



Department of Mechanical, Energy and Management Engineering

Avviso di Seminario

Il prossimo giovedì **21 dicembre 2023**, alle ore **9.00**, presso l'Aula Seminari del DIMEG, si terrà il seminario del prof. T. Sudarshan, il cui titolo e abstract sono riportati di seguito.

Luigi Filice

The Power of Patterning Surfaces

Prof. Tirumalai Sudarshan

Materials Modification Inc, Fairfax, Va 22031

In recent times the availability of tools has enabled the ability to pattern surfaces with precision and with unique functionalities. Various metrics of measure have helped enhance the possibilities as well as control the locations where the patterns can be created. The ability to tailor surfaces with different patterns on the same substrates to provide unique characteristics has opened up the possibilities in thermal management, friction and wear, biobased applications and optical control. The vastness of this field will be highlighted and the applications to some newer applications highlighted. The surface engineer has now the unique ability to not only treat conventional engineering surfaces but can also treat biological surfaces for improved response with reduced inflammation. Finally, the inspiration drawn from nature to create surfaces and patterns provides the unique features that can expand the imagination of researchers in developing creative solutions especially in practical applications for the benefit of society.