colour could be changed by varying the excitation wavelength also. The emission spectrum for the sample has been converted to the CIE 1931 color coordinate system. The color coordinates corresponding to the prominent emissions are determined. The CIE chromaticity calculation demonstrated its potential as white LED-based near-UV excitation.

The research work presented in the thesis has either been published in or communicated to reputed international journals and presented in various national/international seminars.

**Research papers published/communicated**


Research Papers Presented in National /International Seminars


2. Siby Mathew, Karthika S, Prathibha Vasudevan, K T Mathew, N V Unnikrishnan, Dielectric studies of ZnSe / Eu³⁺ ions in Sol Gel glasses, National workshop on Quantum confined systems and nanoscale devices, St. Thomas College, Palai, Dec 2009.

3. Xavier Joseph, Arun Kumar K V, Prathibha Vasudevan, Gijo Jose, N V Unnikrishnan, Optical and Z-Scan studies of CdS/Tb³⁺/Eu³⁺ doped silica matrix, National Laser Symposium [NLS-9], Baba Atomic research Center (BARC), Mumbai, Jan 2010.


8. **Prathibha Vasudevan**, Karthika S, Sunil Thomas, Biju P R, N V Unnikrishnan., White light emission from Tb\(^{3+}\), Eu\(^{3+}\)/PVA film under Single UV Excitation, *National Workshop on “Mesmerisms in Opto-electronics”*, Baselius college, Kottayam, **July 2011**.
