


- 11 July 2020: Department of Physics, DBT STAR Lecture Series CTMS Lecture 2

REC Som Datta Kaushik is presenting

Focusing Crystal Diffractometer



Beam hole no.	TT-1015, Dhruva Reactor
Monochromator	Bent perfect Si, doubly focusing
Wavelengths	1.48 Å & 2.315 Å (1.17 Å & 1.76 Å are also possible)
Beam size	15 x 25 mm ²
Flux at sample	7x10 ¹⁷ n.cm ⁻² .s ⁻¹
Scattering angle	6° – 123°
Sample required	~ 1 cc in volume (typical)
Q range	0.4 – 7.4 Å ⁻¹ (1.48 Å)
Adid	~ 0.3%
Detector	12 Linear He PSDs

- Cryogen Free Magnet
- Vertical field, Split pair magnet
- Temperature range: 2 – 300 K
- Magnetic field range: 0 – 7 T

Source: S. Datta Kaushik, J. Phys.: Condens. Matter 2018, 30, 115401

People (130) Chat

- Merin George (You)
- A K Sadanandan
- Abhirama Thampi
- ABHIRAMI B
- Abhishek Nair
- aishu alsawarya
- Aishwarya Raj
- Aishwarya Unnikrishnan Unnikri...
- AKHIL M ANAND
- akshaya vijay

Som Datta Kaushik, Ganesh Bera, IQAC Bishop..., Copikhand Ra..., Ananya S., Lija K Joy, d sojan

Activate Windows



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DBT ONLINE LECTURE SERIES ON

CHARACTERISATION TECHNIQUES IN MATERIALS SCIENCE

CTMS 2020

Lecture 2

"NEUTRON DIFFRACTION:
A UNIQUE PROBE TO UNDERSTAND
THE MAGNETISM IN
MAGNETIC MATERIALS"

Dr. Som Datta Kaushik

UGC DAE Consortium
for Scientific Research,
BARC, Mumbai

11 July 2020

11.00 am-12.30 pm



Organised as part of
DBT STAR College Scheme, MHRD, Govt. of India

Number of participants will be limited to 125

E-certificates will be provided to the registered participants attending the lecture
Interested Faculty members/Research scholars and PG students can register at

<https://forms.gle/42yuaPXzX6Y369Wu8>