**Bagua boundary element method (八卦邊界元)**

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**In this talk, two parts will be given. First, the history of Taiwan BEM development is addressed. Second, I will mention recent works of NTOU/MSV group on the quaternion BEM and the Clifford valued BEM.**

***Keywords***: Clifford valued BEM.

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**BIOGRAPHY**

**Professor Jeng-Tzong Chen** is Life-time Distinguished Professor of the Department of Harbor and River Engineering in National Taiwan Ocean University, Taiwan. Prof. Chen received his PhD in Civil Engineering from National Taiwan University in 1994. He had worked as a research assistant in the Structural Division of the Department of Rocket and Missile System, Chung Shan Institute of Science and Technology, from 1986 to 1990. In 1994, he joined the Department of Harbor and River Engineering in National Taiwan Ocean University and was selected as the Life-time Distinguished Professor in 2007. He is also the Professor of Department of Mechanical and Mechatronic Engineering of Taiwan Ocean University. His major interests are computational mechanics, vibration and acoustics.  Boundary element method is his research specialty. He had derived the theory of dual integral equations for boundary value problems with degenerate boundary. He also developed five dual BEM programs for the BVPs of Laplace equation, Helmholtz equation, bi-Helmholtz and modified Helmhotlz equation and Navier equation. Recently, he also employed the null field integral equations to solve BVPs with circular and/or elliptical boundaries including holes and inclusions. Besides, he focused on the nonuniqueness solution of integral equations in recent years. Recently, NTU and NTOU MSV group focused on the quaternion BEM and the Clifford valued BEM. He has won many awards due to his outstanding performances in research, including three times of Outstanding Research Awards from MOST (former National Science Council) in Taiwan, the first Wu Ta-You Memorial Award in 2002, and the MOE academic award and the ICACM Fellow Award in 2011. He serves as the associate (area) editor as well as member of editorial board of seven SCI journals, and has published two books, more than 209 SCI journal papers and ever invited to give plenary and keynote lectures in many professional conferences, including twice in World Congress on Computational Mechanics (WCCM4 (1998) in Buenos Aries and WCCM5 (2002) in Vienna), four times in ICOME 2006(Nanjing), 2009(Hefei), 2012(Kyoto) and 2015(Hangzhou). More than 2683 citing from 1634 papers are found to cite Prof. Chen’s work. Since 2016, he was the Vice President of Taiwan Society of Industry and Applied Mathematics (TwSIAM).