

Report on Webinar entitled “ **Magnetic Phase Diagram of Few Classical Antiferromagnets: A Focus on Magnetic Triple Point and H-T Phase Diagram**”

Date: 01-06-2021.

Time:11.00am to 1.00 pm.

Invited speaker: **Dr.Subash Thota**, Professor of Physics, IIT Guwahathi.

Convener : DR.J.N.KIRAN and Co- Convener: Dr.K.Sowri Babu.

NO. OF REGISTRATIONS: 248

No. of participants : 134

Prof.N.Srinivasu, Head ,Department of S&H, Professor.M.Sreenivasulu, Head , Division of Physics and Prof.J.Nischal Kiran , Covener of the Webinar has addressed the participants. Dr. Subhash thota has given an enlighting talk on complex magnetic order, electronic structure, spin dynamics, Magnetic Triple Point and H-T Phase Diagram of few classical Antiferromagnets and Ferrimagnets. He has also discussed the how several novel characterization techniques such as neutron, X-ray scattering, frequency dependent ac-magnetic susceptibility ( $\chi'$  &  $\chi''$ ) and temperature dependence of magnetization (M-T & M-H) and heat-capacity measurements CP(T) have used to understand their properties in detail. In this talk he focussed on few such complex systems along with peculiar magnetic behavior such as Re-entrant Spin-glass ordering, Exchange Bias and Field Induced transitions. In the second part of the talk, he discussed few recent results obtained from by his Research group at IIT Guwahati .