Faculty of Engineering
The University of Hong Kong
香港大學工程學院

Land Building in the Delta of the Mississippi River: Is It Feasible?

Prof Gary Parker
W H Johnson Professor of Geology,
Dept of Civil & Environmental Engineering and Dept of Geology
University of Illinois at Urbana-Champaign, USA

Date:	December 9, 2008 (Tuesday)
Time:	5:30 - 6:30 p.m.
Venue:	Theatre A, Chow Yei Ching Building, HKU
Language:	English

Abstract:
In 2005, Hurricane Katrina caused an unprecedented disaster in the city of New Orleans and the surrounding area. Hurricane Katrina served to highlight the fact that the delta of the Mississippi River and its associated wetlands are subsiding into the Gulf of Mexico at a rapid rate in engineering time. This subsidence has caused habitat loss, interfered with human activities, and progressively reduced the storm surge buffer to New Orleans as the shoreline has moved northward. The main cause of delta subsidence is the lack of overbank sedimentation from the Mississippi, which is confined by levees nearly to its mouth. Controlled avulsions of the river below New Orleans can build significant new land and help reverse this deterioration. This is illustrated using a quantitative numerical model using a range of justifiable inputs. The model predicts that about 700 to 1220 km2 of new land could be built over the span of a century.

Speaker:
Prof Gary Parker received his Bachelor degree in Science from Johns Hopkins University and his PhD degree in Civil Engineering from University of Minnesota. He received numerous awards and the more recent awards include IAHR M Selim Yalin Lifetime Achievement Award in 2007 and National Academy of Science G K Warren Award in 2002. His major research interests are river mechanics and morphology, sediment transport and two-phase solid fluid flow. A major research goal is to use the fundamental techniques of fluid mechanics and applied mathematics to treat interesting geomorphological problems. Prof Parker is a member of American Society of Civil Engineers, International Association for Hydraulic Research and American Geophysical Union.

Registration:
Registration is open from 21/11/2008 16:00(HKT) to 09/12/2008 18:00(HKT) on a first-come-first-served basis.

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