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Revista Labor & Engenho

Campinas [Brasil], v.7, n.4, 2013.

Labor & Engenho / Universidade Estadual de Campinas. -- v.1 (2007). – Campinas [SP] : UNICAMP, 2007-

Anual (v.1, n.1, 2007).

Trimestral a partir do v.4, n.1, 2010.

Contém sumário em inglês e [português ou espanhol ou francês ou italiano].

Texto completo disponível em: <www.conpadre.org>

Arquitetura – Periódicos.
 Engenharia Civil – Periódicos.
 Universidade Estadual de Campinas. II. Título.

ISSN 2176-8846

CDD - 378.05

FICHA CATALOGRÁFICA ELABORADA PELO Sistema de Bibliotecas da UNICAMP / Diretoria de Tratamento da Informação. Bibliotecário: Helena Joana Flipsen – CRB-8ª / 5283.

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Editorial L&E, v.7, n.4, 2013

This issue of International Journal L&E (*Labor & Engenho*) is a special issue where were published the major papers presented at the XI Brazil-Japan International Workshop, which happened in the city of Caraguatatuba [Brazil] in the 11th of past September, in the campus of IFSP (Federal Institute of Education, Science and Technology of Sao Paulo).

The objective of this event has been to discuss about actual information of government, private and academic programs in the following areas: Energy, Biomass and Biofuel; Sustainable agriculture, Fishery and Coastal Management; Sanitary Engineering, Environment and Water Management; Immigration and Cooperation between Brazil and Japan: Education, Science and Technology. And it has been an important vehicle for researches and developments sharing among researchers from both the countries.

In the immigration context, the event has regarded the historic relationship among both the countries: Brazil and Japan, their high-level technological shares and mainly the Brazilian program called *Ciência sem Fronteiras* (Science without borders), which reinforces the knowledge sharing among the academic institutions from both the countries and contributes to the innovation projects development.

This issue of L&E was the first one entire written in English. And it presents a set of ten papers from Brazilian and Japanese researchers, which consolidates L&E as an International Journal once more.

The first article written by **Shirley Pacheco de Souza** addresses the theme of "payment for environmental services" (PES), and she suggests the adoption of strategies involving interested fishers in bycatch monitoring programs, where fishers could collect local data on the critical areas and frequency of dolphins' accidental catches, consequently increasing their awareness of the problem and providing a better baseline to support educational and regulatory measures related to cetaceans' bycatch, which would contribute to cetaceans' conservation and to the fishers' economic stability as well.

In the second article, by Alessandra Carvalho, José Neto, Luciana Moura, Gisele Fernandes, Marilu Figueiredo and Elaine Faria, it is regarded to perform a diagnosis of the soil usage as well as the state of preservation of the water resources of Juqueriquerê River's watershed, in Caraguatatuba, Estate of Sao Paulo. The analysis of the data allowed the contrast between the degradation areas and the quality of the water resources. They have stated that safety policies, respect of the soil usage and the proper application of environmental management plans are essential to achieve the sustainable use of the natural resources.

Vassiliki Boulomytis and Claudia Alves present in the third article a proper methodology for the assessment of potato plantation areas, taking the short time of procedure into consideration, as the period between the plantation and the harvest occurs in six months the furthest. Considering the availability of LANDSAT medium resolution images, methods for their appropriate classification were used to provide effective target detection for potato plantation areas in the city of Bueno Brandão, Estate of Minas Gerais.

The fourth article written by **Dante Junior**, **Geraldo Filho** and **Maria Seydell** presents the potential for wind power generation in the town of Caraguatatuba, Estate of Sao Paulo. The statistical analysis of wind speed has contributed to this evaluation. The authors stated that

the average power of the wind speed is favorable to the installation of wind turbines in all seasons.

The fifth article presents the research conducted by **Beatriz Antoniassi**, **Nathalie Miranda**, **Raúl Uribe** and **Márcia Chaves**. They show the analyzes of water from the streams *Água Comprida*, *Vargem Limpa*, *Ribeirão Vargem Limpa* and *Bauru River* between the center and the industrial district of the city of Bauru, Estate of Sao Paulo. For this comparative analysis, they have conducted a quantitative and qualitative study in partnership with the Bauru Department of Water and Sewerage (DAE) in the Wastewater Laboratory. By the analysis of the water quality it was possible to evaluate the quality of water, thus informing the public about the serious problems that persist in the region and how an industrial district affects the water quality of a city.

In the sixth article, **Larissa Meira** and **Herlane Calheiros** presents an overview of the use of the construction waste, which should receive special attention in the management of solid waste, the removal of this gas, presenting a potential field of study, given the high rates and low efficiency obtained cost of implementation and operation.

Egont Schenkel, **Eric Fujiwara**, **Murilo Santos**, **Eduardo Ono** and **Carlos Suzuki** highlight in the seventh article the use of photocatalysts. The authors have aimed to the use of the Rietveld refinement for quantifying the mass fraction present in titania nanoparticles obtained by the flame aerosol method. They have observed that the methodology of flame aerosol is effective for controlling the growth of anatase and rutile phases by just controlling the gas flow in the burner: fraction of anatase / rutile with relative errors smaller than 10% was obtained by Rietveld refinement.

Finally, in the eighth article, **Eliane Grigoletto** and **Araí Pécora** present a literature review involving soldering processes and describes the lead toxicity from related residue. The main solder alloy that is nowadays used to substitute tin-lead and European Directives also presented in this work as well.

We hope you enjoy this issue and join us in the upcoming issues.

Pedro Augusto Pinheiro Fantinatti

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