# Abstract Template

## Title of the Presentation – Graphene foam solar sail propulsion

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Graphene (a carbon molecular monolayer) is a wonder material of great interest to materials researchers. Its molecular-layer thickness, finite fractional absorption, high melting point, and impermeability to gases coupled with the fact that doped materials, additives and multiple layers increase both fractional absorption and reflectivity indicates that it may be a superior material for application in solar-photon sailing. This paper first reviews relevant graphene physical and optical properties and then investigates the kinematics of interstellar solar sails constructed using this material. Two sail configurations are considered: thin-film probes and hollow-bodies sails. It is shown that graphene sail performance may be superior to that of beryllium sails, electrodynamic teather,ion beathing engine.How graphene porous nature and its absorbtion and reflection will help in sailing spacecraft and what will be its effect on adding it to various aersoace material like Aluminium 6061,7075,titanium,Mylar.
I will be discussing on what wonders that graphene can do in aerospace industry and how we produce graphene at low cost.How cheaper and secure will be space race in future.

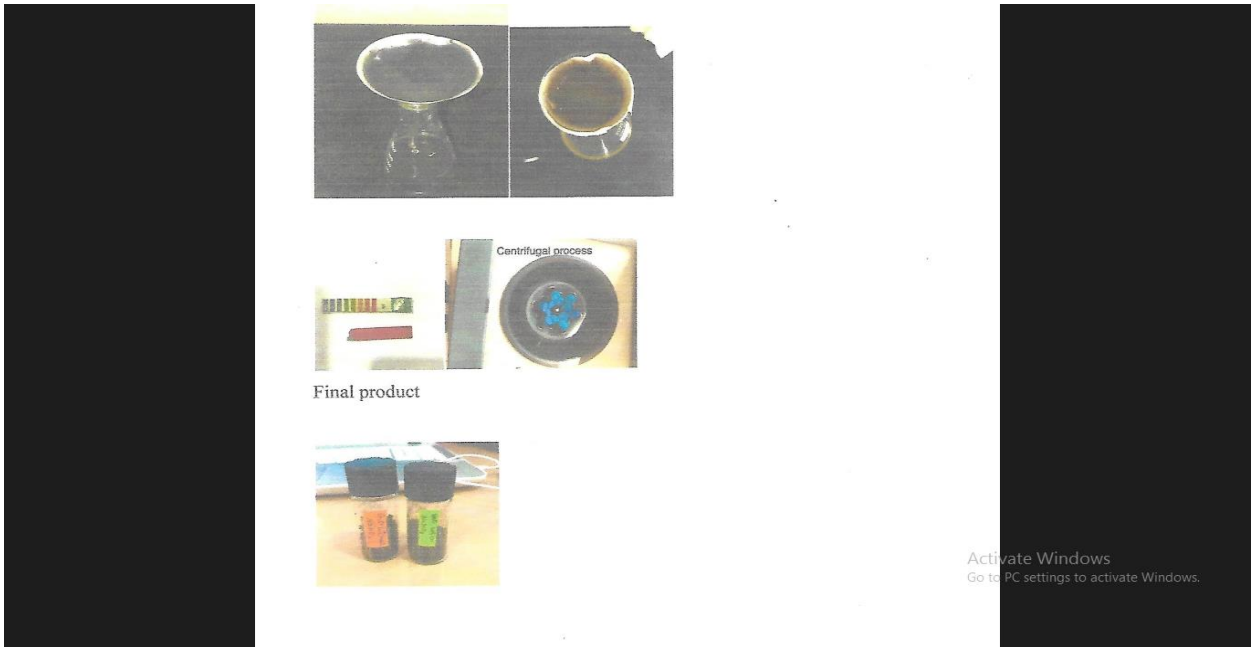



Fig 1.Graphene from solid waste and sugar cane bagasse for solar sail and teather ball.

## References

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## Biography

AKASH PANDEY have completed his BE from Punjab Technical University and has worked with many reowned organization.I am owner of Cruzex dynamics company,India's first private agency that design and develop UAV and missiles.I started with vision of producing hi tech UAV's with high endurance and AI equiped missiles.I have developed graphene based gas sensor and we have filed the patent too.We design and develop pocketqube and cubesat.I am working in filed of graphene from last two years and we are coming up with graphene based solar sail,drag sail and ion breathing engine.In our lab we are working graphene based MCT detectors,Graphene tether,Bullet proof jacket.I am research assistnt under Dr SHARAN ASUNDI ,US.

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