



# Magnetism in Materials

### Name of the PMRF student

Alapan Bera

### Required background of the students taught

Basic knowledge of quantum mechanics, electromagnetism and statistical mechanics.

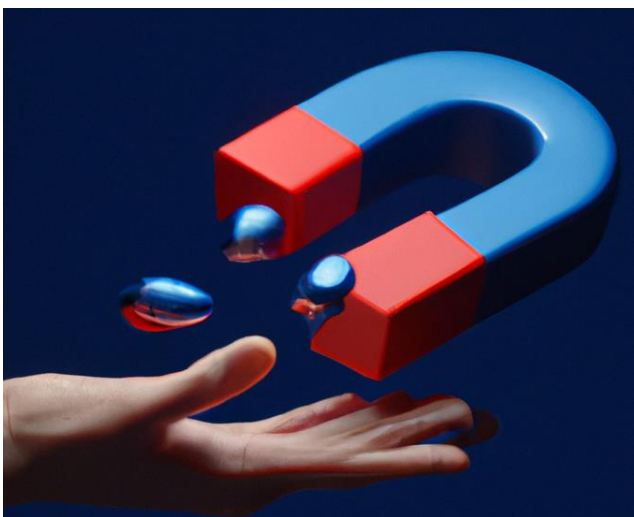
### Online session coordinator

Will be chosen from the list of registrants

### Details of the content of the module

This will be a lecture series on magnetism in materials aiming to build a good understanding of the origin of magnetism and interesting physics it leads to in different types of materials. The broad topics those will be covered are:

1. Physics behind para-magnetism and diamagnetism
2. Origin of long range order(exchange interactions)
3. Ferromagnetism and anti-ferromagnetism
4. Spontaneous symmetry breaking and long range order
5. Spin-wave(magnon) excitation
6. Domain-wall physics



### Schedule of the module

Start Date: 23.03.23

End Date: 30.04.23

Timings: Thursday: 8.00pm-9.00pm

Sunday: 10.30am-12.00pm

Meeting link : Will be shared later

[Link](#)

Contact email ID: [issc.forum@gmail.com](mailto:issc.forum@gmail.com)

Registration link:

<https://forms.gle/pkCPuSUPycs8zDCa8>