIFFERENCES IN HEALTH EXPENDITURE DEPENDING ON THE LEVEL OF EDUCATION OF HOUSEHOLD HEAD**

Magdalena Kludacz, Marlena Piekut

**ICEUBI2015-2.04- EXPENDITURE ON HEALTH CARE IN POLAND - THE LEGAL PERSPECTIVE**

Jolanta Pacian

## ► 14H00-15H30- SESSION ICEUBI2015 - 3



## Innovations in Public Spaces 1- Room 8.8

**CHAIRMEN: Anna Włodarczyk and Inês Campos****ICEUBI2015-3.01- WHAT WAY SHALL WE FOLLOW FOR A BETTER CITY? - DESIGN THINKING METHODOLOGY AS A TOOL FOR INNOVATION IN URBAN SPACE**

Joanna Szechlicka; Joanna Szustakiewicz



**ICEUBI2015-3.02- ANALYSIS OF THE ACOUSTIC CLIMATE OF A SPA PARK USING THE FUZZY SET THEORY**

Jacek Sztubecki; Małgorzata Sztubecka

**ICEUBI2015-3.03- INNOVATIONS IN PUBLIC SPACES IN SMALL TOWNS IN POLAND**

Przesmycka Elzbieta

**ICEUBI2015-3.04- NOISE LEVEL ARRANGEMENT IN DETERMINED ZONES OF HOMOGENOUS DEVELOPMENT OF GREEN AREAS ON THE EXAMPLE OF THE SPA PARK IN INOWROCLAW**

Małgorzata Sztubecka; Marta Anna Skiba

► **14H00-15H30- SESSION ICEUBI2015 - 4**



**Transportation Infraestructure Management- Room 8.10**

**CHAIRMEN: Silvino Capitão and Jorge Gonçalves**

**ICEUBI2015-4.01- DETERMINAÇÃO DO NÍVEL DE SERVIÇO EM ESTRADAS MULTIVIAS PORTUGUESAS: METODOLOGIA HCM 2010**

João Fernandes; Bertha Santos; Jorge Gonçalves

**ICEUBI2015-4.02- DIAGNÓSTICO DA SINISTRALIDADE RODOVIÁRIA PORTUGUESA NOS TROCOS EM OBRAS**

Cláudia Polónia; Bertha Santos; Carmen Carvalheira

**ICEUBI2015-4.03- NUTII CENTRO - ACESSIBILIDADES RODOVIÁRIAS E DESENVOLVIMENTO REGIONAL**

Pedro Miguel Luís da Silva; Carmen Geraldo Carvalheira; Maria João de Moreira Fontes

**ICEUBI2015-4.04- TAV RIO - CAMPINAS: DESENVOLVIMENTO REGIONAL ATRAVÉS DE MOBILIDADE INTERURBANA SUSTENTÁVEL**

Alline Margarete da Mota Serpa

**ICEUBI2015-4.05- HEAVY METAL REMOVAL IN A DETENTION BASIN FOR ROAD RUNOFF**

Paulo Scalize; Antonio Albuquerque; Paulo Belizario

► **14H00-15H30- SESSION ICEUBI2015 - 5**



**Asset Management- Room 8.12**

**CHAIRMEN: João Quaresma Dias and João Matias**

**ICEUBI2015-5.01- GESTÃO DE ATIVOS, O CAMINHO FUTURO**

Daniel da Fonseca Albino Sampaio Viola

**ICEUBI2015-5.02- EVOLUÇÃO DO ESTADO DAS ORGANIZAÇÕES NA GESTÃO DE ATIVOS: DESDE O GRAU DE MATURIDADE ATÉ À CERTIFICAÇÃO, PELA NORMA ISO 55001**

Daniel da Fonseca Albino Sampaio Viola



**ICEUBI2015-5.03- A IMPORTÂNCIA DA GESTÃO DE ATIVOS NA INDUSTRIA**

Joaquim Cabral Martins

**ICEUBI2015-5.04- O PAPEL DA ENGENHARIA NA GESTÃO DE ATIVOS INDUSTRIAS**

Joaquim Cabral Martins

**ICEUBI2015-5.05- PROPOSAL OF A SYSTEMIC AND INTEGRATED FRAMEWORK TO SUPPORT NEW PRODUCT DEVELOPMENT DESIGN**

António João Feliciano Pina da Costa Abreu; João Carlos de Oliveira Matias; João Carlos Quaresma Dias; Ana Sofia Martins da Eira Dias

**ICEUBI2015-5.06- PROPOSAL OF A CONCEPTUAL/FUNCTIONAL MODEL TO SUPPORT NEW PRODUCT DEVELOPMENT DESIGN**

João Carlos de Oliveira Matias; João Carlos Quaresma Dias; Ana Sofia Martins da Eira Dias; António João Feliciano Pina da Costa Abreu

**► 16H00-17H30- SESSION ICEUBI2015 - 6****Air Transport 2****Auditorium 8.1**

**CHAIRMEN:** Jorge Silva and Vasco Reis

**ICEUBI2015-6.01- FUEL CONSERVATION STRATEGIES FOR THE VERTICAL PROFILE OF CRUISE FLIGHT**

Henrique S. F. A. Nunes; Jorge M. R. Silva

**ICEUBI2015-6.02- INSIGHTS AND CHALLENGES OF FLIGHT SIMULATION SYSTEMS IN AIR TRANSPORTATION**

Luís G. Trindade; João Neves; Jorge Silva; Jorge Silva; Kouamana Bousson; Laura N. Martins

**ICEUBI2015-6.03- PSYCHOPHYSIOLOGICAL FACTORS ANALYSIS IN UNPRESSURIZED AIRCRAFT CABINS**

Luís Patrão; Sara Zorro; Jorge Silva

**ICEUBI2015-6.04- MODELLING , OPTIMIZATION OF RUNWAY OCCUPANCY TIME AND REVENUE MANAGEMENT IMPACT**

Seddik Sakif; Najiba Sbihi; Hicham Nizar; Mohammed Benbrahim

**ICEUBI2015-6.05- MODELLING AN AIR TRANSPORT NETWORK WITH PUBLIC SERVICE OBLIGATIONS**

Duarte Rego Costa Amorim da Cunha; Maria do Rosário Maurício Ribeiro Macário; Luis Miguel Martinez

**ICEUBI2015-6.06- A CONECTIVIDADE NO CONTEXTO DO DESENVOLVIMENTO DO CONCEITO DE CIDADE-AEROPORTO: O CASO DE ESTUDO DO AEROPORTO DE LISBOA**

Vasco Domingos Moreira Lopes Miranda dos Reis; Maria Braga Pestana

**► 16H00-17H30- SESSION ICEUBI2015 - 7****Health Care Economics and Management 2- Room 8.6**

**CHAIRMEN:** Magdalena Kludacz and Paulo Scalize

**ICEUBI2015-7.01- HEALTH EXPENDITURE IN HOUSEHOLD BUDGETS OF DIFFERENT SOCIO-ECONOMIC GROUPS IN POLAND**

Piekut Marlena, Kludacz Magdalena

**ICEUBI2015-7.02- IDENTIFICATION OF POLISH HOUSEHOLDS VULNERABLE TO NEGATIVE HEALTH EFFECTS RESULTING FROM ALCOHOLIC BEVERAGES, TOBACCO PRODUCTS AND DRUGS CONSUMPTION**

Renata Walczak, Marlena Piekut, Katarzyna Osiecka

**ICEUBI2015-7.03- METODOLOGIA LEAN APPLICADA A METROLOGIA NOS SERVIÇOS HOSPITALARES**

Maria do Céu L. S. Ferreira; Helena V. G. Navas; Dione T. S. Guimarães

**ICEUBI2015-7.04- LA FLUORACIÓN DEL AGUA EN CIUDADES DEL CENTRO-OESTE DE BRASIL**

Germán Sanz Lobón; Paulo Sérgio Scalize; Cláudia Alves de Souza; Humberto Carlos Ruggeri Júnior; Antonio Albuquerque

**► 16H00-17H30- SESSION ICEUBI2015 - 8****Innovations in Public Spaces 2- Room 8.8****CHAIRMEN: Anna Włodarczyk and Jorge Marum****ICEUBI2015-8.01- PASSENGER INTERMODAL STATIONS: NEW TRANSPORT AREAS IN THE EUROPEAN CITIES**

Katarzyna Foljanty

**ICEUBI2015-8.02- RENATURALIZATION OF RIVERBANKS IN URBAN AREAS**

Anna Marta Włodarczyk; Jorge Mascarenhas

**ICEUBI2015-8.03- TEMPORARY PUBLIC SPACES - FUNCTIONAL INNOVATIONS**

Natalia Przesmycka

**ICEUBI2015-8.04- WILD PUBLIC SPACES. CASE STUDIES OF RUMMELSBURGER BUCHT IN BERLIN (D) AND DOLOMITY IN BYTOM AND TARNOWSKIE GÓRY (PL)**

Anna Marta Włodarczyk; Michał Włodarczyk

**► 16H00-17H30- SESSION ICEUBI2015 - 9****Mobility and Transportation- Room 8.10****CHAIRMEN: Carmen Carvalheira and Bertha Santos****ICEUBI2015-9.01- GESTÃO MUNICIPAL - APLICAÇÃO DE SISTEMAS DE INFORMAÇÃO GEOGRÁFICA EM CIDADES DE PEQUENA DIMENSÃO**

Diana Fernandes; Carmen Carvalheira

**ICEUBI2015-9.02- TRANSPORTES COLETIVOS URBANOS: ANÁLISE EVOLUTIVA DO SISTEMA NA COVILHÃ**

Jorge Humberto Gaspar Gonçalves

**ICEUBI2015-9.03- PEDONALIZAÇÃO DE UMA ARTÉRIA DE UM CENTRO URBANO - RUA GARRETT EM LISBOA**

Silvino Capitão; Rafael Durão; Carmen Carvalheira

**ICEUBI2015-9.04- INDICADORES PARA A CARACTERIZAÇÃO DE NÍVEIS DE SEGURANÇA RODOVIÁRIA EM MEIO URBANO**

Carmen Jesus Geraldes Carvalheira; Vânia Martins Serra; Vanessa Filipa Batista Moura; Silvino Dias Capitão

**► 16H00-17H30- SESSION ICEUBI2015 - 10****Aerospace Sciences- Room 8.12****CHAIRMEN: Miguel Ângelo Silvestre and João Monteiro****ICEUBI2015-10.01- TUBO DE PITOT PARA MEDIDAÇÃO DA VELOCIDADE DO AR OBTIDO POR IMPRESSÃO 3D**

João Alexandre Dias Carrilho; Manuel Carlos Gameiro da Silva; Alexandre Borges de Miranda; João Manuel Milheiro Caldas Paiva Monteiro

**ICEUBI2015-10.02- SIMULAÇÃO CFD DE ALHETAS DE SAÍDA COM ATUADORES DBD PARA A TUBEIRA HOMER**

F. Dias; J. Páscoa; C. Xisto; M. Abdollahzadeh; F. Rodrigues

**ICEUBI2015-10.03- CARACTERIZAÇÃO DA POTÊNCIA CONSUMIDA POR ATUADORES A PLASMA DBD PARA CONTROLO DA CAMADA LIMITE**

Frederico Rodrigues; José Páscoa; Filipe Dias



## ICEUBI2015 – Parallel Sessions

### ICEUBI2015-10.04- PROPULSÃO PARA MICRO VEÍCULOS AÉREOS INSPIRADOS NA BIOLOGIA

Jorge Barata, Fernando Neves, Pedro Manquinho

### ICEUBI2015-10.05- A COMPUTER APPLICATION FOR PARAMETRIC AIRCRAFT DESIGN

Pedro Albuquerque; Pedro Gamboa; Filipe Fraqueiro

### ICEUBI2015-10.06- AERODYNAMIC PERFORMANCE OF AEROFOILS OBTAINED FROM A GEOMETRIC OFFSET APPLIED TO A GIVEN INITIAL AEROFOIL

Pedro V. Gamboa; Diogo B. Sousa; David R. B. Melo

2<sup>nd</sup> December 2015

3<sup>rd</sup> December 2015

4<sup>th</sup> December 2015





## ⇒ 09H00-10H30- SESSION ICEUBI2015 - 11

**Rehabilitation of Buildings and Satisfaction of Contemporary Requirements 1****Auditorium 8.1****CHAIRMEN:** Eduardo Qualharini and João Lanzinha**ICEUBI2015-11.01-** ANÁLISE CONCEITUAL DOS PROJETOS DE RETROFIT E SEUS NOVOS DESAFIOS: TOMADA DE DECISÃO E ANÁLISE DE RISCOS ATRAVÉS DE UMA VISÃO COMPLEXA

Danillo Araujo dos Santos; Lysio Séllos; Gisele Blak Bernat; Eduardo Linhares Qualharini; Orlando Celso Longo

**ICEUBI2015-11.02-** CONSIDERAÇÕES SOBRE BIM E REALIDADE AUMENTADA COMO AGENTE FACILITADOR NA MANUTENÇÃO E RETROFIT DE OBRAS CIVIS

Orlando Celso Longo; Lysio Séllos; Gisele Blak Bernat; Eduardo Linhares Qualharini; Danillo Araujo dos Santos

**ICEUBI2015-11.03-** ESTRUTURA DE PLANO DE MANUTENÇÃO DE EDIFICAÇÕES MULTIFAMILIARES

Elaine Garrido Vazquez; Flavia do Nascimento Vieira

**ICEUBI2015-11.04-** OS DESAFIOS DO GERENCIAMENTO DE RISCOS EM PROJETOS DE REABILITAÇÃO PREDIAL

Gisele Blak Bernat; Danillo Araujo dos Santos; Lysio Séllos; Orlando Celso Longo; Eduardo Linhares Qualharini

**ICEUBI2015-11.05-** A RESPONSABILIDADE TÉCNICA EXIGIDA NO COTIDIANO DA GESTÃO PREDIAL CONDOMINIAL

Fernando José Seixas Pereira; Camilo Michalka Jr; Aldemar Norek de Oliveira Lima

**ICEUBI2015-11.06-** EDIFÍCIOS POMBALINOS - CONSEQUÊNCIAS DE ALGUMAS INTERVENÇÕES DE REABILITAÇÃO

Jorge Morarji dos Remédios Dias Mascarenhas; Fernando José Fortes Garrido Branco

## ⇒ 09H00-10H30- SESSION ICEUBI2015 - 12

**Electrotecnics, Electronics, Instrumentation and Control- Room 8.6****CHAIRMEN:** Bruno Ribeiro and José Pacheco de Carvalho**ICEUBI2015-12.01-** FERRAMENTA DE TESTE E VERIFICAÇÃO PARA SENsoRES INERCIAlS E ALGORITMOS DE POSICIONAMENTO

Sérgio Cravo Patrão; José Pedro Amaro

**ICEUBI2015-12.02-** INFLUÊNCIA DOS MODELOS DAS CARGAS NA ESTABILIDADE DINÂMICA DE TENSÃO

R. M. Monteiro Pereira; Adelino J. C. Pereira; C. M. Machado Ferreira; F. P. Maciel Barbosa

**ICEUBI2015-12.03-** LABORATORY PERFORMANCE STUDIES OF IEEE 802.11 A, G OPEN FOUR-NODE PTMP LINKS

António D. Reis; Hugo Veiga; José A. R. Pacheco de Carvalho; Cláudia F. F. P. Ribeiro Pacheco

**ICEUBI2015-12.04-** ANALISADOR DE PERDAS EM CABOS ELÉTRICOS ASSISTIDO POR MICROCONTROLADOR ( $\mu$ CLA)

Pedro Aleixo; Amilcar Baptista; Manuel Valdez; Adelino Pereira

**ICEUBI2015-12.05-** SISTEMAS DE MONITORAÇÃO DESPORTIVA - INTENSIDADE DO SALTO EM CAMA ELÁSTICA

Ana Costa; Mariana Batalha; Vanda Umbelino; José Pedro Amaro

**ICEUBI2015-12.06-** DEVELOPMENT OF A CLOUD-BASED SYSTEM FOR REMOTE MONITORING OF A PVT PANEL

Paulo Alexandre A. Vieira; Carlos A. Figueiredo Ramos; António J. Marques Cardoso; Luís Miguel G. Saraiva; Adérito N. Alcaso

**ICEUBI2015-12.07-** DIGITAL COMMUNICATION SYSTEMS BY FIBER OPTIC AND SYNCHRONISM

Jose P. Carvalho; Antonio D. Reis; Jose F. Rocha; Atilio S. Gameiro





2<sup>nd</sup> December 2015

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## ICEUBI2015 – Parallel Sessions

### ► 09H00-10H30- SESSION ICEUBI2015 - 13



#### Metaheuristic Optimization- Room 8.8

**CHAIRMEN:** Renata Walczak and Paulo Fazendeiro

##### **ICEUBI2015-13.01-** INTEGRAÇÃO DE METODOLOGIAS PARA A MELHORIA CONTÍNUA DE PROCESSOS

David S. Vilamariz; José E. P. Paulos; Helena V. G. Navas

##### **ICEUBI2015-13.02-** MODELO DE UTILIZAÇÃO CONJUNTA DAS FERRAMENTAS ANALÍTICAS DE LEAN E TRIZ

Gustavo H. N. Lopes; Helena V. G. Navas

##### **ICEUBI2015-13.03-** TEORIA DE RESOLUÇÃO INVENTIVA DE PROBLEMAS (TRIZ)

Helena V. G. Navas; José P. M. Bandeira; Isabel L. Nunes

##### **ICEUBI2015-13.04-** PLANEAMENTO DA MANUTENÇÃO PREVENTIVA USANDO ALGORITMOS GENÉTICOS

António Abreu; J. M. F. Calado; Eduardo Pêgo

##### **ICEUBI2015-13.05-** MICROFILARIAE CLASSIFICATION USING MULTIPLE CLASSIFIERS FOR COLOR AND SHAPE FEATURES

Faroq AL-Tam; António dos Anjos; Sébastien Pion; Michel Boussinesq; Hamid Reza Shahbazkia

### ► 09H00-10H30- SESSION ICEUBI2015 - 14



#### Architecture, Design and Urban Planning- Room 8.10

**CHAIRMEN:** Miguel Moreira Pinto and Inês Campos

##### **ICEUBI2015-14.01-** A AFIRMAÇÃO DO “ARQUIESPAÇO” NO MUNDO DA IMAGEM DO CATÁLOGO DA MARCA REVÍGRES DE 2014

Maria Celsa Rebelo Gil Alves; Luís Miguel de Barros Moreira Pinto; Ângela Prestes Veiga dos Santos

##### **ICEUBI2015-14.02-** VILLA SAVOYE DE LE CORBUSIER: FOTOGRAFIA E CINEMA NA ARQUITECTURA

Susana Maria Tavares dos Santos Henriques; Maria João dos Reis Moreira Soares

##### **ICEUBI2015-14.03-** ANÁLISE DE CICLO DE VIDA APLICADA À PROJETOS DE ARQUITETURA: ESCOLHA DE SISTEMA CONSTRUTIVO

Tiago Joaquim de Sá Laranjeira; Luiz Antonio Pereira de Oliveira

##### **ICEUBI2015-14.04-** LIFE CYCLE ASSESSMENT OF MODULAR GREEN ROOF ARCHITECTURAL SOLUTIONS

Luiz Antonio Pereira de Oliveira; Sandra Carolina Cortez Alves

##### **ICEUBI2015-14.05-** PLACEMAKING - QUALIDADE DO ESPAÇO PÚBLICO

Catarina Dais

### ► 09H00-10H30- SESSION ICEUBI2015 - 15



#### ICT Applications on Engineering, Spatial Planning and Architecture 1- Room 8.12

**CHAIRMEN:** Ana Lídia Virtudes and José Neves Dias

##### **ICEUBI2015-15.01-** PLATAFORMA ROBUSTA PARA APOIO À PRODUÇÃO

Alfredo Fernandes; Paula Prata

##### **ICEUBI2015-15.02-** A MODEL OF ENERGY EFFICIENCY FROM THE ANALYSIS OF RESILIENT TERRITORIES

Rolando-Arturo Cubillos-González

##### **ICEUBI2015-15.03-** ANÁLISE DO CENÁRIO ATUAL DO ENSINO DE ENGENHARIA CIVIL NO BRASIL E A PARTICIPAÇÃO DO BIM NAS UNIVERSIDADES BRASILEIRAS

Gisele Blak Bernat; Orlando Celso Longo; Lysio Séllos; Eduardo Linhares Qualharini; Danillo Araujo dos Santos

**ICEUBI2015-15.04- BIM METHODOLOGY APPLIED IN STRUCTURAL DESIGN**

Alcinia Zita Sampaio; Vitalino Azevedo

**ICEUBI2015-15.05- BIM TRAINING IN ENGINEERING SCHOOL**

Alcinia Zita Sampaio

**ICEUBI2015-15.06- PLATAFORMA CeAMATE-ON - A UTILIZAÇÃO DE UMA PLATAFORMA E-LEARNING NO ENSINO EM ENGENHARIA**

Emília Bigotte de Almeida; Anabela Gomes; Jorge Vale

**► 11H00-12H30- SESSION ICEUBI2015 - 16****Rehabilitation of Buildings and Satisfaction of Contemporary Requirements 2****Auditorium 8.1****CHAIRMEN: Eduardo Qualharini and Manuel Pinto****ICEUBI2015-16.01- EMPREENDIMENTOS DE CONSTRUÇÃO E REABILITAÇÃO - CUSTOS ASSOCIADOS**

Ana Cristina Leite Torres; João Carlos Gonçalves Lanzinha

**ICEUBI2015-16.02- HABITAÇÃO E SAÚDE - PROPOSTA DE METODOLOGIA PARA AVALIAÇÃO DE RISCOS PARA OS OCUPANTES**

Marisa Monteiro; João Lanzinha

**ICEUBI2015-16.03- PROJETO 6.60.6 - CAMPANHA EXPERIMENTAL**

Ana C.A. Sousa; M. Ramiro Pastorinho; João C. G. Lanzinha; Miguel Nepomuceno; Marisa Monteiro

**ICEUBI2015-16.04- HOUSE DUST FUNGAL COMMUNITIES' CHARACTERIZATION: A DOUBLE TAKE ON THE SIX BY SIXTY BY SIX PROJECT (6x60x6)**

Raquel Amaro; Marisa Monteiro; Ana C.A. Sousa; Sónia D. Coelho; Miguel Nepomuceno; M. Ramiro Pastorinho; João C. G. Lanzinha; Luís Taborda-Barata; João Paulo Teixeira; Maria Assunção Vaz-Pato; Cristiana C. Pereira

**ICEUBI2015-16.05- QUANTIFICAÇÃO DE MERCÚRIO EM AMOSTRAS DE PÓ DOMÉSTICO RECOLHIDAS NA CIDADE DA COVILHÃ (PORTUGAL) - RESULTADOS PRELIMINARES DO PROJETO 6x60x6**

Sara M. Neves; Miguel Nepomuceno; M. Ramiro Pastorinho; João C. G. Lanzinha; Luís Taborda-Barata; Ana C.A. Sousa; Maria Assunção Vaz-Pato; Marisa Monteiro

**ICEUBI2015-16.06- PATOLOGIAS BIOLÓGICAS - CRESCIMENTO DE VIDA VEGETAL EM FACHADAS DE EDIFÍCIOS HISTÓRICOS DO RIO DE JANEIRO**

Gustavo Millan Cesar de Almeida; Marcus Vinicius Arruda Plaisant Mariz Filho

**► 11H00-12H30- SESSION ICEUBI2015 - 17****Small Scale Industrialized Architectures of Nomadic Nature- Room 8.6****CHAIRMEN: Salvator Mata Peréz and Eduardo Fraile****ICEUBI2015-17.01- ARQUITECTURA DE EMERGENCIA: PROTOTIPOS CONTEMPORÁNEOS EFÍMEROS**

Lucía Muñoz Mínguez

**ICEUBI2015-17.02- FOLDING WAVE HOUSE: HABITAÇÃO PARA UM SURFISTA NÓMADA**

Teresa Sílvia Magalhães Loureiro Carvalho

**ICEUBI2015-17.03- MODULAR PARA REABILITAR. O AÇO E A LUZ NO RE-HABITAR DE RUÍNAS COM CARÁCTER CENOGRÁFICO.**

Inês Daniel de Campos; Ana Maria Tavares Martins





2<sup>nd</sup> December 2015

3<sup>rd</sup> December 2015

4<sup>th</sup> December 2015

## ICEUBI2015 – Parallel Sessions

**ICEUBI2015-17.04-** SALUDABLE Y NÓMADA: UN PROYECTO PILOTO DE MÓDULO ASISTENCIAL SANITARIO DE CARÁCTER INDUSTRIALIZADO DE PEQUEÑA ESCALA Y AUTOSUFICIENTE

Salvator Mata Peréz

**ICEUBI2015-17.05-** LA COMPRESIBILIDAD, CONDICIÓN SUBSTANCIAL DE LAS ARQUITECTURAS NÓMADAS Y DE EMERGENCIA.

Eduardo Miguel González Fraile

**ICEUBI2015-17.06-** COMPARACIÓN DE TÉCNICAS FOTOGRAFÍCAS DE BAJO COSTO PARA EL RELEVAMIENTO DE PIEZAS MECÁNICAS

Gavino S.; Defranco G.; Lara M.; Fuertes L.; Lopresti L.; Barba S.

### ► 11H00-12H30- SESSION ICEUBI2015 - 18



#### Dynamics and Stability in Structural Engineering- Room 8.8

**CHAIRMEN:** Rui Carneiro Barros and Luis Bernardo

**ICEUBI2015-18.01-** ANÁLISE DO COMPORTAMENTO SÍSMICO DE DUAS FORMAS DE TORRES PARA A PONTE ATIRANTADA PROPOSTA PARA A TERCEIRA TRAVESSIA DO TEJO

Rui Carneiro Barros; Pedro M. N. Almeida

**ICEUBI2015-18.02-** ANÁLISE POR CFD DO ESCOAMENTO EM TORRES TUBULARES DE TELECOMUNICAÇÃO

Rui Carneiro Barros; Sandra Freitas; Fabio M. Paiva

**ICEUBI2015-18.03-** APLICAÇÃO DO RADAR INTERFEROMÉTRICO IBIS FS NA MONITORIZAÇÃO DE UM POSTE DE TELECOMUNICAÇÕES

Luis Silva; Rui Carneiro de Barros; Fabio M. Paiva; Jorge M. Henriques

**ICEUBI2015-18.04-** DIMENSIONAMENTO REGULAMENTAR DE CINTAS HELICOIDAIS PARA TORRES TUBULARES DE TELECOMUNICAÇÕES

Sandra Freitas; Rui Carneiro Barros; Fabio M. Paiva

**ICEUBI2015-18.05-** O RADAR INTERFEROMÉTRICO IBIS-FS NA MONITORIZAÇÃO DO COMPORTAMENTO ESTRUTURAL

Luis Carlos Gonçalves Silva; Rui Carneiro de Barros; Fabio M. Paiva; Jorge M. Henriques

**ICEUBI2015-18.06-** OPTIMIZATION OF A FUZZY LOGIC CONTROLLER FOR MR DAMPERS USING ANFIS

Manuel T. Braz-César; Rui Carneiro de Barros

### ► 11H00-12H30- SESSION ICEUBI2015 - 19



#### Textile- Room 8.10

**CHAIRMEN:** Albert Manich and Rita Salvado

**ICEUBI2015-19.01-** DESEMPEÑO DA INFLUÊNCIA DOS SISTEMAS DE FIOS NO TECIDO DE FELPO

Juliana Cruz

**ICEUBI2015-19.02-** Re-DESIGN DE TECIDOS ESTREITOS PARA APLICAÇÕES INOVADORAS

Mara Fernandes; Nuno Moura e Sá; Raquel Carvalho; Cátia Relvas; Raul Fangueiro; Eduardo Moura e Sá

**ICEUBI2015-19.03-** EFECTO DEL LIGAMENTO, PROCESADO Y HUMEDAD RELATIVA EN EL ESPESOR, LA DENSIDAD APARENTE Y EL COMPORTAMIENTO A LA COMPRESIÓN DE TEJIDOS DE PLA/LANA Y PET/LANA

Rui A L Miguel; Manuel J Santos Silva; Meritxell Martí; Diana Cayuela; Albert M Manich

**ICEUBI2015-19.04-** ESTUDO DE MATERIAIS FIBROSOS PARA REDUÇÃO DA ASSINATURA TÉRMICA

Cátia Relvas; Raquel Carvalho; Raul Fangueiro; Eduardo Moura e Sá; Nuno Moura e Sá

**11H00-12H30- SESSION ICEUBI2015 - 20****ICT Applications on Engineering, Spatial Planning and Architecture 2- Room 8.12****CHAIRMEN:** Ana Lídia Virtudes and Alcina Zita Sampaio**ICEUBI2015-20.01- THE ROLE OF INTEGRATED MOBILITY MANAGEMENT TOWARDS THE CONCEPT OF SMART CITIES**

Tiago I. Costa; Gonçalo Duarte; Sandra Melo; Patrícia Baptista

**ICEUBI2015-20.02- ICT FOR SMART EVALUATION OF VERNACULAR ARCHITECTURE: CANEIRAS THE ALIVE AND LIVED STILT-HOUSE VILLAGE**

Ana Lídia Virtudes; Filipa Almeida

**ICEUBI2015-20.03- ICT FOR SMART EVALUATION OF VERNACULAR ARCHITECTURE: ESCAROUPIM THE MOST URBAN STILT-HOUSE VILLAGE**

Filipa Almeida; Ana Lídia Virtudes

**ICEUBI2015-20.04- ICT FOR SMART EVALUATION OF VERNACULAR ARCHITECTURE: LEZIRÃO THE BUSY FISHING STILT-HOUSE VILLAGE**

Filipa Almeida; Ana Lídia Virtudes

**ICEUBI2015-20.05- ICT FOR SMART EVALUATION OF VERNACULAR ARCHITECTURE: PALHOTA THE EXPECTANT STILT-HOUSE VILLAGE**

Filipa Almeida; Ana Lídia Virtudes

**ICEUBI2015-20.06- ICT FOR SMART EVALUATION OF VERNACULAR ARCHITECTURE: PATAÇÃO DE CIMA THE FORGOTTEN STILT-HOUSE VILLAGE**

Filipa Almeida; Ana Lídia Virtudes

**ICEUBI2015-20.07- PROJETO E CONSTRUÇÃO VIRTUAL DAS INSTALAÇÕES HIDROSSANITÁRIAS**

José de Paula Barros Neto; João Bosco Pinheiro Dantas Filho; Bruno Maciel Angelim; Joana Pimentel Guedes; Marcelo Augusto Farias de Castro

**14H00-15H30- SESSION ICEUBI2015 - 21****Construction****Auditorium 8.1****CHAIRMEN:** Szymon Dawzynski and Marisa Dinis**ICEUBI2015-21.01- DESEMPENHO TÉRMICO DAS PAREDES DE FACHADA EM PORTUGAL**

Beatriz Viegas de Oliveira

**ICEUBI2015-21.02- A MODELAÇÃO DO COMPORTAMENTO DOS PORTUGUESES EM CASO DE INCÊNDIO**

Elisabete da Cunha Cordeiro; António Leça Coelho; Miguel Nepomuceno; João Craveiro

**ICEUBI2015-21.02- A MODELAÇÃO DO COMPORTAMENTO DOS PORTUGUESES EM CASO DE INCÊNDIO**

Elisabete da Cunha Cordeiro; António Leça Coelho; Miguel Nepomuceno; João Craveiro

**ICEUBI2015-21.03- LONG-TERM COMPARATIVE TESTS OF RC BEAMS STRENGTHENED WITH CFRP STRIP AND SRP TAPE**

Marcin Górski; Rafal Krzywon; Szymon Dawczynski

**ICEUBI2015-21.04- EXECUÇÃO DE ESTRUTURA EM CONCRETO ARMADO E PROTENDIDO APARENTE DE ALTO DESEMPENHO: ESTUDO DE CASO DA SUPERESTRUTURA DO NOVO MIS - MUSEU DA IMAGEM E DO SOM, EM COPACABANA, RJ**

Bruno Lery Santos; Helcio Moraes; Marcio Machado

**ICEUBI2015-21.05- O USO DE MATERIAL FRESCO EM MISTURAS BETUMINOSAS TEMPERADAS**

Márcia Lopes Afonso; Marisa Dinis-Almeida





## ► 14H00-15H30- SESSION ICEUBI2015 - 22



## Rehabilitation of Monastic Heritage 1- Room 8.6

**CHAIRMEN:** María Teresa Pérez Cano and Ana Maria Martins**ICEUBI2015-22.01-** NUEVOS USOS DE LA ARQUITECTURA MONÁSTICA EN CÓRDOBA: LOS CUARTELES MILITARES.

Pérez Cano, María Teresa; Morcillo Arencibia, José Antonio; Royo Naranjo, Lourdes

**ICEUBI2015-22.02-** PERMANENCIA, ADAPTACIÓN O REUTILIZACIÓN. TRANSFORMACIONES DE LOS CONVENTOS EN LA CIUDAD DE SEVILLA.

Antonio Cubero Hernández; María Teresa Pérez Cano

**ICEUBI2015-22.03-** PLANOS DE MOSTEIROS CISTERCIENSES PORTUGUESES: REGRAS EXISTENTES OU NÃO?

Ines Daniel de Campos; Ana Maria Tavares Martins

**ICEUBI2015-22.04-** REHABILITACIÓN-ARQUITECTURA-CIUDAD. LA INTERVENCIÓN DE EDUARDO SOUTO DE MOURA EN EL CONVENTO DAS BERNARDAS DE TAVIRA

Luis Rubiño Chacón

## ► 14H00-15H30- SESSION ICEUBI2015 - 23



## Hydraulic and Environment / Teaching Engineering- Room 8.8

**CHAIRMEN:** Cristina Fael and António Albuquerque**ICEUBI2015-23.01-** AVALIAÇÃO DE DISPONIBILIDADES HIDRÍCAS EM BACIAS HIDROGRÁFICAS NÃO MONITORIZADAS - CASO DE ESTUDO

Joana Margarida Monteiro Raposo; Maria Manuela Portela; Cristina Sena Fael

**ICEUBI2015-23.02-** IDENTIFICAÇÃO E CARACTERIZAÇÃO DAS BACIAS DE CAPTAÇÃO SUPERFICIAL DE ÁGUA PARA ABASTECIMENTO QUANTO A PRESENÇA DE DISPOSIÇÃO FINAL DE RESÍDUOS SÓLIDOS**ICEUBI2015-23.03-** STUDY OF PERMEABLE PAVEMENTS IN URBAN AREAS EVALUATION OF HIS EFFICIENCY IN ORDER TO REDUCE THE RUNOFF

Cátia Filipa Carvalho; Marisa Dinis-Almeida; Cristina Sena Fael

**ICEUBI2015-23.04-** AULAS POR UNA SOCIEDAD SOSTENIBLE: INGENIERÍA Y ARQUITECTURA DESDE LA EDUCACIÓN OBLIGATORIA. UNA EXPERIENCIA EN ENSEÑANZA SECUNDARIA

Javier Encinas Hernández

**ICEUBI2015-23.05-** O ESTUDANTE DA ENGENHARIA GERANDO UM PRODUTO ÚTIL PARA SOCIEDADE DE EDUCAÇÃO

Jhonata Cirilo de Souza; Bruno de Santos; Ana Brasil; Márcia Motta Pimenta Velloso, DSC; Lucas Carvalho Orofino; David de Azevedo Esteves

**ICEUBI2015-23.06-** O ESTUDANTE DE ENGENHARIA GERANDO UM PRODUTO EDUCACIONAL ÚTIL PARA A SOCIEDADE

Bernardo Baptista Ribeiro; Victor Baptista Schnellrath; Márcia Motta Pimenta Velloso, DSC; Bruno de Santos; Ana Brasil; Gabriel Panza Vieira Pinto

## ► 14H00-15H30- SESSION ICEUBI2015 - 24



## Traditional Buildings - Their Contribution for a Better Sustainable World 1- Room 8.10

**CHAIRMEN:** Jorge Tiago Pinto and Luiz Oliveira**ICEUBI2015-24.01-** ESTUDO COMPARATIVO DE SOLUÇÕES DE REABILITAÇÃO ENERGÉTICA DE EDIFÍCIOS ANTIGOS - A QUINTA DA FONTE NOVA

Margarida Conceição; Ana Ferreira Ramos



## ICEUBI2015 – Parallel Sessions

### ICEUBI2015-24.02- ALTERNATIVAS EFICIENTES NA CONSTRUÇÃO CIVIL POPULAR: ESTUDO DE FACHADAS RESIDENCIAIS NO MORRO DO ATALAIA

Tamara Teixeira Lopes; Hellyda Perroud Souza

### ICEUBI2015-24.03- BIODEGRADAÇÃO DE PAREDES DE TABIQUE

Anabela Paiva; Jorge Pinto; Teresa Pinto; Sandra Pereira; Ana Briga Sá

### ICEUBI2015-24.04- MECHANICAL MODELLING OF TABIQUE WALLS NAILS OF THE ALTO DOURO WINE REGION

Rui José Silva Cardoso; Anabela Gonçalves Correia de Paiva; Jorge Tiago Queirós da Silva Pinto; João Carlos Gonçalves Lanzinha

### ICEUBI2015-24.05- THREE REHABILITATION CASES OF TABIQUE CONSTRUCTION

Sandra Pereira; Jorge Pinto; Ana Principe

### ► 14H00-15H30- SESSION ICEUBI2015 - 25



#### Urban Riverfronts- Room 8.12

**CHAIRMEN:** David Sousa-Rodrigues and Jorge Jular

### ICEUBI2015-25.01- CIDADE, ESPAÇO PÚBLICO E FRENTE DE RIO. PROJETO DE REGENERAÇÃO EM RIBEIRA DE SANTARÉM

Rita Ochoa; David Quinas

### ICEUBI2015-25.02- RANDOM-WALK CONNECTIVITY OF LISBON'S WATERFRONT IN THE POST-1755 RECONSTRUCTION

Mafalda Sampayo; David Sousa-Rodrigues

### ICEUBI2015-25.03- OS GALPÕES DO PORTO DE VITÓRIA: UM PATRIMÔNIO A SER PRESERVADO

Luciana Nemer Diniz; Lívia Santos de Morais

### ICEUBI2015-25.04- PROGRAMA POLIS PARA FRENTE RIBEIRINHA DE SETÚBAL: AVALIAÇÃO QUALITATIVA DO ESPAÇO PÚBLICO DE 1900 A 2015

Sara Lança; Mafalda Sampayo

### ICEUBI2015-25.05- PROGRAMA POLIS PARA A FRENTE RIBEIRINHA DE SETÚBAL: AVALIAÇÃO QUANTITATIVA DO ESPAÇO PÚBLICO DE 1900 A 2013

Sara Lança; Mafalda Sampayo

### ICEUBI2015-25.06- ATIVIDADE PORTUÁRIA E CONFLITOS TERRITORIAIS NA VITÓRIA METROPOLITANA

Mineli Fim; Martha Machado Campos

### ICEUBI2015-25.07- CIDADE PORTUÁRIA E VIDA URBANA: SOBRE CONFLITOS ENTRE PROJETOS E LUGARES

Nathalia Spala Sorte; Martha Machado Campos

### ► 15H00-16H00- SESSION ICEUBI2015 - Poster

#### Poster Session- Room Atrium

### ICEUBI2015-P.01- DEVELOPMENT OF MOBILE ULTRASONIC HYDROSTATIC LEVELLING SYSTEM

Adelino Jorge Coelho Pereira

### ICEUBI2015-P.02- WEAR BEHAVIOR OF STEELS FOR ALUMINUM EXTRUSION DIES

A. Varela; J. L. Mier; C. Camba; A. García; A. Filgueira; B. Del Río

### ICEUBI2015-P.03- ABRASIVE WEAR BEHAVIOR OF HADFIELD TYPE MEDIUM-MANGANESE STEELS

B. Del Río; A. Varela; J. L. Mier; F. Barbadillo; A. García; A. Filgueira

### ICEUBI2015-P.04- PSEUDOCERAMIC MORTAR AS A RESTORATION MATERIAL OF BRICKS OF THE ARCHITECTURAL HERITAGE

Abílio P. Silva; Honorato Justicia Muñoz; Jesús Montoya Herrera; Jorge Alberto Durán Suárez; Rafael Peralbo Cano

2<sup>nd</sup> December 2015

3<sup>rd</sup> December 2015

4<sup>th</sup> December 2015



**ICEUBI2015 – Parallel Sessions**

**ICEUBI2015-P.05- QUALITY OF NEW CERAMIC MATERIALS OBTAINED WITH TUNGSTEN MINING WASTE: NEO MINERALS FORMED MULLITE AND HEMATITE.**

João Paulo de Castro Gomes; Honorato Justicia Muñoz; Jorge Alberto Duran Suarez; Jesus Montoya Herrera; Rafael Peralbo Cano

**ICEUBI2015-P.06- NUMERICAL ANALYSIS OF COMPOSITE MATERIALS IN FLEX SPLINES OF HARMONIC DRIVES**

Piotr Folega; Abílio P. Silva; Tomasz Wegrzyn; Jan Piwnik

**ICEUBI2015-P.07- QUALITY ANALYSIS OF COTTON FABRICS DYED IN PROTIC IONIC LIQUIDS**

Helen Ronise Mazzer; Lucio Cardozo Filho; Fábia Regina Ribeiro; Rebecca S. Andrade; Gilson dos Santos Croscato; Miguel Angel Iglesias Duro

**ICEUBI2015-P.08- KNOWLEDGE EXTRACTION IN QUEUE SYSTEM USING DATA MINING MODELS**

Tiago Miguel Pereira Candeias

**ICEUBI2015-P.09- THE PERFORMANCE OF BUILDINGS, AND THE SMALL CONSTRUCTION CONCERNS**

Karine Lopes Ferreira; Maria Aparecida Steinherz Hippert

**ICEUBI2015-P.10- VARIATIONS IN REACTIVE POWER DUE TO IMBALANCES IN LINEAR THREE-PHASE SYSTEMS**

M. A. Graña López; J. D. Chouza-Gestoso; A. E. Masdías-Bonome

**ICEUBI2015-P.11- EQUIVALENT CIRCUIT OF A DYN TRANSFORMER BY USING THE UNIFYING THEORY OF ELECTRIC POWER**

J.D. Chouza-Gestoso; M.A. Graña- López; A.E. Masdias-Bonome

**ICEUBI2015-P.12- A DEVICE FOR EARLY PARKINSON DISEASE DIAGNOSIS**

Joana Noivo; Emilia Bigotte; Rodolfo Silva; José Pedro Amaro

**ICEUBI2015-P.13- 3D IMAGING OF P-WAVES VELOCITY AS A TOOL FOR HEAT INDUCED LIMESTONE DECAY EVALUATION AND SUBSEQUENT CONSOLIDATION**

Manuela Mendes; Amélia Dionisio; Edite Martinho

**ICEUBI2015-P.14- CONSOLIDATION OF LIMESTONE THERMALLY DAMAGED BY FIRE: PRELIMINARY RESULTS**

Magda Viana; Amélia Dionísio; Vera Pires

► **16H00-17H30- SESSION ICEUBI2015 - 26**

**Rehabilitation of Buildings and Satisfaction of Contemporary Requirements 3**



**Auditorium 8.1**

**CHAIRMEN: Eduardo Qualharini and João Lanzinha**

**ICEUBI2015-26.01- MARIEE: UM INSTRUMENTO DE APOIO AO PROJETO DE SEGURANÇA AO INCÊNDIO NA REABILITAÇÃO DE EDIFÍCIOS**

António Leça Coelho; Elisabete da Cunha Cordeiro

**ICEUBI2015-26.02- ARGAMASSAS FOTOCATALÍTICAS: ATIVIDADE AUTOLIMPANTE SEGUNDO A ORIENTAÇÃO SOLAR.**

João Pedro Marins Treviso; Denise Carpêna Coitinho Dal Molin; Jéssica Deise Bersch

**ICEUBI2015-26.03- PREVISÃO DA RESISTÊNCIA DE GEOPOLÍMEROS MONOFÁSICOS**

Abdollahnejad, Z. Nazari, A. Pacheco-Torgal, F. Sanjayan, J.G. Barroso de Ag

**ICEUBI2015-26.04- SMART TEXTILES FOR STRENGTHENING OF STRUCTURES**

Rita Salvado; Marcin Górska; Catarina Lopes; Rafal Krzywon; Pedro Araújo; Szymon Dawczynski; Fernando José Velez; Leszek Szojda; João Castro-Gomes

**ICEUBI2015-26.05- INVESTIGAÇÃO EXPERIMENTAL SOBRE COMPOSIÇÃO, RESISTÊNCIA MECÂNICA E CAPACIDADE DE AUTO-LIMPEZA DE ARGAMASSAS FOTOCATALÍTICAS**

Azevedo; N.; Miraldo, S.; Abdollahnejad, Z.; Pacheco-Torgal, F.; Aguiar, J.

**ICEUBI2015-26.06- ESTADO GERAL DOS POSTES CILÍNDRICOS EM CONCRETO ARMADO NA CIDADE DO RIO DE JANEIRO**

Amaro Francisco Codá dos Santos; Jorge Luiz Alves Junior; Luiz Henrique Araújo do Nascimento



## ► 16H00-17H30- SESSION ICEUBI2015 - 27



## Rehabilitation of Monastic Heritage 2- Room 8.6

**CHAIRMEN:** Eduardo Mosquera Adell and Ana Maria Martins**ICEUBI2015-27.01-** A PERTINÊNCIA DO PROJETO ORFEUS NO ÂMBITO DA INVESTIGAÇÃO SOBRE O PATRIMÓNIO MONÁSTICO CISTERCIENSE PORTUGUÊS

Ana Maria Tavares Martins

**ICEUBI2015-27.02-** EL EXCONVENTO DE SAN AGUSTIN DE SEVILLA. BASES PATRIMONIALES PARA SU INTERVENCIÓN

María Teresa Pérez Cano; Eduardo Mosquera Adell

**ICEUBI2015-27.03-** LOS ORÍGENES DE LA REUTILIZACIÓN DEL PATRIMONIO MONÁSTICO: LA TRANSFORMACIÓN INDUSTRIAL EN EL SIGLO XIX TRAS LA DESAMORTIZACIÓN. EL CASO DE JEREZ DE LA FRONTERA (ESPAÑA).

José-Manuel Aladro-Prieto

**ICEUBI2015-27.04-** O RENASCIMENTO EM PORTUGAL E A SUA MARCA NO CLAUSTRO DO CONVENTO DE CRISTO, EM TOMAR

Tiago Rodrigues

## ► 16H00-17H30- SESSION ICEUBI2015 - 28



## Assessment, Diagnosis, Energy efficient and Refurbishment for Sustainability- Room 8.8

**CHAIRMEN:** Anabela Paiva and Miguel Nepomuceno**ICEUBI2015-28.01-** APLICAÇÃO DO CERMA A UM EDIFÍCIO DE HABITAÇÃO – ANÁLISE DE RESULTADOS COM A UTILIZAÇÃO DE DIFERENTES EQUIPAMENTOS.

Marisa Pombo; Ana Ferreira Ramos

**ICEUBI2015-28.02-** SELEÇÃO EXIGENCIAL DE ISOLANTES TÉRMICOS

Manuel Pinto

**ICEUBI2015-28.03-** QUALIDADE DO AMBIENTE INTERIOR EM LARES E JARDINS DE INFÂNCIA NA CIDADE DA COVILHÃ - ESTUDO EXPLORATÓRIO

João C. G. Lanzinha; Tiago Freire; Albino Alves; Manuel Pinto

**ICEUBI2015-28.04-** MEDIDAS DE REDUÇÃO DE CONSUMOS ENERGÉTICOS EM EDIFÍCIOS DE SERVIÇOS: ESTUDO DE CASO

Luis Carlos Carvalho Pires; Pedro Nuno Dinho Pinto da Silva; João André Andrade Amado; Cíntia Angélica dos Santos Fernandes

**ICEUBI2015-28.05-** MEDIDAS DE REDUÇÃO DE CONSUMOS ENERGÉTICOS EM PISCINAS PÚBLICAS: ESTUDO DE CASO

Cíntia Angélica dos Santos Fernandes; João André Andrade Amado; Luis Carlos Carvalho Pires; Pedro Nuno Dinho Pinto da Silva

**ICEUBI2015-28.06-** ESTUDO DE UM CASO DE APLICAÇÃO DE UNIDADES DE PRODUÇÃO PARA AUTOCONSUMO (UPACs) FOTOVOLTAICAS EM EDIFÍCIOS DOMÉSTICOS

Luis Carlos Carvalho Pires; Pedro Nuno Dinho Pinto da Silva; João Miguel Lemos Sena

## ► 16H00-17H30- SESSION ICEUBI2015 - 29



## Traditional Buildings - Their Contribution for a Better Sustainable World 2- Room 8.10

**CHAIRMEN:** Jorge Tiago Pinto and Marisa Dinis**ICEUBI2015-29.01-** CONTRIBUIÇÃO PARA O CONHECIMENTO DAS PATOLOGIAS DE ORIGEM GEOTÉCNICA NA CIDADE DA COVILHÃ

Luis Manuel Ferreira Gomes; H.H. Figueiredo Baptista; L.J. Andrade Pais





2<sup>nd</sup> December 2015

3<sup>rd</sup> December 2015

4<sup>th</sup> December 2015

## ICEUBI2015 – Parallel Sessions

**ICEUBI2015-29.02- CONTRIBUTO PARA O ESTUDO DA VULNERABILIDADE ESTRUTURAL DE PONTES FERROVIÁRIAS METÁLICAS ANTIGAS: PONTE SOBRE O RIO CORGO**

Ana Briga Sá; Isabel Bentes; Jorge Pinto; Daniel Morgado

**ICEUBI2015-29.03- CHARACTERIZATION OF TABIQUE WALLS NAILS OF THE ALTO DOURO WINE REGION**

Rui Jose Silva Cardoso; Anabela Gonçalves Correia de Paiva; Jorge Tiago Queirós da Silva Pinto; João Carlos Gonçalves Lanzinha

**ICEUBI2015-29.04- EL EDIFICIO DE LA ESTACIÓN DE ALTA VELOCIDAD FERROVIARIA: PUERTA DE ACCESO A LA RED**

Carmen Mota Utanda; Miguel àEngel López Guerrero

**ICEUBI2015-29.05- COMPARAÇÃO E ANÁLISE DE PROPRIEDADES FÍSICAS E DE RESISTÊNCIA À COMPRESSÃO DE CONCRETOS COM E SEM ADIÇÃO MINERAL**

David Brandão Nunes; Ana Verônica Gonçalves Borges; Antônio Eduardo Bezerra Cabral; Maria Josefina Positieri; Angel Oshiro

► **16H00-17H30- SESSION ICEUBI2015 - 30**



**Thermal Behavior and Materials- Room 8.12**

**CHAIRMEN: Dominik Dorosz and Jorge Durán Suarez**

**ICEUBI2015-30.01- CARACTERIZAÇÃO DO COMPORTAMENTO TÉRMICO DE UM ARMÁRIO EXTERIOR DE TELECOMUNICAÇÕES MÓVEIS**

Carlos Patrício; Pedro D. Silva; Luís Pires; Pedro D. Gaspar

**ICEUBI2015-30.02- ESTUDO NUMÉRICO DO DESEMPENHO TÉRMICO DE UM ARMÁRIO EXTERIOR PARA EQUIPAMENTOS DE TELECOMUNICAÇÕES MÓVEIS**

Miguel Vicente Duarte; Pedro Miguel de Figueiredo Dinis Oliveira Gaspar; Pedro Nuno Dinho Pinto da Silva; Luís Carlos Carvalho Pires

**ICEUBI2015-30.03- CARBON LAMINATES WITH RE DOPED OPTICAL FIBER SENSORS**

Miluski P.; Jacek Zmaja; Dorosz D; Marcin Kochanowicz; Silva AP; Reis PNB

**ICEUBI2015-30.04- EVALUATION OF SINGLE OPTICAL FIBER IN TEMPERATURE ANALYSIS ON FRP COMPOSITES**

Dorosz D.; Reis P.N.B.; Jorge Santos Rato; Silva A.P.; Ricardo Henriques; Miluski P.

**ICEUBI2015-30.05- APPLICATIONS OF NUCLEAR REACTIONS AND ELASTIC SCATTERING TO NON-DESTRUCTIVE SURFACE ANALYSIS OF MATERIALS**

José A. R. Pacheco de Carvalho

► **20:00– Conference Dinner - HOTEL TRYD D. Maria - Alameda Pêro da Covilhã**





## ► 09H00-10H30- SESSION ICEUBI2015 - 31

**Rehabilitation of Buildings and Satisfaction of Contemporary Requirements 4****Auditorium 8.1****CHAIRMEN: Eduardo Qualharini and Luiz Oliveira****ICEUBI2015-31.01- O RETROFIT COMO FERRAMENTA DE DESENVOLVIMENTO SOCIAL E CULTURAL: CASO DA BIBLIOTECA PARQUE ESTADUAL - RIO DE JANEIRO**

Maiane Ramos da Silva; Paula Tachlitsky,

**ICEUBI2015-31.02- REABILITAÇÃO DOS HOTÉIS DA REGIÃO PORTUÁRIA DE VITÓRIA PARA FINS DE HABITAÇÃO SOCIAL**  
Luciana Nemer Diniz**ICEUBI2015-31.03- INSTALAÇÕES DE ESGOTOS SANITÁRIOS EM EDIFÍCIOS RESIDENCIAIS: PATOLOGIAS, DIAGNÓSTICO E TERAPIA**

Paulo César Corrêa Vieira; Jorge Moya Rodríguez; José Antônio da Silva Souza

**ICEUBI2015-31.04- ILUMINAÇÃO E EFICIÊNCIA ENERGÉTICA EM EDIFÍCIOS: REABILITAÇÃO E ANÁLISE DE PROJETOS PELO USO DO LED**

Moura, Mariangela; Motta, Ana L.T.S; Noya, Maurício

**ICEUBI2015-31.05- TESTES COM NEVOEIRO SALINO EM PEDRA NATURAL. O CASO DE TRÊS CALCÁRIOS ORNAMENTAIS PORTUGUESES.**

Vera Pires; António Carlos Galhano; Joaquim Simão

**ICEUBI2015-31.06- GESTÃO DE RESÍDUOS DE CONSTRUÇÃO E DEMOLIÇÃO NO PROCESSO DE RETROFIT**

Nathália Rodrigues Julião; Thaiane dos Santos Rebêlo

## ► 09H00-10H30- SESSION ICEUBI2015 - 32

**Food Engineering and Properties 1- Room 8.6****CHAIRMEN: Raquel Guiné and Paula Correia****ICEUBI2015-32.01- CHEMICAL AND SENSORIAL PROPERTIES OF BEETROOT JAM**

Ana Rita F. Roque; Fernando J. A. Gonçalves; Paula M. R. Correia; Raquel P. F. Guiné

**ICEUBI2015-32.02- DEVELOPMENT AND CHARACTERIZATION OF WHEAT BREADS WITH ACORN FLOUR**

Paula Correia; Marta Gonzaga; Miguel Batista; Raquel P. F. Guiné

**ICEUBI2015-32.03- ESTUDO COMPARATIVO DA SECAGEM DA COURGETTE POR AR QUENTE E POR INFRAVERMELHOS - CURVAS CINÉTICAS E DIFUSIVIDADE EFETIVA DA HUMIDADE**

Maria Nazaré Coelho Marques Pinheiro; Rita de Oliveira Madaleno; Luis Miguel moura Neves de Castro; Laura Maria Teixeira Santos

**ICEUBI2015-32.04- FACTORS AFFECTING BLUEBERRY PHYSICAL-CHEMICAL PROPERTIES**

Fernando Gonçalves; Daniela V. T. A. Costa; Raquel P. F. Guiné; Christophe F. Gonçalves

**ICEUBI2015-32.05- MODELING OF THE PHENOLIC COMPOUNDS AND ANTIOXIDANT ACTIVITY OF BLUEBERRIES BY ARTIFICIAL NEURAL NETWORKS FOR DATA MINING**

Susana Matos; Fernando Gonçalves; Daniela V. T. A. Costa; Mateus Mendes; Raquel P. F. Guiné





## ICEUBI2015 – Parallel Sessions

### ► 09H00-10H30- SESSION ICEUBI2015 - 33



#### Energy Efficiency in the Agrifood Sector 1- Room 8.8

**CHAIRMEN:** Maria Paula Simões and Pedro Dinis Gaspar

**ICEUBI2015-33.01-** APLICABILIDADE DE INDICADORES DE TEMPO-TEMPERATURA NO APOIO À DEGUSTAÇÃO DE PRODUTOS GOURMET

Luís Pinto de Andrade; José Nunes; João Araújo; Pedro Dinis Gaspar; Pedro Dinho da Silva

**ICEUBI2015-33.02-** ANÁLISE DAS CONDIÇÕES DE CONFORTO EM AMBIENTES REFRIGERADOS

Eduardo Fernandes; José Nunes; Pedro D. Silva; Pedro D. Gaspar; Luís Pires

**ICEUBI2015-33.03-** DISPOSITIVOS DE MONDA MECANIZADA/AUTOMÁTICA - ESTADO DA ARTE

Maria Paula Simões; Marco Lopes; Pedro Dinis Gaspar; Fernando Bigares Santos

**ICEUBI2015-33.04-** SENSORIZAÇÃO DE FRUTOS E LEGUMES NO CAMPO E EM MEIO INDUSTRIAL - ESTADO DE ARTE

Marco Lopes; Pedro Dinis Gaspar; Fernando Bigares Charrua Santos; Maria Paula Simões

### ► 09H00-10H30- SESSION ICEUBI2015 - 34



#### Industrial Management, Production and Maintenance 1- Room 8.10

**CHAIRMEN:** Adérito Alcaso and Carlos Cabrita

**ICEUBI2015-34.01-** APLICAÇÃO DA LÓGICA DIFUSA PARA AVALIAR O NÍVEL LEAN DE UMA ORGANIZAÇÃO

António Abreu; J. M. F. Calado; João Vargas

**ICEUBI2015-34.02-** MODEL TO SUPPORT THE LEAN BUILDING MAINTENANCE (LBM)

António Abreu; Carlos Dias; José Requeijo

**ICEUBI2015-34.03-** OVERALL SERVICE EFFICIENCY (OSE) OF A CONDITION MONITORING SERVICE THROUGH GAP ANALYSIS

Sobral, J.; Roque, A.

**ICEUBI2015-34.04-** OVERALL SERVICE EFFICIENCY (OSE) OF A CONDITION MONITORING SERVICE THROUGH GAP ANALYSIS

Sobral, J.; Roque, A.

### ► 09H00-10H30- SESSION ICEUBI2015 - 35



#### Geotechnics, Geologics and Minning 1- Room 8.12

**CHAIRMEN:** Edite Martinho and Paulo Carvalho

**ICEUBI2015-35.01-** ANÁLISE DA IMPORTÂNCIA DOS FATORES CONDICIONANTES DA ESTABILIDADE DAS ARRIBAS NA COSTA ROCHOSA DO ALGARVE

Luís Pais

**ICEUBI2015-35.02-** ESTUDIO COMPARATIVO DE MODELOS DE CÁLCULO PARA EL DISEÑO DE MUROS PANTALLA

Ricardo Rio; Miguel Paula; Manuel Braz-César

**ICEUBI2015-35.03-** CARACTERIZAÇÃO DE RCDs COM VISTA À UTILIZAÇÃO EM CAMADAS GRANULARES DE PAVIMENTOS RODOVIÁRIOS

Renato Gonçalves; Rosa Luzia; Cátia Costa

**ICEUBI2015-35.04-** AMOSTRAGEM COMBINADA DE UM SOLO RESIDUAL GRANÍTICO

Luís José Andrade Pais



## ► 11H00 - 12H00- SESSION ICEUBI2015 - 36

## Energy



## Auditorium 8.1

**CHAIRMEN:** Maria Rosário Calado and Miguel Nepomuceno**ICEUBI2015-36.01-** TURBINAS EÓLICAS ESTUDO DE POTÊNCIA ACTIVA USANDO ESTATÍSTICA CIRCULAR

Alda Carvalho; Cláudia Sequeira; João Gonçalves; Nuno Henriques

**ICEUBI2015-36.02-** ANÁLISE DE TEMPERATURAS GEOTÉRMICAS PARA APLICAÇÃO DE BOMBAS DE CALOR NO PARANÁ

Heraldo J. L. de Souza; Mauricio P. Cantão; Pedro D. Gaspar; Alexandre F. Santos

**ICEUBI2015-36.03-** DEVELOPMENT AND ANALYSIS OF A TESLA TURBINE LABORATORY MODEL

Cláudia Séneca Casaca; Nuno Paulo Ferreira Henriques; Pedro Miguel Tavares Gaspar

**ICEUBI2015-36.04-** AVALIAÇÃO DO DESEMPENHO DE ARGAMASSAS DE REVESTIMENTO COM AGREGADOS LEVES ARTIFICIAIS E RECICLADOS

Luiz António Pereira de Oliveira; Paula Alexandra Gil Barroca; Miguel Costa Santos Nepomuceno

## ► 11H00 - 12H00- SESSION ICEUBI2015 - 37

## Food Engineering and Properties 2- Room 8.6

**CHAIRMEN:** Raquel Guiné and Maria Paula Simões**ICEUBI2015-37.01-** PHYSICAL PROPERTIES OF PHYSALIS PERUVIANA L.

Raquel P. F. Guiné; Solange F. Olievira; Fernando J. A. Gonçalves; Paula M. R. Correia

**ICEUBI2015-37.02-** PHYSICAL-CHEMICAL PROPERTIES OF BLUEBERRY AS INFLUENCED BY PRODUCTION AND CONSERVATION PROCESSES

Daniela V. T. A. Costa; Christophe F. Gonçalves; Raquel P. F. Guiné; Fernando Gonçalves

**ICEUBI2015-37.03-** PHYSICAL-CHEMICAL PROPERTIES OF COREMA ALBUM (WHITE CROWBERRY OR CAMARINHA)

Raquel P. F. Guiné; Sonia C. Andrade; Fernando J. A. Gonçaves

**ICEUBI2015-37.04-** COBERTURA DO SOLO COM MANTA ECOBLANKET EM POMAR DE PESSEGUEIROS: EFEITO EM ALGUNS PARÂMETROS FÍSICO-QUÍMICOS DO SOLO

Anabela Barateiro; Amarilis de Varennes; Cristina Ramos; Maria Paula Simões; Preciosa Fragoso; Dora Ferreira; Sandra Lopes; Catarina Santos; Isabel Castanheira

## ► 11H00 - 12H00- SESSION ICEUBI2015 - 38



## Energy Efficiency in the Agrifood Sector 2- Room 8.8

**CHAIRMEN:** Luís Pinto de Andrade and Pedro Dinho da Silva**ICEUBI2015-38.01-** AVALIAÇÃO ENERGÉTICA DAS CENTRAIS DE FRUTA DA REGIÃO DA BEIRA INTERIOR

L.P. Andrade; P.D. Gaspar; J. Nunes; P.D. Silva

**ICEUBI2015-38.02-** CARACTERIZAÇÃO DA UTILIZAÇÃO DOS FRIGORÍFICOS DOMÉSTICOS E DO DESPERDÍCIO ALIMENTAR NA COMUNIDADE ESTUDANTIL DA UNIVERSIDADE DA BEIRA INTERIOR

Pedro Dinho da Silva; Luís Carvalho Pires; Diogo Galvão; Pedro Dinis Gaspar

**ICEUBI2015-38.03-** ESTUDO COMPARATIVO DE PROCESSOS DE SECAGEM DA CEREJA

P.D. Silva; L.P. Andrade; L.Pires; R. Tomé; J. Nunes; P.D. Gaspar



**ICEUBI2015 – Parallel Sessions****11H00 - 12H00- SESSION ICEUBI2015 - 39****Industrial Management, Production and Maintenance 2- Room 8.10****CHAIRMEN: João Matias and Davide Fonseca****ICEUBI2015-39.01- METODOLOGIA SEIS SIGMA APLICADA AO ESTUDO DA INEXATIDÃO EM LABORATÓRIOS CLÍNICOS**

José Gomes Requeijo; Ana Paula Faria; Ana Raquel Vital Gaspar

**ICEUBI2015-39.02- CONTROLO ESTATÍSTICO DO PROCESSO PARA NÚMERO REDUZIDO DE DADOS**

Ana Sofia Matos; António Abreu; José Gomes Requeijo

**ICEUBI2015-39.03- UNDERSTANDING DYNAMICS OF INNOVATION BASED ON SYSTEM THINKING**

Paula Urze; António Abreu

**ICEUBI2015-39.04- DESIGN FOR LEAN PRODUCTION NA MELHORIA DE UM COMPONENTE AUTOMÓVEL**

Luís F. Silva; Eurico Seabra; Mariana Correia; Joaquim Barbosa; Anabela Alves

**11H00 - 12H00- SESSION ICEUBI2015 - 40****Geotechnics, Geologics and Minning 2- Room 8.12****CHAIRMEN: Paulo Carvalho and Luis Ferreira Gomes****ICEUBI2015-40.01- MELHORAMENTO DE SOLO SILTO-ARGILOSO COM CAL HIDRÁULICA COM VISTA À SUA UTILIZAÇÃO EM ESTRADAS**

David Oliveira; Rosa Luzia

**ICEUBI2015-40.02- A UTILIZAÇÃO DE PLATAFORMAS ABERTAS EM SIG PARA FINS GEOTÉCNICOS**

Carlos Manuel Rodrigues; António Figueiredo Monteiro; Luís José Pais

**ICEUBI2015-40.03- EVALUATION OF THE DAMAGING EFFECTS OF CHALK AS MARKING TECHNIQUE IN THE GRANITE OUTCROPS WITH ROCK ART.**

José Santiago Pozo Antonio; Sandra Fernández Rodríguez; Teresa Rivas; Fernando Carrera Ramirez

**ICEUBI2015-40.04- GEORGIA MARBLE AT THE MINNESOTA STATE CAPITOL; THE EFFECTS OF MINERALOGY AND CLIMATE ON DURABILITY**

Paul Whitenack



Figura 1 -Quadro da Sala dos Conselhos FEUBI

FACULDADE DE  
Lab. Clínica  
Lab. Eng. Civil  
Bancos de estudo  
Laboratório D...



**UBI**  
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Portugal  
LEPUCOV  
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