

## Department of Architecture

\*nonmember

Characteristics of The Learning Room Use of Environmental Education Facilities from the Viewpoint of Learning Programs Execution - A Study on The Relation between Learning room/equipments and Learning Programs at Environmental Education Facilities Part1-[in Japanese], Hiroki OGAWA and Masuro URAYAMA, Journal of Architecture and Planning, No.581, pp.33-40, 2004.7

This paper clarifies the relation between learning rooms and learning programs of environmental education facilities. Main results are as follow;

1. There are many learning programs of interest or knowledge stage, and a few one of action or understanding stage. Many facilities carry out programs of the only interest stage. But more than half execute learning programs which have a combination of some aim stages.
2. From the equipments of learning room, the use form of leaning room is classified in lecture, training, teaching materials and exhibition. Learning programs of using the plural room are able to achieve a higher stage than ones of the single room use.

A Study on Forming Civic Center and Urban Renewal in Prefectural Capital Cities based on Japanese Castle-Towns in the Meiji and Taisho era. [in Japanese], Kenjiro MATSUURA, Yoshihiro YOKOTA, Satoshi KUSAKABE, Masuro URAYAMA and Shigeru SATOH : Jounal of Architecture and Planning, Transactions of Architectural Institute of Japan, No. 581, p.p. 67-74, 2004. 7

This paper aims to clarify how to form Civic Center for Urban Renewal analyzing cases of prefectural capital 27 Cities based on Japanese Castle-Towns in the Meiji and Taisho era.

Findings are as follows : 1) Government and municipal offices tended to be nearby castle and gather each other to form Civic Center, 2)Just after replacing feudal domain system with prefecture system and operation of city organization system, there were many cases of conversion of existing institutions to prefectural offices and city offices, 3)Nearby Civic Center, Castle Renewal such as reclaiming moats and creating new roads was done in many cities.

A Study on Visual Impacts of Windfarm -On Influences of Windmills Arrangement to Landscape Evaluation-[in Japanese], Shinjiro SAKAMOTO, Fumiko KAMIYA and Masuro URAYAMA, Papers on Environmental Information Science, No.18, pp1-6, 2004.11

The purpose of this study is to analyze visual impacts of windmills arrangement to landscape evaluation. We prepared CG pictures which were drawn in combination of layout, distance from standpoint to windmills and distance between windmills. 48 students evaluated these pictures with 10 adjective scales. We found 3 factors of landscape evaluation, and analyzed the relation between them and windmill arrangement.

MANAGEMENT OF A COMMUNITY FACILITY CONVERTED VACANT SHOP AT THE CENTRAL DISTRICT OF A LOCAL SMALL TOWN AND ITS EFFECTS -Through a social experiment at Kamiichi in Yoshino Town, Nara prefecture-[in Japanese], Hiroki KAWAKITA and Masuro URAYAMA, AIJ Journal of Technology and Design, No.20, pp. 319-324, 2004.12

As it is required to develop a management system of vacant shops at central district of local small towns, this paper reports the challenge for local residents group to convert a vacant shop to a community facility, and management of it at Kamiichi district of Yoshino Town, Nara Prefecture. This facility offered only a place to local people at beginning. After changing to sponsor various use opportunities, this came to be use positively, and made local people feel liveliness. To keep these effects, it is subject to be secured so that maintenance administrative expenses can be paid for local residents group, and attractive use opportunities can continue being sponsored.

A Study on the Transfiguration of the Landscape Ordinance in the Prefectures, Yoshio BANDO, Satoshi ASANO and Shoji IMAI, Journal of Architecture and Planning, No.578, pp.85-92, 2004

The Actual Conditions of the Acceptance and Evaluation of Users for Housing Performance Indication System (Apartment Houses) in Housing Quality Assurance Act [in Japanese], Hiroyuki Takai, Urban Housing Scieces, No.47, pp.95-100, 2004

The aim of this research is to make clear the acceptance condition and evaluation of users for Housing Performance Indication System (Apartment houses) in Housing Quality Assurance Act. The research was made for 210 residents living in the apartment houses adopted the system, and it was found that the system contributes to users choosing houses much. But there are some problems. For example more popularization of the system and more information easy to understand and useful to judge for users are needed.

A Study on the Successive Change Condition of Common Facilities in Condominiums Including Many Units [in Japanese], Yuki Miyauchi , Hiroyuki Takai , Mitsuo Takada\* , Hiroko Saito\*, Urban Housing Scieces, No.47, pp.41-46, 2004

The aim of this research is to make clear the actual condition on successive change of common spaces and facilities in condominiums including many units. The research was made for 40 housing estates in Kansai and Tokyo Metropolitan area by the way of questionnaires to the chief of homeowners association or the management staff and hearing on 3 housing estates. So big change is not occurred yet, but we can find many symptoms. We could find variety of repeated trial and error and changes keep up with an aging repairs costs and management costs.

Improvement of Quality of Concrete with Permeable Form [in Japanese], Naoki MISHIMA, Shigemitsu HATANAKA, Hiromi KOBAYASHI\* and Toshitsugu INUKAI, Proceedings of the

Japan Concrete Institute, Vol.26, No.1, pp.363-368, 2004.7

Influence of Magnitude of Pressure for Vacuum Processing on Strength Distribution in Concrete Slab [in Japanese], Hiroshi WATO, Shigemitsu HATANAKA, Naoki MIAHIMA and Akio MURAMATSU\*, Proceedings of the Japan Concrete Institute, Vol.26, No.1, pp.375-380, 2004.7

Fundamental Study on Bleeding Behavior in Concrete by Visible Evaluation Method [in Japanese], Toshitsugu INUKAI, Shigemitsu HATANAKA, Naoki MISHIMA and Rinji KANEKO\*, Proceedings of the Japan Concrete Institute, Vol.26, No.1, pp.609-614, 2004.7

Fundamental Study on Compaction Mechanism Based on the Consolidation Theory [in Japanese], Hiroki HATTORI, Shigemitsu HATANAKA, Eisuke SAKAMOTO and Naoki MISHIMA, Proceedings of the Japan Concrete Institute, Vol.26, No.1, pp.1227-1232, 2004.7

Visualized Experiment on Air Bubbles Behavior in Concrete of Vacuum-processed Process [in Japanese], Eisuke SAKAMOTO, Shigemitsu HATANAKA, Hiroki HATTORI and Naoki MISHIMA, Proceedings of the Japan Concrete Institute, Vol.26, No.1, pp.1233-1238, 2004.7

Influence of Paste Strength on Compressive Strength of Porous Concrete [in Japanese], Yukihiisa YUASA\*, Shigemitsu HATANAKA, Naoki MISHIMA and Ken MURAO\*, Proceedings of the Japan Concrete Institute, Vol.26, No.1, pp.1425-1430, 2004.7

Fundamental Study on Manufacture of Large Particle Porous Concrete Using Concrete Rubble [in Japanese], Akihiro MAEGAWA, Shigemitsu HATANAKA, Naoki MISHIMA and Yukihiisa YUASA\*, Proceedings of the Japan Concrete Institute, Vol.26, No.1, pp.1455-1460, 2004.7

Uniaxial Compression 3-D FEM Analysis of Cylindrical Concrete Specimens with Different Shape Ratios [in Japanese], Yukio YOSHIDA, Eiji MIZUNO\* and Shigemitsu HATANAKA, Proceedings of the Japan Concrete Institute, Vol.26, No.2, pp.19-24, 2004.7

Analytical Study on Confining Effect Inside Confined Concrete Subjected to Axial Compressive Force [in Japanese], Makoto ITO\*, Eiji MIZUNO\* and Shigemitsu HATANAKA, Proceedings of the Japan Concrete Institute, Vol.26, No.2, pp.31-36, 2004.7

Fundamental Study on Rotation Condition of Shear Wall in Seismic Evaluation of RC Buildings [in Japanese], Kenzo KUBOTA Shigemitsu HATANAKA and Yoshiyuki KATO\*, Proceedings of the Japan Concrete Institute, Vol.26, No.2, pp.1327-1332, 2004.7

Fundamental Study on Compaction Mechanism of Vacuum Processing Method Based on the Consolidation Theory [in Japanese], Hiroki HATTORI, Shigemitsu HANATANA, Naoki MISHIMA and Eisuke SAKAMOTO, J. Struct. Constr. Eng. AIJ, No.585, pp.7-13, 2004.11

The strength and hardness of concrete slab surface is considered significantly affected by bleeding of concrete. It has been reported that dewatering by vacuum processing is quite effective to make concrete high density and high strength. The method, however, has not been successfully used for the concrete works in the field of building construction, compared with that of civil engineering works in Japan. In the earlier report, the authors have already pointed out that there is a strong relationship between the strength distribution and density distribution in the vacuum processed concrete, both gradually decreasing from the top surface to about 15 cm depth of concrete. Main purpose of the present study is to discuss the mechanism of the occurrence of such distribution of strength and density, based on consolidation theory. In the experiment, pore water pressure distribution in concrete has been measured using the original measuring system. As a result, it has been confirmed that the consolidation theory is quite effective to explain the internal properties of vacuum processed concrete as well as those of press-dewatered concrete.

EXPERIMENTAL STUDY ON ELASTICS-PLASTIC BEHAVIOR AND ULTIMATE STRENGTH OF EXPOSURE FIXED-TYPE STEEL COLUMN-BASE SUBJECTED TO BENDING MOMENT [in Japanese], Haruyoshi Kadoya\*, Jun Kawaguchi and Shosuke Morino, Journal of Structural and Construction Engineering, Number 583, pp.123-130, 2004.9.

Experimental Study on Strength and Stiffness of Bare Type CFT Column Base with Central Reinforcing Bars, Haruyoshi Kadoya\*, Jun Kawaguchi and Shosuke Morino, COMPOSITE CONSTRUCTION IN STEEL AND CONCRETE V, pp.1-10, 2004.

Dynamic response of steel beam-columns with square hollow section - Shaking table tests of steel beam-columns subjected to biaxial bending (part 1), Yasuhiro Uchida\*, Jun Kawaguchi and Shosuke Morino, Journal of Structural and Construction Engineering, Number 577, pp.123-130, 2004.3.

Structural design of frame structures by means of a multiobjective genetic algorithm, Toyofumi TAKADA and Keigo MATSUSHIMA, Proc. of the 4th Int. Conf. on Engineering Computational Technology (CD-ROM), paper 104, 2004

Simplified Design Method for Air-based Solar Heating System [in Japanese], Hiroaki KITANO and Kazunobu SAGARA\*, Journal of Environmental Engineering, No.582, pp.45-52, 2004.8

Reducing Effect of Fresh Air Latent Heat Load in Air to Earth Heat Exchange using Underground Double Floor Space, Wontug SON, Hisaya NAGAI, Journal of Asian Architecture and Building Engineering, Vol.3, No.2,pp.29-34, 2004