



**Australian Geomechanics Society**

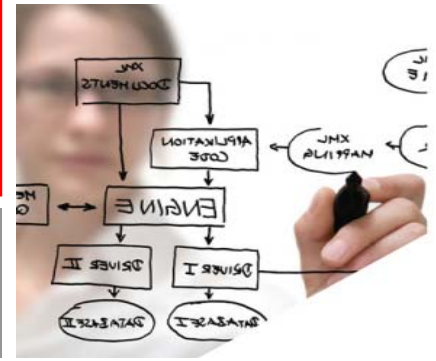
*Sydney Chapter*

Auditorium: Ground Floor, 8 Thomas Street, Chatswood

**TECHNICAL PRESENTATION**

**Wednesday 14<sup>th</sup> July 2010**

Light refreshments at 5.30 PM prior to 6.00 PM meeting



# Next Generation of Unsealed Roads

**Speaker: George Vorobieff**

## SYNOPSIS

Low volume rural roads are typically unsealed roads and numerous Australian and international studies have been carried out to improve their durability and reduce dust. New products and equipment have been produced and tested, and unfortunately many of these new products are typical promoted by the so called 'snake oil' salesman. The goal of the salesman is to sell more product and that equates to more profit, but a holistic approach to the Shires long-term needs are never considered.

A new approach has to be taken where any unsealed road maintenance incorporates the opportunity to incrementally strengthen the pavement, reduce maintenance frequency, improve drainage and reduce the use of depleting quarried sources. At the same time rural communities need and expect safe mobility between homesteads and township, and whilst rural road users desire a sealed road, Shires have limited road funding to build and maintained sealed roads.

The next generation of unsealed roads is to look at an interim or staged approach to unsealed roads where the existing pavement and formation materials are enhanced through stabilisation using conventional binders rather than 'snake oils'. New design methodologies are being developed based on recent research trials, and the presentation will cover the current results being collected at various trial sites.

How does the geotechnical engineer get involved? Many Shires do not sustain the expertise in sampling and understanding the materials that are used for unsealed roads and yet geotechnical engineers have a great understanding of the performance of material subject to climatic and wheel loading, and can provide specialist advice for the use of performance measuring tools, such as DCP, permeability and erosion of materials. In addition, they have the ability to weigh up the short and long-term performance of materials used for unsealed roads.

Australia has always been regarded as innovative in the use of road materials and sprayed sealing, but a lack of innovation has occurred in unsealed roads. If geotechnical and pavement engineers want to continue to add value to the community we serve, we need to continue to push the boundaries of our knowledge and rigorously apply new techniques to improve the mobility of rural communities.

*Attendance may be credited (1 point) towards Continuing Professional Development requirements. Members are responsible for recording CPD for audit purposes.*

Booking is not required.

For further information contact Mark Adams (mark.adams@arup.com.au)



**ENGINEERS  
AUSTRALIA**  
Sydney Division