

## W2S Semínar (Webínar seríes on Spíntronics)





Metal Contact Issues in Low-Dimensional Devices

Speaker:	Date and time:
Prof. Suprem R. Das	14.01.2021 at
Industrial and Manufacturing Systems Engineering	11.00 am
& Electrical and Computer Engineering	Via
Kansas State University, USA	Zoom

## Abstract

Low-dimensional materials have demonstrated significant advancements in their fundamental properties leading to number of technological developments - from electronics to spintronics. Graphene and beyond graphene two-dimensional (2D) materials have shown the émergence of new field in condensed matter physics and nanotechnology since 2004. Much of the success in devices that exploit these materials lies in understanding and engineering their contacts with metal électrodes. In this discussion, I will present our recent research on metal contacts with nanoscale materials in the context of 2D materials and devices with focus on their transport physics. Moreover, I will discuss electronic noise aspects we study in these devices that are significantly important for their applications in high-sensitivity signals. Finally, I will discuss some of the magnetic phenomena in newly discovered 2D magnets that are envisioned for future spintronics devices.

If interested to attend then please visit <u>https://www.niser.ac.in/w2s-seminar/index.php</u>