

BRIEF BIODATA

1. Name : Dr.P. Babu
2. Date of Birth : 10th July 1963
3. Community : Kummara (BC-B)
4. Permanent Address : H. No. 26-31/1, M.C. Palyam,
Palamaner - 517 408,
Chittoor (Dist.), A.P.
5. Martial Status : Married
6. Present Status : Regional Joint Director of Collegiate Edn.
Zone - IV (Chittoor and Kadapa districts)
Kadapa - 516 001, A.P. [OD basis]

7. Work Experience:

- Dec 2022 - Present : Regional Joint Director of Collegiate Education
Zone - IV (Chittoor and Kadapa dists) [OD basis]
Kadapa -516 001, A.P.
- Aug 2022 - Nov 2022 : Principal, NTR Government Degree College,
Valmikipuram - 517 299, A.P.
- Jun 2017 – July 2022 : Principal, SVCR Government Degree College
Palamaner -517408, A.P.
- Oct 2012 – May 2017 : Principal, Government Degree College,
Satyavedu – 517588, A.P.
- Aug 2012 – Sep 2012 : Reader in Physics, Government Degree College,
Nagarkurnool – 509 209, A.P.
- Oct 2001 – Jul 2012 : Reader in Physics, Government Degree College,
Wanaparthy – 509 103, A.P.
- Sep 1997 - Sep 2001 : Senior Lecturer in Physics, Government Degree
College, Wanaparthy – 509 103, A.P.
- Sep 1992 - Aug 1997 : Lecturer in Physics, Government Degree College,
Wanaparthy – 509 103, A.P.
- Feb 1992 - Aug 1992 : Junior Lecturer in Physics, Government Junior
College, Sodam, A.P.
- Aug 1988 - Jan 1992 : Associate Lecturer in Physics, Government Model
Residential Polytechnic, Bhadrachalam, A.P.

8. Education:

Ph.D. : Physics, 2001.

Thesis: Spectroscopic properties of Pr^{3+} , Sm^{3+} , Eu^{3+} and Dy^{3+} ions in lithium borate and lithium fluoroborate glasses.

M.Phil. : Physics, 1988 with First Class.

Dissertation: Ultrasonic studies in the ternary mixture: water + iso-propanol + pyridine.

M.Sc. : Physics (Specialization in Electronics), 1986 with First Class.

B.Sc. : Mathematics, Physics and Chemistry as optionals, 1984, with Distinction.

All are from Sri Venkateswara University, Tirupati – 517 502, INDIA.

9. Fellowship:

Apr. 1996 – Mar.1997: **Teacher Fellowship** under Faculty Improvement Program (FIP) of University Grants Commission (UGC), Govt. of India.

10. Post-Doctoral Experience:

Mar. – Sep. 2002: Dept. of Physics (With Prof. Ki-Soo Lim), Chungbuk National University, Cheongju, Chungbuk 361-763, Rep. of KOREA.

Sep. 2002 – Feb.03: Dept. of Information and Communications (With Prof. K. Oh), Kwangju Institute of Science and Technology (K-JIST), Kwangju 500-712, Rep. of KOREA.

Jan. – Jul. 2005: Department of Physics (With Prof. Hyo Jin Seo), Pukyong National University, Busan, Rep. of KOREA.

May – Jul. 2007: Guest Scientist under the Spanish Visitors Programme (supported by the Ministry of Education and Science, Govt. of Spain) to work with Dr. V. Lavin, University of La Laguna, Santa Cruz de Tenerife, Spain.

Mar – July 2008: Department of Physics (With Prof. Hyo Jin Seo), Pukyong National University, Busan, Rep. of KOREA.

Oct 2008: Department of Physics (With Prof. Hyo Jin Seo), Pukyong National University, Busan, Rep. of KOREA.

- May 2010: Visiting Scientist under an International Complementary Action with India PC12006-A7-0638 (International collaborative Project between India and Spain) to work with Dr. V. Lavin, University of La Laguna, Santa Cruz de Tenerife, Spain.
- May-Jun 2011: Department of Physics (with Prof. Hyo Jin Seo), Pukyong National University, Busan, Rep. of KOREA.
- May-Jun 2012: Visiting Scientist under Indo-Spain International Collaborative project (DST/INT/Spain/P-38/11) sponsored by DST, New Delhi and Govt. of Spain to work with Dr. V. Lavin, University of La Laguna, Santa Cruz de Tenerife, Spain.
- Jun. 2014: Visiting Scientist under Indo-Spain International Collaborative project (DST/INT/Spain/P-38/11) sponsored by DST, New Delhi and Govt. of Spain to work with Dr. V. Lavin, University of La Laguna, Santa Cruz de Tenerife, Spain (30-05-2014 to 12-06-2014).
- May 2015: Visiting Scientist, Dept. of Physics (With Prof. Ki-Soo Lim), Chungbuk, National University, Cheongju, Chungbuk 361-763, Rep. of KOREA.
- May - Jun. 2016: Visiting Scientist to work with Dr. I.R. Martin, University of La Laguna, Santa Cruz de Tenerife, Spain (15-05-2016 to 06-06-2016).
- May - Jun. 2018: Visiting Scientist to work with Dr. I.R. Martin, University of La Laguna, Santa Cruz de Tenerife, Spain (30-05-2018 to 09-06-2018).
- Oct. 2023: Visiting Scientist to work with Dr. V. Lavin, University of La Laguna, Santa Cruz de Tenerife, Spain (16-10-2023 to 28-10-2023).

11. Awards/Recognitions:

- (a) Andhra Pradesh State (India) Government “**State Teacher Award**” for the year 2009.
- (b) Listed as one among **world top 2%** Scientists in Applied Physics (2019).
J.P.A. Loannidis, K.W. Boyack, J. Baas, “Updated Science-wide Author data bases of Standardized Citation Indicators”, PLoS Biol. 18 (10) e3000918,
<https://doi.org/10.1371/journal.pbio.3000918>].
- (c) One among Top 10,000 scientists in India (Jan 2022) [AD Scientific Index].
- (d) Listed in World Scientist and University Rankings 2022, 2023 and 2024 [AD Scientific Index].

12. Positions held at Sri Venkateswara University, Tirupati:

- (a) Chairman, Board of studies (UG Physics) from 01-01-2016 to 31-12-2019
- (b) **Member of the Executive Council** from 03-02-2016 to 30-06-2019

13. Extra-Curricular:

- Computer Lab Incharge from Jun. 1997 to Jun. 2012 (15 years).
- Mana TV Coordinator from Jan. 2006 to Dec. 2011 (6 years).
- M.Sc. Physics Coordinator from Aug. 2009 to Jul. 2012 (3 years).
- National Service Scheme (NSS) Programme Officer from Jul.-2009 to Jun. 2011 (2 years).
- Physics Dept. Incharge from May to Sep. 2012.
- Served as Member in various College Committees.

14. Membership in Professional organizations:

- (i). Life member, Government College Teachers’ Association (GCTA), Andhra Pradesh, India.
- (ii). Life member, Indian Laser Association (ILA).
- (iii). Life member, Rare Earths Association of India (REAI).

15. Research Projects Completed:

- i. Member of the Korean team in the **Korea-Japan** International Collaborative Research Project (From 01-07-2006 to 30-06-2008) entitled “Growth and optical study of fluoride crystals doped with rare earth ions – Basic research for high quality optoelectronic devices” supported by Korea and Japan (Grant No. F01-2006-000-10100-0).

- ii. Principal Investigator, **UGC** (Govt. of India) Minor Research Project (From 26-03-2007 to 25-03-2009), File No. MRP-2379/06 (UGC SERO, Hyderabad) Dt. 20-03-2007.
- iii. Member of the **Indo-Spain** International collaborative project (From 01-03-2008 to 28-02-2011) sponsored by “Ministerio de Educacion y Ciencia of Spain under an International Complementary Action with India (PC12006-A7-0638).
- iv. Co-investigator in the **Indo-Spain** International collaborative project (DST/INT/Spain/P-38/11) sponsored by Govt. of India (DST, New Delhi) and Govt. of Spain from 01-04-2012 to 31-10-2015.
- v. Co-Principal Investigator in the **Indo-Portugal** International Collaborative project sponsored by Govt. of India (DST, New Delhi) and Govt. of Portugal (2017-2020).

16. Research Experience:

- Preparation of Rare earth doped bulk glasses by melt quenching technique and Glass processing techniques such as cutting and polishing.
- Preparation and characterization of Rare earth doped transparent nanocrystalline glass-ceramics for Photonics applications.
- Physical property measurements such as Refractive index and Density.
- Optical measurements such as Absorption, Emission and Lifetimes using laser (Ar⁺, Nd:YAG, Dye, Ti:Sapphire and OPO) excitations.
- Experimental data analysis using the models: Model Hamiltonian, Judd-Ofelt, Inoukoti-Hirayama, etc.

17. Research guidance:

- One **M.Phil.** degree have been awarded under my guidance from Periyar University, Salem, Tamilnadu.
- Recognized Ph.D. guide in Physics of Sri Venkateswara University, Tirupati, A.P.

18. Participation:

- i) Participated in the “*Two day Conference on Physics Curriculum*” held at the Department of Physics, Osmania University, Hyderabad, 27 - 28 Oct. 2006.
- ii) Participated in the state level Seminar on “*Higher Education-Quality measures*” organized by the Govt. College Teacher’s Association, A.P. at Govt. City College, Hyderabad, 23 - 24 Dec. 2006.

- iii) Participated in the two-day Workshop on “**Strengthening of District Resource Centers and enhancing Quality of Teaching, Learning Practices**” organized by the Commissionerate of Collegiate Education, A.P., Hyderabad in association with State Quality Assurance Cell, A.P. and District Resource Centre, Mahabunagar Dist. at MVS Govt. Degree College, Mahabunagar, 6 -7 Dec. 2007.
- iv) Participated in the “**Theme meeting on Laser Glass Science & Technology**” held at Department of Physics, Sri Venkateswara University, Tirupati, 1- 2 Mar. 2011.
- v) Participated in Six day training programme on “**Academic, Administrative and Financial Matters**” conducted at Dr. MCR HRD institute of A.P., Hyderabad from 15-20 Oct. 2012.
- vi) Participated in the International Workshop on “**Role of Material Science in Engineering and medicine**” held at Krishna Teja Technical campus, Chadalawada Nagar, Renigunta Road, Tirupati – 517 506, A.P., India, 1-2 Oct. 2013.
- vii) Participated in the UGC sponsored Two day State Level Workshop on “**Experiments for Young Engineers and Scientists**” organized by the PVKN Govt. College, Chittoor, 15 -16 Nov. 2013.
- viii) Attended State Level training program on “**Learning Management System**” organized by State Project Directorate, RUSA, Govt. of Andhra Pradesh in association with ICONMA Professional Services & Solutions Pvt. Ltd., 12 Sept. 2019.
- ix) Attended 7 Day Online Faculty Development Program on “**Revised Accreditation Frame work of NAAC**”, conducted by Govt. College (A), Rajahmundry-533 105, A.P., 27 May- 2 Jun 2020.
- x) Participated in the "**Leadership Capacity Development Programme for College Principals of Andhra Pradesh**" organized by the National Institute of Educational Planning and Administration during 13-18 Mar 2023 at NIEPA, New Delhi

19. Webinars/Workshops/Seminars organized:

1. One International and two National and webinars.
2. A three day Science Academies Lecture workshop on "Recent Advances in Functional Materials" sponsored by Indian Academy of Sciences (IAS), Bangalore, Indian National Science Academy (INSA), New Delhi, National Academy of Sciences India (NASI), Allahabad, at NTR Govt. Degree College, Valmikipuram - 517 299, Annamayya (Dist.), 10-12, Nov. 2022.

20. Publications:

a) Books

1. One of the authors of B.Sc. II year Physics Text Book (T.M.) published by Telugu Academy, Government of Andhra Pradesh, India (2010).
2. Proc. of the 9th DAE-BRNS National Laser Symposium (ISSN No. 0304-4289) published by Indian Academy of Sciences (2010).

b) **Journal papers: 84** [National: **2**, International: **82**]

c) **Conference Papers: 119** [National: **63**, International: **56**]

d) **Google Scholar Citations: 4753** (As on 07-07-2024)

[h-index: **39**; i-10 index: **74**]

e) Reviewer

Acting as Reviewer for Elsevier Science Journals

Total **Journals** Reviewed for : **11**

Total **Reviews** Completed : **35** (upto 30-06-24)

21. Research Interests:

- (a) Synthesis and Solid State Spectroscopy (Absorption, Luminescence, Energy transfer, Up-conversion, temperature sensing, etc.) of Rare earth-doped materials (Glasses, Nano-crystalline Glass-ceramics, Nanomaterials, Bionanomaterials) for Photonic and Biological applications.
- (b) Solar Energy, Energy Storage & Conversion – Materials and devices.
