

口絵写真 新しい情報を伝えるアーツ写真 (一部カラー)

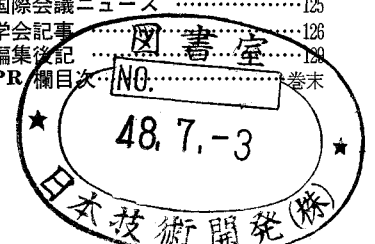
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● 今月の表紙/日本石油喜入原油貯蔵基地にて建設中の4号原油取扱い棧橋。接岸可能最大船型 50万 D/Wt. バース水深 33m ●

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 中立応力低下による海底地盤の改良・佐々木伸・笠島志朗・阿久根省三◎穴あけベンケルマンビーム試験による舗装構造の解析・植下協・吉兼亨・玉野富雄◎
 鉄道トンネル内路盤コンクリートの設計について・西頭常彦◎ Elastic Surface Method による宅地造成設計の最適化・村井俊治◎
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OUTLINE OF ERTS PROJECT.....*T. Maruyasu (pp. 2~7)*

NASA started ERTS Project. A number of photographs obtained by the project provide various informations for us by the cooperation of specialists in each field.

In this article some examples of informations are described interestingly from a viewpoint of civil engineering field in addition to the principle of the photographs of ERTS.

SURVEYING OF GOODS SUPPLY IN METROPOLITAN AREA

.....*T. Shiina and T. Kurokawa (pp. 8~13)*

A long-range policy based on the comprehension of traffic demand is urgently required in the world to solve the traffic congestion resulting from the concentration of population in cities.

This article reports a surveying of goods supply in the metropolitan area, its background and purposes, surveying system and method, and its tabulation and analysis.

ESTIMATION FOR STRENGTH OF PIPE JOINT

.....*T. Okumura, E. Murakami and N. Akiyama (pp. 14~22)*

A way of estimation for the strength of pipe joint is proposed in connection with an experimental study on the off-shore frame works to construct the Honshu-Shikoku Connection Bridge. The experiments for ultimate strength and low-cycle fatigue were carried out with various fundamental types of joints. An experimental formula for the yield strength of various joints were proposed on the basis of mechanical properties of joints.

OUTLINE OF COMPREHENSIVE TECHNICAL DEVELOPMENT PROJECT

.....*A. Kitano and O. Kurashima (pp. 23~29)*

This article describes the outline of a comprehensive technical development project established by Ministry of Construction as technical development budget for the fiscal year 1972-73. It introduces the contents of the projects, "Development of New Earthquake-Proof Design Method", "Development of Techniques for Construction of Off-Shore Structures", "Development of New Road Traffic system" and "Development of Total Evaluation of Housing Efficiency".

CONSTRUCTION OF THE ONI-TOGE TUNNEL IN THE MOMIJIYAMA LINE

.....*Y. Iwata, Y. Iida and T. Tani (pp. 30~37)*

The Ishikatsu line, which is now being constructed by the Japan Railway Construction Corporation, is the new line with 110 km long and also the shortest line connecting between the central and east parts of Hokkaido.

The Momijiyama line, a part of the Ishikatsu line, crosses the Kamuikotan Structural Zone which is one of the largest serpentine zone in Japan along the Hidaka Mountains. The Oni-Toge Tunnel which belongs to the Kamuikotan Structural Zone suffers heavy earth pressure over 480 m crushed zone.

POLICY FOR IMPROVEMENT OF TRAFFIC IN CITIES.....*Hans Georg Retzko (pp. 38~41)*

Traffic in cities is a common serious problem in the world. In every large city, it is forced to select either the construction of traffic facilities or the restraint of traffic demand.

In this article, the traffic situation of West Germany is reported by Prof. Dr.-Ing. Hans Georg Retzko who is acquainted with the traffic problems in Japan.

OTHER CONTENTS

Expectation for Establishment of Laboratory on Environmental Science (*H. Ogawa*)/Analysis of Survey on University Civil Engineering Course and Advice for It (*Studying Committee on University Engineering Course*)/Recent Problems on Natural Resources (*A. Watanabe*)/Foreign Guide for Civil Engineers, No. 6, "Construction Works in Australia, Snowy Mountains Scheme" (*R. Jozaki and T. Katayama*)/Lecture on Numerical Analysis, No. 18, Problem in Numerical Calculation (II) "Stability in Differential Scheme" (*T. Nogi*).
