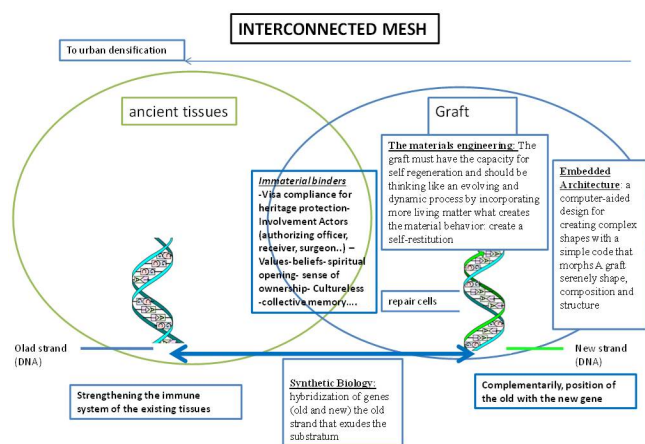


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Volume 7 (3); 25 May, 2017



Short Communication

An Urban Sclerosis between the Hegemony of the Past and the Legitimacy of the Innovation.

Imène Kh and Blekacem L.

J. Civil Eng. Urban., 7(3): 36-40, 2017; pii:S225204301700006-7

Abstract

Nowadays, the incompatibility between grafts that must be fixed to the former tissues drives them to crumble off in an edifying way and convey spiritually a rupture feeling in search of novelty. And simultaneously, a feeling which is similar to urban Alzheimer motivates our investigation to analyze first the ephemeral dimension of the building and then to be capable of determining accurately these substitution transplants by giving to the latter a better capacity of regeneration. This will make them able of reprinting the authentic DNA, the genetic heritage of our cities.

Keywords: Graft, Self- Regeneration, Permanence/ Evanescence.

[Full text- [PDF](#)] [[DOAJ](#)] [RiCeST]



Research Paper

Assessment of Flow Discharge Prediction in Main Channels using GEP and Traditional Models.

Zahiri A, Hashemi F.

J. Civil Eng. Urban., 7(3): 41-47, 2017; pii:S225204301700007-7

Abstract

Making accurate calculation of flood flow discharges has specific priority for many river engineering projects, flood control measures, and sediment transport problems. Nowadays, under the form of compound open channels, rivers have been widely used as flood conveyance systems for urban water management. Due to momentum transfer between main channel and flood plains, the flow hydraulic in compound channels is more complicate than the simple channels. Most studies in this field are focused on prediction of the total flow discharge in compound open channels. However, in flood conditions and in the case of spill of water on the flood plains, the bed and specially suspended sediment loads are mainly transported by the main channel flow discharge. In this study, using laboratory and field stage-discharge datasets from channels with compound sections, the individual flow discharge of the main channel is predicted applying gene-expression programming (GEP) then compared with traditional divided channel methods. Results showed that the proposed soft computing method with mean error of 8.2% has promising performance in prediction of subsection flow discharges for main channel. Furthermore, among the traditional methods, the diagonal (inclined) and vertical divided channel methods with mean errors of 10.6 and 18.2 % have greatest and lowest accuracies in estimation of main channel discharge, respectively.

Keywords: Main channel; Floodplains; Gene-Expression Programming; Traditional approaches

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