

Report on Webinar entitled **Rare earth doped phosphors for photonic applications**
Division of Physics
Department of Science & Humanities

A webinar on **Rare earth doped phosphors for photonic applications** is conducted on **7th June 2021** by **Prof.M.Sreenivasulu**, Head, division of Physics. **Prof. A. Srinivasa Rao**, Professor of Applied Physics department, **Delhi Technological University** delivered the talk on this occasion as resource person. Faculty from the host and other Institutions, research scholars registered and participated in the webinar session. At the beginning Prof N.Srinivasu Head, Department of Science & Humanities, Convener Prof.M.Sreenivasulu gave their remarks about the Institution and topic of the webinar. Prof. J.N.Kiran introduced the resource person to the participants. The lecture include the fundamentals of photonics, preparation methods of phosphors, characterization of samples, analysis and their applications in various fields. The resource person covered the methods of preparation of phosphors including sol-gel, their absorption and emission spectra, up-conversion and down-conversion process of phosphors, their advantages and applications. The resource person elaborated the discussion on the role of photonics in medical diagnostics, drug delivery, laser surgery, surgical endoscopy in medicine and lasers, optical fibres in communication. Prof.A.S.Rao also delivered the scope of research, recent advances and challenges on photonic research and its application. The webinar also thrown light on emerging fields related to photonics like photonic integrated circuits and optical systems & networks, improvisation of efficiency of solar cells.