



An Online Short Term Course on Surface Engineered Materials Technology

Mon, 20 Nov – Fri, 01 Dec; 7:00 pm to 9:00 pm
Venue: **Online (12 days, 2hr lectures/day = 24 hrs)**

Eligibility	<i>Academics and Industry (outside IITKGP) interested in the area of surface engineering</i>
Syllabus	Surface Engineered Materials Technology (including one Assessment)
Lec 1, 2	Introduction to Surface Science, Surface Coating processes, CVD process
Lec 3, 4	Arc Deposition, Magnetron Sputtering, Sputter Deposition, Electroplating, Wetting
Lec 5	Thermal Spray and Related Processes
Lec 6, 7, 8	Surface Roughness Parameters and their Measurement Techniques
Lec 9, 10	Contact of Surfaces, Laws of Friction, Archard's Law, Lubricated Contact
Lec 11, 12	Reynolds Eqn. for Smooth and Rough surfaces, Modelling of Mixed Lubrication method
Instructors	<i>Profs Partha Bandyopadhyay, Vamsi Munagala, Ajay Sidpara, N Das Chakladar</i>
Course Fee	(a) Students outside IITKGP (₹2,950); (b) Outside faculty/research staff (₹5,900); (c) Industry/R&D (₹8,850) – Prices are inclusive of GST.
Payment	https://erp.iitkgp.ac.in/CEP/courses.htm (Payment is to be made in advance in the portal)
Coordinator	Principal Coordinator: Dr Nilanjan Das Chakladar, Assistant Professor (📞 +91 8442953215) https://sites.google.com/view/nilanjan-das-chakladar/outreach (<i>Keep an eye for updates!</i>) Joint Coordinator: Dr Ajay M Sidpara, Associate Professor (📞 +91 8116568933) https://sites.google.com/site/sidajay80/
Contact	ndaschakladar@mech.iitkgp.ac.in ; ajaymsidpara@mech.iitkgp.ac.in