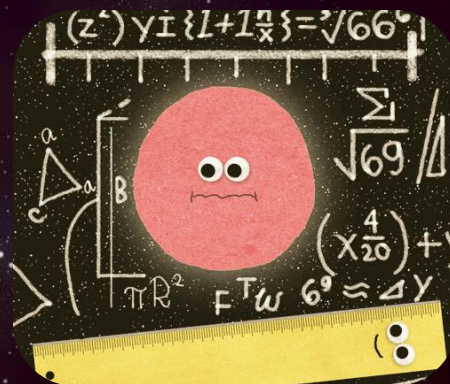
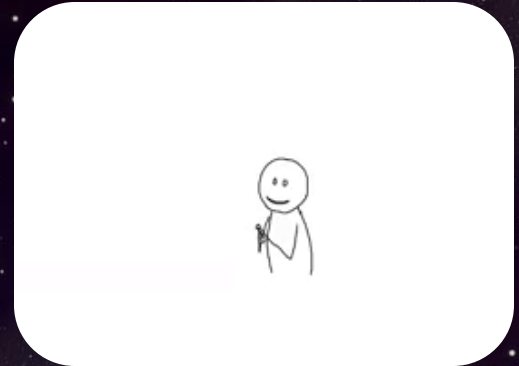


DISCOVERER Women in Engineering

My journey to Space Systems Engineering Research

Dr Kate Smith

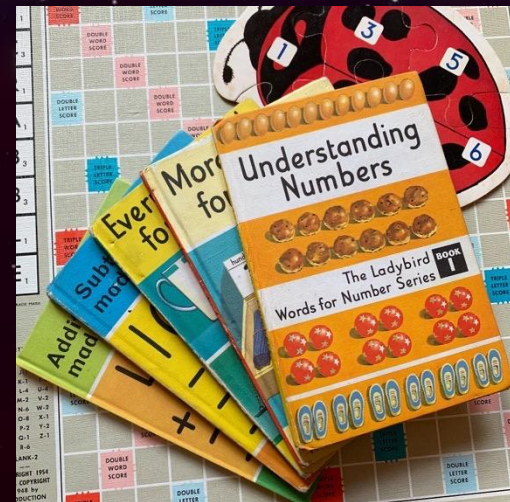
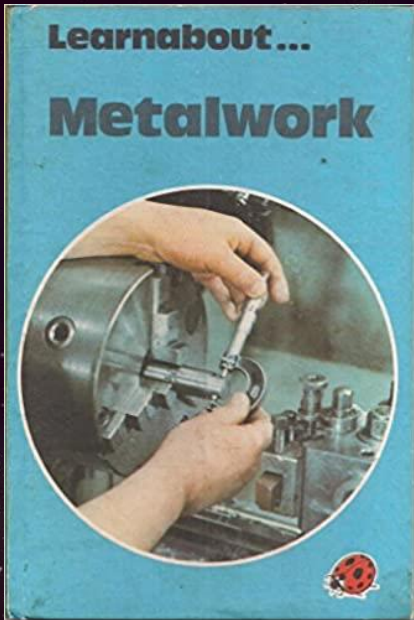
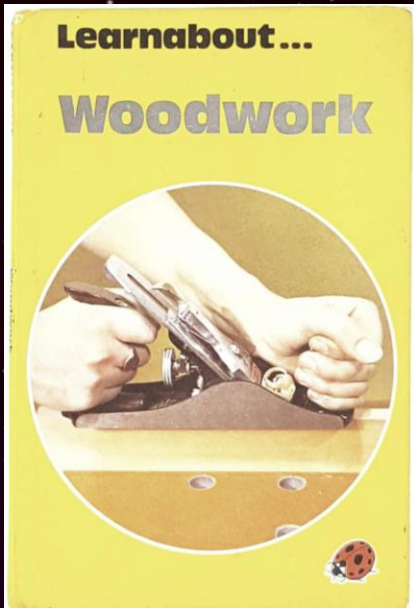
What is Space Systems Engineering ?







Earth's Moon – The Moon (Image credit Gregory H. Revera)





Animator



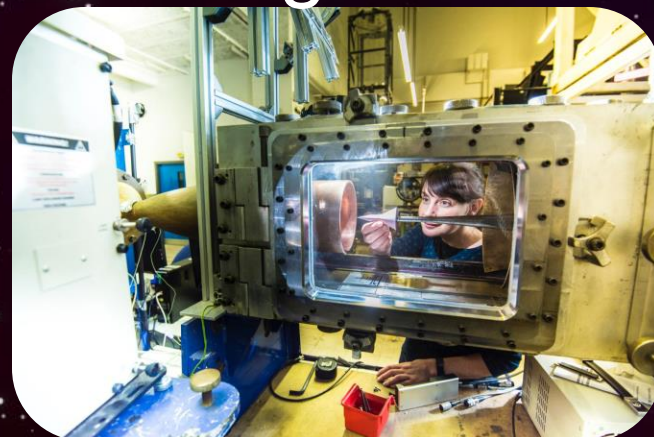
Architect



Pilot

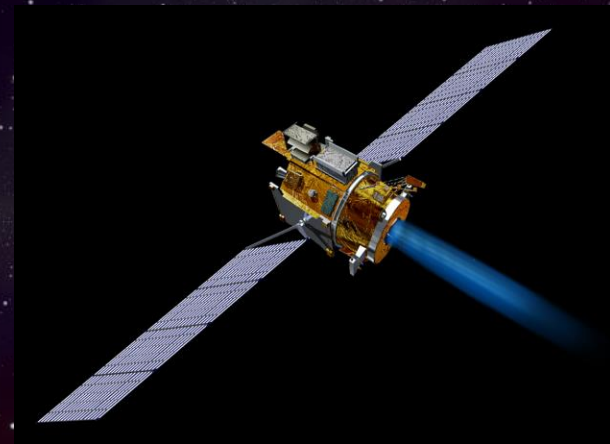


Engineer



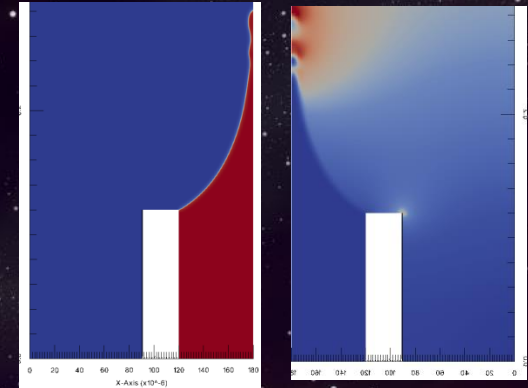
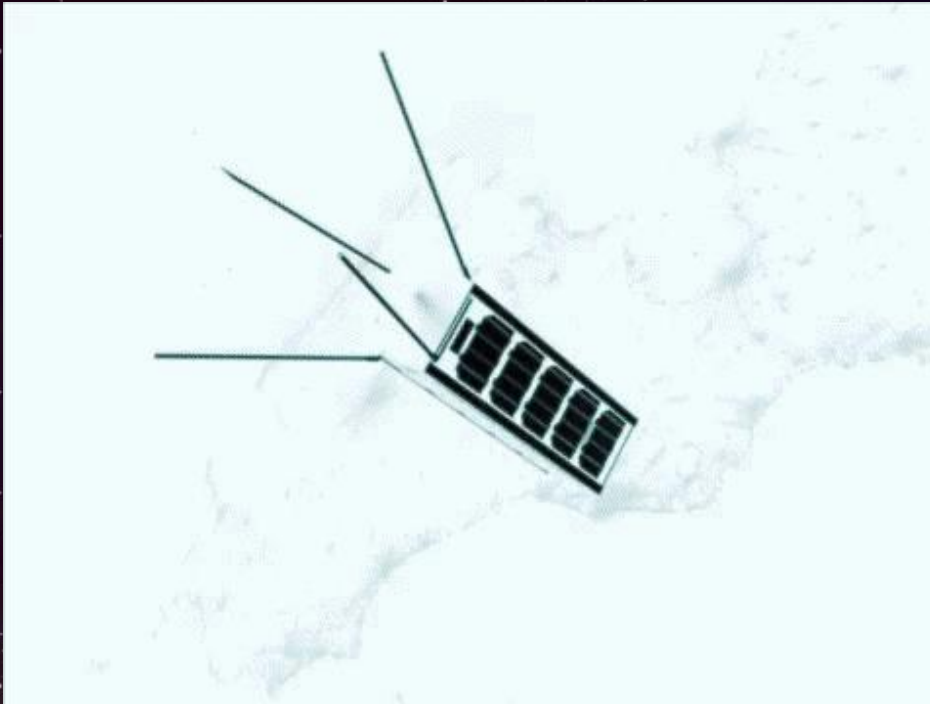


PhD?

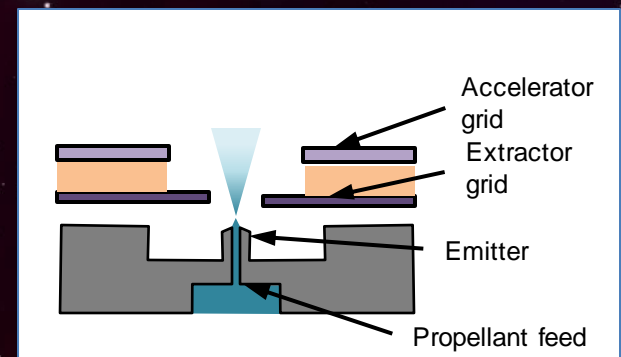


Spacecraft Micro-Propulsion

Electrospray micro thrusters



CFD - Volume of fluid cone model a) fluid phases b) electric field [1]



Electrospray (ES) Thruster schematic

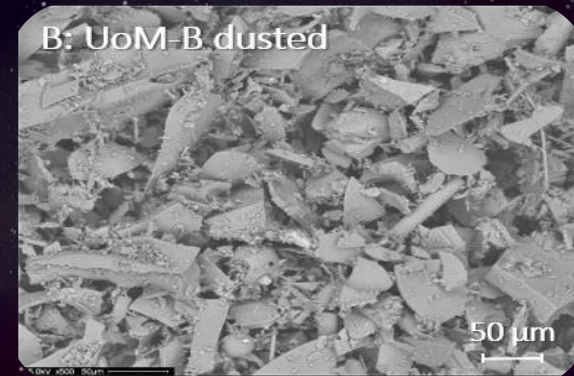
In situ resource utilisation (ISRU)

Lunar ISRU



UoM-B lunar regolith mechanical analogue [1]

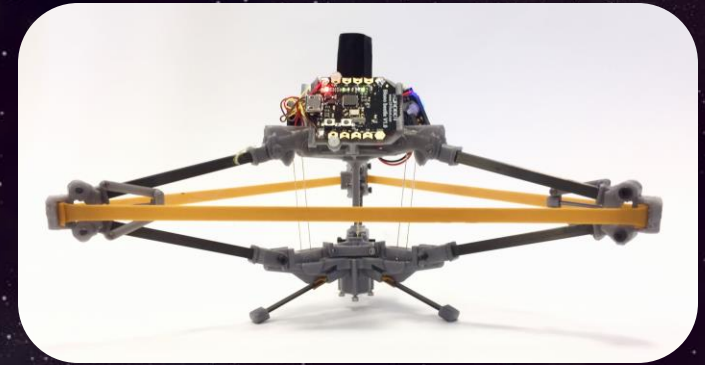
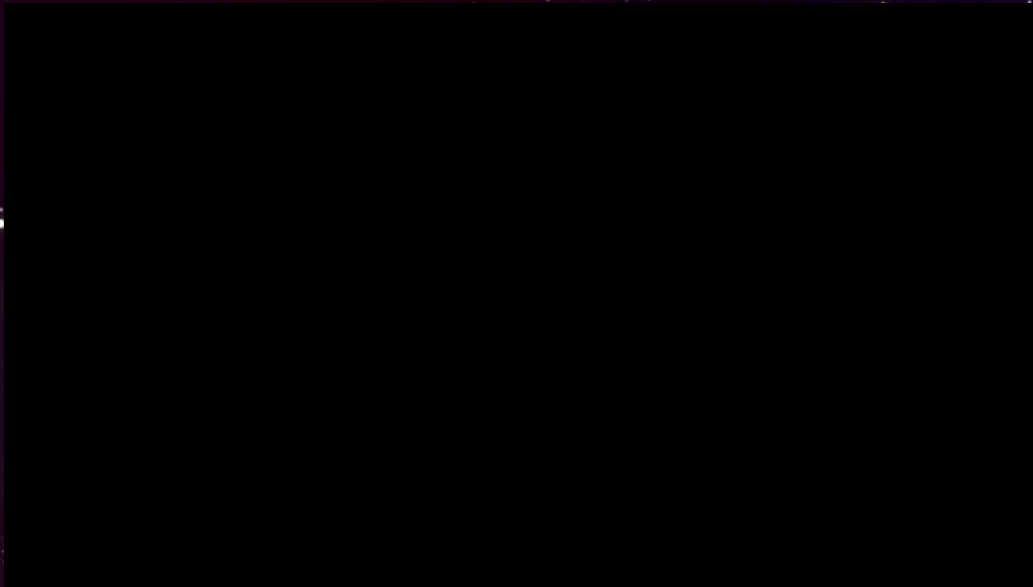
Excavation tool with integrated size separation [2]



Specialist Aggregates Ltd commercialisation of characterised lunar regolith analogue [1]

Space robotics

Hopping rovers for planetary exploration



Rocketry, Robotics and Flying

