2019 年 9月 24 日

**日本材料学会九州支部特別講演会のお知らせ**

C. K. Chao 教授が北九州に来日されるのに合わせ，大分大学にて特別講演会を開催致します．皆様，奮ってご参加ください．

記

日時：令和 元 年 11 月 11 日（月）10:30～12:00 （時間は若干変更する場合があります）

場所：大分大学理工学部 ９号館 1階 多目的研修室

**講演者：Prof. Ching-Kong Chao (Department of Mechanical Engineering, National Taiwan University of Science and Technology)**

**講演題目：Complex Variable Methods in Elasticity Problems**

　Within the framework of the linear theory of elasticity, the problem of multilayered media with straight or curvilinear boundaries is solved by using complex variable methods. Based on the method of analytical continuation theorem, conformal mapping and the alternating technique, a rapid convergent series solution for both the displacement and stress functions, which is expressed in terms of an explicit general term of the complex potential of the corresponding homogeneous problem, is obtained in an elegant form. The number of layers is arbitrary and the system is subjected to arbitrary loading (singularities). The solutions to elasticity problems are derived by the heterogenization technique which allows us to write down the solution explicitly in terms of the solution of a corresponding homogeneous problem subjected to the same loading. Numerical results are provided for some particular examples to investigate the effect of material combinations on the interfacial stresses.

**Biographies**

　Ching-Kong Chao received the B.S. degree in mechanical engineering from the National Cheng Kung University in 1978, the M.S. degree from the National Taiwan University in 1980 and Ph.D. degree in mechanical engineering from Lehigh University in 1987. He joined the faculty of the Department of Mechanical Engineering, National Taiwan University of Science and Technology in 1987 as an associate professor. He was promoted to full professor in 1993. Professor Chao has received the Distinguished Research Award from the National Science Council (NSC) of Taiwan three times. He has been elected as a fellow of the Society of Theoretical and Applied Mechanics of Taiwan. He is currently a chair professor of the Department of Mechanical Engineering, National Taiwan University of Science and Technology. His research interests are in the fields of fracture mechanics, solid mechanics, biomechanics, and MEMS.

以上

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