


ANDHRA LOYOLA INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, Recognized by Govt of AP, Affiliated to JNTUK, Kakinada)

An ISO 9001: 2008 Certified Institution

Govt. Polytechnic Post, ITI Road, ALC Campus, Near Ramesh Hospital, Vijayawada-8

FACULTY PROFILE

Name of the Faculty	Dr.V. Ravi Kumar		
Designation	Assistant Professor		
Department	Science & Humanities		
Date of Joining the Institution	05-10-2020		
Qualification with Class/Grade	UG: B. Sc, MPC (1st class) M. Sc Physics (1st class with Distinction) Ph.D		
Employee ID	ALIET-22-09		
E-Mail	Ravikumar89.physics@gmail.com		
Total Experience in Years	Teaching: 7.4 years	Industry : Nil	Research: 9
Papers Published	29 (SCI)		
Papers presented in Conferences	Nil		
PhD Guide? Give field & University	Nil		
PhDs / Projects Guided	Nil		
Books Published/IPRs/Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	---		
Awards	01 (BEST RESEARCHER AWARD FROM COGNIZANCE ACADEMIA)		
Grants fetched	---		
Whether Ratified by University (Yes/No)	No		

Experience in other Institutions: 5.4 years

ACADEMIC QUALIFICATION:

NAME OF THE COURSE	INSTITUTE	YEAR OF PASSING	PERCENTAGE
B. Sc	Vikas Degree college, ANU	2009	68 I Div.
M. Sc	Vikas P.G College, ANU	2011	71.25 I Div. with Distinction
Ph. D	Acharya Nagarjuna University	2017	-

LIST OF PUBLICATIONS ELSEVIER (S C I Journals): 29

1. **Valluri Ravi kumar**, G. Giridhar and N. Veeraiah “Influence of modifier oxide on emission features of Dy³⁺ ion in Pb₃O₄–ZnO–P₂O₅ glasses” **Optical Materials** 60 (2016) 594-600 (*Elsevier Journal* , Thomson & Reuters Impact Factor : 3.08)
2. **Valluri Ravi Kumar**, G. Giridhar, V. Sudarsan and N. Veeraiah “Influence of red lead on the intensity of green and orange emissions of Sm³⁺ and Ho³⁺ co-doped ZnO–SrO–P₂O₅ glass system” **Journal of Alloys and Compounds** 695 (2017) 668-681. (*Elsevier, Thomson & Reuters Impact Factor : 5.316*)
3. **Valluri Ravi kumar**, G. Giridhar, V. Ravi Kumar, C.K. Jayasankar, and N. Veeraiah “The energy transfer efficiency from Yb³⁺ to Nd³⁺ in SrO–Pb₃O₄– ZnO–P₂O₅ glass system-Influence of lead ions” **Journal of Luminescence** 187 (2017)281–289 (*Elsevier, Thomson & Reuters Impact Factor : 3.599*)
4. **Valluri Ravi Kumar**, G. Giridhara and N. Veeraiah “ Concentration dependence of luminescence efficiency of Dy³⁺ ions in strontium zinc phosphate glasses mixed with Pb₃O₄” **Luminescence: The Journal of Biological and Chemical Luminescence**, 32 (2017) 71–77 (*Wiley Journal, Thomson & Reuters Impact Factor : 2.464*)
5. K.Srinivasa Rao, **Valluri Ravi Kumar**, Ya. Zhydachevskii, A. Suchocki, M. Piasecki, Y.Gandhi, V. Ravi Kumar, N. Veeraiah, “Luminescence emission features of Nd³⁺ ions in PbO–Sb₂O₃ glasses mixed with Sc₂O₃/Y₂O₃/HfO₂” **Optical Materials** 69 (2017) 181–189 (*Elsevier, Thomson & Reuters Impact Factor : 3.08*)
6. G. Chinna Ram, T. Narendrudu, S. Suresh, A. Suneel Kumar, M.V. Sambasiva Rao, **V. Ravi Kumar**, D. Krishna Rao “Investigation of luminescence and laser transition of Dy³⁺ ion in P₂O₅-PbO -Bi₂O₃-R₂O₃ (R = Al, Ga, In) glasses” **Optical Materials** 66 (2017) 189-196.(*Elsevier, Thomson & Reuters Impact Factor : 3.08*)
7. K. Srinivasa Rao, **Valluri Ravi Kumar**, Yaroslav Zhydachevskii, Andrzej Suchocki, Michal Piasecki, G. Naga Raju, V. Ravi Kumar, N. Veeraiah “Influence of some non-conventional rare earth metal oxides on orange emission of Er³⁺ ions in PbO-Sb₂O₃ glasses” **Journal of Luminescence** 192 (2017) 443-451. (*Elsevier, Thomson & Reuters Impact Factor : 3.599*)

8. P. Sobhanachalam, V. Ravi Kumar, B.V. Raghavaiah, **Valluri Ravi Kumar**, G. Sahaya Baskaran, Y. Gandhi, P. Syam Prasad, N. Veeraiah “In vitro investigations on CoO doped CaF₂-CaO - B₂O₃-P₂O₅-MO bioactive glasses by means of spectroscopic studies” **Optical Materials** 73 (2017) 628 - 637 (*Elsevier, Thomson & Reuters Impact Factor : 3.08*)
9. P. Sudhakar, V. Ravi Kumar, **Valluri Ravi Kumar**, N. Purnachand, A. Siva Sesha Reddy, N. Veeraiah, “Violet-blue emission characteristics of Pr³⁺ co-doped with Ti⁴⁺ ions in lead arsenate glass system” **Journal of Luminescence** 199 (2018) 416-422 (*Elsevier, Thomson & Reuters Impact Factor : 3.599*)
10. G. Naga Raju, P. Venkateswara Rao, **Valluri Ravi Kumar**, Ch. Chandrakala, J. Ashok “Study on the influence of TiO₂ on the characteristics of multi component modifier oxide based B₂O₃ glass system” **Journal of Non Crystalline Solids**, 498 (2018) 309-314. (*Elsevier, Thomson & Reuters Impact Factor : 3.531*)
11. A. Ashirvadam, **Valluri Ravi Kumar** and G. Naga Raju “Influence of modifier oxide on emission features of Sm³⁺ ion in lithium antimonate glasses” (*Elsevier , Materials Today Proceedings*) 5 (2018) 26191–26198. **Impact Factor: 1.24**)
12. **Valluri Ravi Kumar**, G. Naga Raju, M. Vidya Elizabeth and D. Udaya Keerthi “Spectroscopic properties of Dy³⁺ ions in PbO-Sb₂O₃ glasses mixed with MgO/CaO/SrO” 5 (2018) 26372-26379 (*Elsevier Materials Today Proceedings*) 5(2018) 26372-26379. **Impact Factor: 1.24**)
13. K.Srinivasa Rao, **Valluri Ravi Kumar**, G. Naga Raju and A. Subba Rao “Influence of alkaline earth modifiers on luminescence characteristics of Dy³⁺ ions in lead zinc antimonate glasses” **IJERA** (International Journal of Engineering Research and Applications) (**Impact Factor : 5.851**) 8 (2018) 07-12. ISSN: 2248-9622.
14. **Valluri Ravi Kumar**, K. Srinivasa Rao, V. Ravi Kumar, G. Naga Raju, “Structural influence of yttria, scandia and hafnia on emission features of samarium ions in lead antimonate glass system” **Optical Materials** 95 (2019) 109200. (*Elsevier, Thomson & Reuters Impact Factor : 3.08*)
15. **Valluri Ravi Kumar**, G. Nagaraju, A. Asirvadam, A. Siva Sesha Reddy, J. Ashok “Spectroscopic properties of Nd³⁺ doped PbO–Sb₂O₃–CaO/MgO/SrO glasses” 19 (2019) 2663-2667. **Materials Today Proceedings**, (*Elsevier, Thomson & Reuters Impact Factor : 1.24*)
16. A. Venkata Sekhar, L. Pavic, A. MogošMilanković, **Valluri Ravi Kumar**, G. Naga Raju, N. Veeraiah, “Dielectric dispersion and conductivity spectra of NiO doped Li₂SO₄–MgO–P₂O₅ glass system” **Journal of Alloys and Compounds** 824 (2020) 153907. (*Elsevier, Thomson & Reuters Impact Factor: 5.316*)
17. Ch. Chandrakala, A. Siva Sesha Reddy, J. Jedryka, **Valluri Ravi Kumar**, G. Naga Raju, N. Venkatramaiah, V. Ravi Kumar, G. Lakshminarayana, N. Veeraiah, Third-order nonlinear optical features of zirconia-added lead silicate glass ceramics embedded with Pb₂Fe₂O₅ perovskite crystal phases and role of Fe ions, **APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING**, 126 (2020) 413 doi.org/10.1007/s00339-020-03570-x. (*Sringer, Thomson & Reuters Impact Factor: 2.584*)

18. A. Siva Sessa Reddy, G. Lakshminarayana, N. Purnachand, **Valluri Ravi Kumar**, N. Venkatramaiah, V. Ravi Kumar, N. Veeraiah, “Influence of gold ions on visible and NIR luminescence features of Er^{3+} ions in lead boroselenate glass ceramics”, **Journal of Luminescence** 226 (2020) 117481, doi: 10.1016/j.jlumin.2020.117481. (*Elsevier, Thomson & Reuters Impact Factor: 3.599*)
19. A. Venkata Sekhar, A. Ingram, **Valluri Ravi Kumar**, M. Kostrzewa, A. Siva Sessa Reddy, G. Naga Raju, V. Ravi Kumar, N. Veeraiah, “Influence of nickel ion concentration on the free volume defects entrenchment in an alkali sulphophosphate glass system by means of positron annihilation characterization technique”, **Journal of Non-Crystalline Solids** 547 (2020) 120315. (*Elsevier, Thomson & Reuters Impact Factor: 3.531*)
20. A. Venkata Sekhar, M. Kostrzewa, **Valluri Ravi Kumar**, A. Ingram, A. Siva Sessa Reddy, G. Naga Raju, V. Ravi Kumar, N. Veeraiah, Estimation of concentration of nanosized voids ingrained in CuO doped lithium sulfophosphate amorphous system using positron annihilation spectroscopy, **Optical Materials** 109 (2020) 110314. doi.org/10.1016/j.optmat.2020.110314, (*Elsevier, Thomson & Reuters Impact Factor: 3.08*)
21. K. Srinivasa Rao, A. Subba Rao, **Valluri Ravi Kumar**, B. Naveen Kumar Reddy, “Fluorescence features of Sm^{3+} ions in $\text{P}_2\text{O}_5\text{--B}_2\text{O}_3\text{--Pb}_3\text{O}_4$ glass systems”, Compliance Engineering Journal, ISSN NO: 0898-357, 11 (2020) 466 – 484. (UGC Care / Scopus, **Impact Factor: 2.183**)
22. **Valluri Ravi Kumar**, N. Purnachand, B. Naveen Kumar Reddy, V. Ravi Kumar, B.V. Ragavaiah, “NIR luminescence features of Nd^{3+} ion in exotic lithium antimonite glass system for applications in telecommunications, **Physica B-Physics of Condensed Matter** 600 (2021) 412519. (*Elsevier, Thomson & Reuters Impact Factor: 2.436*)
23. Pathuri Naresh, M. Kostrzewa, M.G. Brik, N. Venkatramaiah, **Valluri Ravi Kumar**, N. Krishna Mohan, V. Ravi Kumar, M. Piasecki, N. Veeraiah, Emission features of Er^{3+} ions in an exotic SeO_2 based glass system” **Journal of Non-Crystalline Solids** (2020) 120558 doi.: [10.1016/j.jnoncrysol.2020.120558](https://doi.org/10.1016/j.jnoncrysol.2020.120558) (*Elsevier, Thomson & Reuters Impact Factor: 3.531*)
24. P. Naresh, **Valluri Ravi Kumar**, A. SivaSessa Reddy, M. Kostrzewa, N. Venkatramaiah, N. Krishna Mohan, V. Ravi Kumar, N.Veeraiah, Studies on near infrared emission of Yb^{3+} ions in a SeO_2 based glass system, **Physica B** (2021) 412827, doi.: [10.1016/j.physb.2021.412827](https://doi.org/10.1016/j.physb.2021.412827). (*Elsevier, Thomson & Reuters Impact Factor: 2.436*)
25. **Valluri Ravi Kumar**, A. Ashirvadam, P. Naresh, G. Naga Raju, M. V. Ramachandra Rao, B. Naveen Kumar Reddy, G. Sahaya Baskaran, Spectroscopic properties of $\text{P}_2\text{O}_5\text{--MgO--Na}_2\text{O:Dy}_2\text{O}_3$ glasses for the applications of W-LEDs **Optical Materials** 121 (2021) 111590. (*Elsevier, Thomson & Reuters Impact Factor: 3.08*)
26. A. Asirvadam, **Valluri Ravi Kumar***, M. Nagarjuna, G. Naga Raju**, P. Syam Prasad, G. Sahaya Baskaran, V. Ravi Kumar, P. Venkateswara Rao, “Optical and luminescence properties of Er^{3+} doped $\text{Sb}_2\text{O}_3\text{--Li}_2\text{O--MO}$ (M=Mg, Ca and Sr) glasses” **Optical Materials** 128 (2022) 112422, (*Elsevier, Thomson & Reuters Impact Factor: 3.08*). doi.org/10.1016/j.optmat.2022.112422.

27. A. Asirvadam, **Valluri Ravi Kumar**, B. Naveen kumar Reddy, G. Naga Raju, P. Syam Prasad, P. Venkateswara Rao, Spectroscopic properties of Nd³⁺ ions in Li₂O–MO (M=Mg, Ca and Sr)–Sb₂O₃ glasses, **Optik - International Journal for Light and Electron Optics** 264 (2022) 169405. (Elsevier, Thomson & Reuters Impact Factor: 2.443). doi.org/10.1016/j.ijleo.2022.169405.
28. A. Siva Sessa Reddy, M. Kostrzewa, **Valluri Ravi Kumar**, A. Ingram, N. Venkatramaiah, G. Sahaya Baskaran, V. Ravi Kumar, N. Veeraiah, Influence of nano-sized defects on PL efficiency of Er³⁺ ions co-doped with Au₂O₃ in lead boroselenate glass ceramic system- A novel approach using PAL spectroscopy, *Luminescence*, (2022) 1-9. (SCI: Wiley Thomson & Reuters Impact Factor: 2.464). doi: 10.1002/bio.4357.
29. P. Pavani Koteswari Devi, **Valluri Ravi Kumar**, A. Venkata Sekhar, A. Siva Sessa Reddy, N. Venkatramaiah, V. Ravi Kumar, N. Veeraiah, Luminescence efficiency of Sm³⁺ ions in hafnia added lithium silicate glass system-the impact of Au⁰ particles, **Journal of Non-Crystalline solids**, (2022) 121863 (Elsevier, Thomson & Reuters Impact Factor: 4.458). doi:10.1016/j.jnoncrysol.2022.121863.

PAPERS PRESENTED / CONFERENCE ATTENDED

1. UGC sponsored **National Seminar** on “Renewable Energy for Sustainable Growth” Organized by the Department of Physics, SVRM College, Nagaram, Guntur, India, During 26th and 27th July, 2013.
2. **National workshop** on “Recent Trends In Device Materials” Organized by the Department of Physics under TEQIP-II, National Institute of Technology (NIT), Warangal, India During 8th – 10th November, 2013.
3. **National conference** on “Advanced Materials for Energy Applications-(NCAMEA)” Organized by the Department of Physics, University college of Science, Osmania University, Hyderabad, India, During 31st January - 1st February-2014.
4. One Day **State level Seminar** on “Recent Trends In Materials Science” Organized by the Department of Physics, Ideal college of Arts and Sciences, Kakinada, India, on 22nd February-2014.
5. UGC sponsored Two- Day **National workshop** on “Advances In Material Processing” Organized by the Department of Nano-Technology, Acharya Nagarjuna University, Guntur, India, During 28th and 29th March -2015.
6. **International Seminar** on “Glasses and Other Functional Materials (ISGFM)” Organized by the Department of Physics, Acharya Nagarjuna University, Guntur, A.P., India, During 11th -13th December-2014.

7. **6th Indian Youth Science Congress**, Acharya Nagarjuna University, A.P, India, During 19th – 21st January-2015.
8. **5th International Conference** on “Luminescence and its Application (ICLA)” Organized by PES Institute of Technology, PES University, Bengaluru, Karnataka State, India, During 9th -12th February-2015.
9. UGC Sponsored Two-Day **National Conference** on “EMERGING FRONTIERS OF MATERIALS SCIENCE” Organized by Department of Physics, Maris Stella College, Vijayawada, A.P., India, During 12th & 13th February-2015.
10. UGC sponsored Two-Day **National Seminar** on “Emerging Techniques in Physics Teaching and Training (ETPTT)” Organized by Department of Physics, S.V.R.M college, Nagaram, A.P., India, During 7th & 8th August-2015.
11. **3rd National workshop** on “Materials Chemistry (NWMC) Organized by Chemistry Division Baba Atomic Research Center, Mumbai, India, During 20th & 21st November-2015.
12. **National Seminar** on “Advances in Materials Science (NSAMS)” Organized by Department of Electronics and Instrumentation Technology, Acharya Nagarjuna University, Guntur, A.P., India, During 25th & 26th November-2015.
13. **National Conference** on “Functional Glasses/ Glass Ceramics and Ceramics” Organized by Department of Physics, Visvesvaraya National Institute of Technology, Nagpur, India, During 10th – 12th December-2015.
14. UGC Sponsored **National Seminar** on “Recent Trends in Applied Physics” Organized by Department of Physics, K.R.K Govt. Degree College Addanki, A.P., India, During 16th & 17th December-2015.
15. **International conference** on “Science and Engineering of Materials for Future Needs” Organized by Department of Physics, S.R & B.G.N.R. Govt. Arts & Science College, Khammam, Telangana., India, During 21st & 22nd December-2015.
16. **1st Andhra Pradesh Science Congress** on “Science for Smart Technologies” Organized by Sri Venkateswara University, Tirupati, A.P., India, During 27th - 29th January-2016.
17. One Day **National Seminar** on “Materials Science and Technology” _ Organized by Department of Physics, Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada, A.P., India, on 19th November-2016.” Effect of Pb₃O₄ on rare earth Er³⁺ doped in lead zinc phosphate glasses”
18. **104th Indian Science Congress** Organized by Sri Venkateswara University, Tirupati, A.P., India, During 3rd - 7th January-2017.

19. **UGC Sponsored Two day National Seminar** on “Recent trends in Chemistry and Physics of Materials” Organized by Department of Physics, SRR & CVR Govt. Degree college, Vijayawada, A.P., India, During 15th & 16th September-2017.
20. **National seminar** on “Physics and Chemistry of Non-crystalline materials” Organized by Department of Physics, Nandigama, Krishna Dist. A.P., India, During 1st and 2nd -2017.
21. **National seminar** on “ Advances in Biomaterials & Characterization Techniques” Organized by Department of Physics, Vijayawada, Krishna Dist. A.P., India, During 20th and 21st - 2017.
22. **National seminar** on “Luminescence and its applications” Organized by CSIR-National Institute for Interdisciplinary Science and Technology (**CSIR-NIIST**), Trivandrum And Luminescence Society of India (LSI) (Reg. No. Guj./1156, Baroda, India, September, 1995), During 14th – 16th - 2018.
23. NCFAM (National Conference on Functionality of Advanced Materials) Organized by Division of Physics, S&H department, Vignans Foundation for Science, Technology and Research (deemed to be University), Guntur, Andhra Pradesh, India, During 24th – 25th June, 2019.
24. Faculty Orientation program 5th to 16 July 2019 in Vignans Foundation For Science, Technology and Research
25. A National Level 3 Day Virtual Faculty Development Program on “MOVING TO MASTER SCIENCE IN TECHNOLOGY (MMST: 2020), Organized by Freshmen Engineering Department from 18th -20th June 2020.
26. National Webinar on “Recent Advances in Materials for Sensing and Energy Harvesting” Organized by Dept. of Physics, S& H, VFSTR (Deemed to be University) during 22nd June 2020.
27. Three day National level Webinar on “Recent Trends in Materials Science” (RTMS-2020) Organized by Dept. of Physics, S& H, Usha Rama college of Engineering & Technology, during August 19th to 21st 2020.
28. Faculty Development Program on “Advances in Atmospheric Physics and Chemistry” organized by DEPARTMENT OF BASIC SCIENCES, SANTHIRAM ENGINEERING COLLEGE, NANDYAL, from 05th October to 09th October 2020.
29. International virtual faculty Development program on **Research and Writing** organized by Andhra Loyola Institute of Engineering and Technology, Vijayawada and **CAPE COMORIN TRUST** from 26-30 June 2022.

Conducted a Three days International Webinar on “Functional Materials And Their Applications” (FMA- 2021) During 25th to 27th March-2021

Convener:

Dr. Valluri Ravi Kumar
Assistant Professor (Physics) , ALIET