

## **Technical Webinar**

Organised by Iranian Chapter of IGS

## Shallow Foundations with Geosynthetics

**Prof. Sanjay Kumar Shukla** 

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05.00~07:00 p.m. IR (1:30~3:30 p.m. GMT)

























Registration

Link





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https://us06web.zoom.us/webinar/

## **Shallow Foundations with Geosynthetics**

The construction of shallow footings supported on geosynthetic reinforced foundation soils has considerable potential as a cost effective alternative to conventional deep foundations. In this technique, one or more layers of geosynthetic reinforcement (geotextile, geogrid, geocell or geocomposite) are placed inside a controlled granular fill beneath the footings in order to create a composite material with improved performance characteristics. Geosynthetic-reinforced foundation soils are also being used to support paved and unpaved roads, low embankments, railway tracks, oil drilling platforms, platforms for heavy industrial equipment, parking areas, closure covers for tailing dams, etc. Such reinforced foundation soils provide improved load-bearing capacity and reduced settlements by distributing the imposed loads over a wider area of weak subsoil. In the conventional construction techniques without the use of any reinforcement, a thick granular layer is needed, which may be costly or may not be possible, especially for sites that have a limited availability of good-quality granular materials. Moreover, the simplicity of the basic principles and the economic benefits over the conventional approaches make geosynthetic-reinforced foundation soil very attractive to designers. Also, the use of geosynthetics provides many other indirect benefits. This talk will cover several aspects of geosynthetic-reinforced foundation soils subjected to loads from shallow footings of structures.









