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Recent Publications (names of latest five): By Dr Subrata Hazarika

- 1.D.Bora ,**S.Hazarika** ; “ Correlating Spectral Variations of Malachite Green with Organic Co-Precursors in TEOS Silica Hybrid Glasses” *IJSER*,Vol-4(12),2013,1593-1597
2. D.Bora ,**S.Hazarika** ; “Parametric Characterization of Spectroscopic Properties of Malachite Green in Sol-Gel Derived Silica Matrices with a Prospective Analysis of Optical Usage” *IJCET*,Vol-3(5),2013,1977-1581.
3. Spectral linewidth narrowing and intensity enhancement of the ${}^5G_6 \rightarrow {}^5I_8$ hypersensitive transition in uv-blue up-conversion from Ho^{3+} activated $Al(NO_3)_3-SiO_2$ sol-gel glass.**S. Hazarika** and Reeta Rajbonshi, *Opt. Mat. Exp.* **1** (2011) 1307 (Optical Society of America)
4. Fluorescence dynamics of Tb^{3+} and Tb^{3+}/ Ho^{3+} doped phosphate glasses. **S.Hazarika** and S.Rai, *Opt. Mater* **30**(2008) 1343. (Elsevier)
5. Characteristics of Nd^{3+} ions in sol-gel derived silicate glass in presence of $Al(NO_3)_3$ and the ${}^4F_{3/2} \rightarrow {}^4I_{11/2}$ transition. **S.Hazarika**, S.Rai, *Opt. Mater.* **30** (2007) 561.(Elsevier)
6. Spectral characteristics of Triarylmethane(Crystal violet and Malachite Green) dyes in sol- gel derived $Al (NO_3)_3-SiO_2$ glass. **S. Hazarika**, M. Baruah and S. Rai. *Proc. Of 4th DAE-BRNS National Laser Symposium. BARC, Mumbai*, page 561 (Allied Publishers, Mumbai, 2005).
7. Structural , optical and non-linear investigation of Eu^{3+} : $Al (NO_3)_3-SiO_2$ sol-gel glass. **S. Hazarika** and S.Rai , *Bull. Mater. Sci.* **27** (2004) 223. (Springer)

Reviewer of international journals:

Review research articles for international journals in Physics such as

- i) *Physica B* and ii) *J. Non-cryst. Solids* (both Elsevier publication)etc.

Invited Talk & Resource Person :

Served as a resource person in the workshop entitled “**Basic Concepts of Biotechnology and Molecular Biology**’ organised by Life science & Bioinformatics department , AUDC and sponsored by Institutional Biotech Hub on 2nd and 3rd December 2011.

Delivered invited talk in the lecture series on “**Emerging Science & Technologies, its future impact on Society and Industrial Sectors**” organized by Sibsagar College, Joysagar from 26th to 27th November 2010.:

Workshop & Seminar attended

1.DAE-BRNS National Laser Symposium (NLS-20), held in Anna University, Chennai, from 9th to 12th January-2012.

Under communication

Effect of Dy³⁺ on Upconversion Luminescence in Sol-Gel Derived Dy³⁺/Er³⁺ Codoped Silica Glasses , **S. Hazarika** and Abhijeet Das communicated for presentation in PHOTONICS 2012.

Workshop/ Symposium attended and paper presented/ published by research scholar Mr. Dulen Bora

1. Attended Workshop on “CRYSTAL GROWTH AND CHARACTERISATION OF LASER MATERIALS” organized by Crystal Growth Centre, Anna University, Chennai and conducted by Indian Laser Association(ILA)on 7 and 8 January-2012 .

2 Presented a paper “EMISSION INTENSITY STUDIES OF MALACHITE GREEN (DYE) IN Al (NO₃)₃ -SiO₂ SOL-GEL GLASS” in the UGC sponsored national Seminar “Recent Development on Natural Sciences” organized by DKD College, Dergaon, Assam, on 21-22 January-2012.

4.Attended DAE-BRNS National Laser Symposium (NLS-20), held in Anna University, Chennai, from 9th to 12th January-2012.