

## Curriculum Vitae

**Prof. Dr. Vijaya Kumar Kambila**  
Chairman-Department of Physics, **School of Engineering**  
**Dayananda Sagar University, Bangalore-562112-INDIA**  
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### Objective:

To work in a challenging and dynamic environment, and to use my expertise for the growth of university/organization in advance

### Career profile:

- A talented and qualified university Professor of Physics and college Director -College of Engineering studies, University of Petroleum and Energy Studies, Dean Academics and HOD/Chairman with more than **30 years of experience in the administration and management of college activities**
- **14 Years as a Professor and Head of the Dept.in University cadre**

### Professional Research Experience :

- ❖ Development of Nano Structured Polymer composites for Energy storage device applications, Solid state Ionics- Fabrication of Electrochemical Cells-Solid state Batteries and Development of Sensors for defence and medical applications.

### Achievements:

- Ex. Director, School of Engineering University of Petroleum and Energy Studies-Dehradun
- Principal Investigator-DRDO, AR&DB Project (code 3789 dated:7/7/2021 AR&DB Secretariat, New Delhi
- **Principal Investigator- ICMR**, Innovative Technology Research Project (ID 2021-13918, dated 4/4/2022 **Rs.26.40 lakh**)-**On going**
- First year Coordinator, CBIT-Hyderabad & K L University-Guntur.
- Chairman-Physics Board (2017-18)-Visvesvaraya Technological University (VTU)
- Reviewer for Sponsored Projects-DST-SERB, Govt. of India
- Academic Council member-K L University, Vijayawada
- Research Expert Committee Member- Visvesvaraya Technological University (VTU),
- Reviewer International Journal of Materials Research Development-USA Reviewer International Journal of Polymer Analysis-Tailors & Francis-UK
- Reviewer International Journal of Royal society of Chemistry-UK

➤ **Educational Qualifications:**

Exam Passed	Board/ University	Special Subjects	Year
M. Sc.,	Sri Krishnadevaraya University, Anantapur, A. P	Physics with Transducers Electronics	1987
M. Phil.,	Sri Venkateswara University, Tirupathi, A. P	Thin-Films-Electrical and Optical Properties of Thin Polymer Blend films	1990
Ph. D.,	Osmania University, Hyderabad- A. P	Ion Conducting polymer electrolytes and their Applications as an Electrochemical cells& Fuel Cells	2004

**Research Projects being pursued / carried out:**

S.No	Title of the Project	Subject	Funding Agency	Period of Project (Years)	Total Grant Sanctioned in Lakh	Other Investigator S
1	Development and characterization of Nano Structured conducting polymerElectrolyte system for Electrochemical cell	Energy Materials	DST, New Delhi	3	24	Krishna Jyothi Nadella
2	Targeted Delivery of Nano particles to Enhance DR5-DDX3 mediated Apoptosis in Tumer microenvironment	Medicine	DBT, New Delhi	3	43	B. Mahendran
3	Development of a miniaturized low-cost Graphene doped Pd/PdOx /SiC Schottky diode gas sensor and their adoptability in ECS for Aero Space applications	Physics-Materials Science	DRDO-AR	2	15	Nil
4	Polarization Imaging Camera for characterization of Planetary atmosphere and surface	Physics-Thin-Films	ISRO	3	27	Dr MVH Rao

5	Design and development of low cost rGO/Si doped Tungsten trioxide-based gas sensor for human breathe analysis applications	Sensor technology	ICMR- New Delhi	3	27	Nil
6	Development of lanthanide (Gd) doped Li (Ni 2/3-xZn1/3) O2 Nano metal oxide composite as new cathode material in high-capacity LiIon Batteries for Naval applications(CO-PI) File.No.DST R/R	Materials Science- Polymer Batteries	DST- Rajasthan	2	3	K Venkat Ratnam Kamma-M NIT

### Distinctions/Fellowships/Awards

State/National : 5

International : 1

### Research Publications as per UGC-CARE / UGC approved Indexed Journals (In Numbers)

Papers Published National: 26

Papers Published Inter-National: 53

h-index: 20

i10-index: 28

No. of Patents: 3

Books with ISBN Number Edited: 2

Books with ISBN Number Published: 1

### Most significant 15 Publications

- Magnesium ion conducting PVB-based polymer electrolyte for solid-state magnesium batteries *J Mater Sci: Mater Electron* (2024) 35:277 Nature Springer IF: 3.2, <https://doi.org/10.1007/s10854-024-12017-5>
- Structural and electrical properties of TSP: CH<sub>3</sub>COONa amorphous Biopolymer electrolytes for electrochemical cell applications-*Journal of Non-Crystalline Solids* 616(2023)122465-, <https://doi.org/10.1016/j.jnoncrysol.2023.122465> ELSEVIER Publishing-UK, IF: 4.8
- Influence of Sm<sup>3+</sup>-doped  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> thin films on structural, optical, and photoluminescence properties, *J Mater Sci: Mater Electron* (2023) 34:2085, <https://doi.org/10.1007/s10854-023-11505-4>

- Density fluctuations and single-mode thermal states in the FRW universe  
**European Phys. Journal Plus –Springer –Germany, Part of Springer Nature Publishing (May 2020)** IF:3.68, [10.1140/epjp/s13360-020-00362-3](https://doi.org/10.1140/epjp/s13360-020-00362-3)
- Structural and electrochemical properties of ZrO<sub>2</sub> doped PVP-Na<sup>+</sup> based Nano composite polymer films, **Materials Science in Semiconductor Processing, ELSEVIER Publishing (U K)**, 89(2019) 41-50, <https://doi.org/10.1016/j.mssp.2018.08.030>
- Preparation and Characterization of ruthenium based organic composites for optoelectronic device application, 164-pp.596-605., **2018 Optik-ELSEVIER**, <https://doi.org/10.1016/j.ijleo.2018.03.071>
- Preparation and Characterization of Nano-Dy<sub>2</sub>O<sub>3</sub>-Doped PVA +Na<sub>3</sub>C<sub>6</sub>H<sub>5</sub>O<sub>7</sub> Polymer Electrolyte Films for Battery Applications **Advances in Materials Science and Engineering** Volume 2018, Article ID 2080369, 9 pages, **March 2018**, <https://doi.org/10.1155/2018/2080369>
- Synthesis and Dielectric Studies on PVP Based Polymer Electrolyte Films for Solid state Battery Applications-**Polymer Bulletin-Springer-Verlag Berlin Heidelberg**, **May 2017** DOI 10.1007/s00289-017-2072-5, <https://doi.org/10.1007/s00289-017-2072-5>
- Optical and Dielectric Properties of PVP Based Composite Polymer Electrolyte Films'' - **POLYMER SCIENCE, SERIES A Composites** Vol. 59 No. 4, 2017- pp. 554–565. © Pleiades Publishing, Ltd., **2017**, <https://doi.org/10.1134/S0965545X17040095>
- Structural and Dielectric Properties of PVP based composite polymer electrolyte thin films-Journal of **Inorganic and Organometallic Polymers and materials Springer-** Vol.26, No.6; ISSN1574-1443 -**2016**, <https://doi.org/10.1007/s10904-016-0487-3>
- Preparation and Characterization of PAN-KI complexed gel Polymer electrolytes for Solid state battery applications, **Bulletin of Materials Science, Springer 39(4)**, 1042-1055, 2016, <https://doi.org/10.1007/s12034-016-1241-8>
- Ionic conductivity and battery characteristic studies of a new PAN-based Na<sup>+</sup> ion conducting gel polymer electrolyte system-**Indian Journal of Physics, Springer**, 90(3), **2016**, 289-296, <https://doi.org/10.1007/s12648-015-0758-9>
- Structural and Spectral features of Cr<sup>3+</sup> doped B-BaB<sub>2</sub>O<sub>4</sub> nano powder by Co-Precipitation method, International Journal of **Physica B: Condensed Matter, Elsevier**, 429, 18- 23, 2013, <https://doi.org/10.1016/j.physb.2013.07.028>
- Influence of Zr<sup>4+</sup> doping on structural spectroscopic and conductivity studies of Lithium titanium phosphate - **Ceramics International, Elsevier**, **40**, 1311-1316, **2014**, <https://doi.org/10.1016/j.ceramint.2014.05.111>

- Ionic conductivity and Electrochemical Cell Studies of New Mg<sup>2+</sup>-ion conducting PVA/PEG based Polymer blend electrolytes, **Advanced Materials Letters (Sweden)** 3(5) 406-409 2015, <https://doi.org/10.5185/amlett.2011.6375>
- Conductivity Study of polyethylene oxide (PEO) complexed with sodium bicarbonate, **Journal of Materials Science (Netherlands)**, Springer Publications 42(14) 5752-5755 20015, <https://doi.org/10.1007/s10853-006-0743-y>

#### Number of Seminars Attended as Resource Person

National (Number)	: 10
International (Number)	: 5
Total (Number)	: 15

#### Important MoUs Formulated for Academic Collaborations

S.No	MoUs Formulated	Name of Agencies/Departments involved	Year of MoU
1	Letter of Intent (LOI) for becoming R	Centre for Materials for Electronics Technology-GOI, Hyderabad	2017
2	LOI- Collaborative research with Dept.of Physics	Indian Institute of Technology- Madras	2017
3	LOI for becoming Collaborative partner in Materials for Energy Conversion and Storage Platform Program- DST, GOI with Dept.of Physics	Bangalore University	2017
4	MOU Dept. Of Physics and VB Ceramic Consultants- Chennai	V B Ceramics, Chennai-600041	2017
5	MOU between DSATM and Audi Sankara Group of Institutions Gudur A. P	Audi Sankara Group of Institutions-Gudur A. P	2017

#### Most Significant Books Published

S.No	Title of the Book	Year of Publication	Name of the Publisher	Author Type	ISBN Number
1	Management and Applications of Energy Storage Devices- Chapter-Structural, Optical, and Electrical Studies of PAN Based Gel Polymer Electrolytes for Solid-State Battery Applications	2022	Intech Open	Author	978-1-83969-645-9
2	Development and characterization of Ionconducting Polymer electrolytes	2005	Lambert Academic Publishing Inc. 66123, Saarbrücken, GERMANY	Author	ISBN NR: 978-3-8443-2668

## Honours / Awards & Fellowships for Outstanding Work

S.No	Name of the Award / Fellowship etc.	Elected / Honorary Fellow	Awarded by	Year of Award
1	Best HOD of the year Award	Elected	Global Education and Corporate Leadership (GECL-2020)	2020
2	Best Teacher Award	Elected	KLEF -Vijayawada	2012
3	Outstanding Faculty award in Physics in2015	Elected	VENUS International-Chennai	2015
4	Symposia	Elected	DST-New Delhi	2013
5	Fellow member	Elected	Eudoxia Research University-USA	2023
6	Bharat Ratna Indira Gandhi Gold Medal Award	Elected	Global Economic Progress	2021

## Administrative Experience/Post(s) & Responsibilities held

S.No	Post	Organization / University	From	To	Experience (In Years and Months)
1	Head of the Department	Dayananda Sagar University	2016-07-07	2024-09-27	8 years and 2 Months
2	Head of the Department	K L University	2010-07-01	2016-07-07	6 years
3	Centre Director	University of Petroleum	2007-06-05	2010-08-02	3 years 2months
4	Chairman, Board of Studies	Dayananda Sagar University	2019-07-17	2024-09-27	5 years 2 months
5	Member of Executive Council	K L University	2010-08-05	2016-07-04	5 years 11 months

## International Academic Exposure

S.No	Post / Assignment	Organization / University	Area of Assignment	From	To	Duration in Years & Months
1	Lifetime Fellow member	Eudoxia Research University-USA	R & D	2023-05-12	2026-05-11	3 years

## Membership of the Reputed Academic Bodies

National (Number) : 4

International (Number) : 1

- ✓ **Fellow member of Eudoxia Research University-USA**
- ✓ **Life Member International association of Advanced Materials (IAAM)-Sweden**
- ✓ Life member- Indian Physics Association, BARC, Bombay
- ✓ Life Member Indian Science Congress Association (ISCA)
- ✓ Life Member Indian Analytical Scientists Association (Delhi Chapter)
- ✓ Life member Institute of Smart structures and Systems (IISc., **Bangalore**)

## References

**Prof. B L V Prasad** FASc, FRSC

Director

Centre For NanonAnd Soft Matter Sciences

(Autonomous Institute Under the Department Of Science  
And Technology, Govt of India)

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**Duncan H Gregory**

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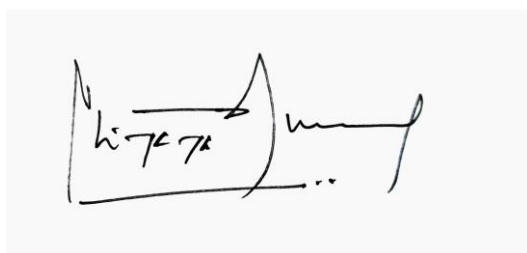
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Materials, and Head School of Chemistry

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Signature of Applicant

