Name	:	Dr. V. Gopala Krishnan	
Designation	:	Professor	
Department	:	Physics //	
Qualification	:	M.Sc., M. Phil., Ph. D.	
Experience	:	Teaching: 12 Years 03 Months	
		Research: 13 Years	
Area of Specialization(s)	:	Gas sensing Oxide Materials, Li-Ion Battery, Photovoltatic	
Email (Official ID)	:	gopalakrishnan@drngpasc.ac.in	

# Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph. D.	Physics	Government Arts College, Coimbatore	2018
M. Phil.,	Physics	Sri Ramakrishna Mission Vidhyala College of Arts and Science College, Coimbatore	2010
M. Sc.,	Physics	Sri Ramakrishna Mission Vidhyala College of Arts and Science College, Coimbatore	2008
B. Sc.,	Physics	Kongunadu College of Arts and Science College, Coimbatore	2006

# **Research Publications (Indexed)**

# International:

- P. Jayamurugan, S. Deivanayaki, S. Ashokan, V. Gopala Krishnan, N. V. S. S. Seshagiri Rao, J. Chandrasekaran & Ehab El Sayed Massoud, Impact of MnO<sub>2</sub> on the optical electrical and antibacterial characteristics of Graphite/Polyaniline Ternary composites, Journal of Materials Science: Materials in Electronics, Issue 9, 2022, DOI: 10.1007/s10854-022-07902-w (Indexed in SCOPUS).
- M.Raja, R.Marnadu, M.Balaji, K.Ravikumar, V.Gopala Krishnan, MohanrajKumar, Ehab El SayedMassoud, Fabrication and characterization of novel Ga-doped WO3 films and n-Ga@WO<sub>3</sub>/p-Si junction diode for optoelectronic device applications, Inorganic Chemistry Communications 139 (2022) 10929, DOI: 10.1016/j.inoche.2022.109291 (Indexed in SCOPUS).

- B. Gokul, P. Matheswaran, M. Pandian, C. Arun Paul, K. Ravikumar, V. Gopala Krishnan, Mohd. Shkir, S. AlFaify, Gedi Sreedevi, "Polymorphism induced magnetic transitions in Ni(OH)<sub>2</sub> nanostructures", Journal of Magnetism and Magnetic Materials 539 (2021) 168364, ISSN: 0304-8853, (Indexed in SCOPUS).
- V. Gopala Krishnan, P. Elango, K. Ravikumar, R. Marnadu, Omar M. Aldossarye and Mohd Ubaidullah, "Noticeable improvement in the toxic gas-sensing activity of the Zndoped TiO<sub>2</sub> films for sensing devices", New J. Chem., 2021, 45, 10488, ISSN: 1144-0546 (Indexed in SCOPUS).
- 5. **V. Gopala Krishnan,** RavikumarN, Dilip R.P. Elango, "Gas Sensing Nature and Characterization of Zr Doped TiO<sub>2</sub> films Prepared by Automated Nebulizer Spray Pyrolysis Technique", Optik, Vol. 206 pp. 164347, March 2020, ISSN: 0030-4026, (Indexed in SCOPUS).
- V. Gopala Krishnan, P. Elango, V. Ganesan, "Surface Characterization and Gas sensing Performance of Yttrium Doped TiO<sub>2</sub> nanofilms Prepared by Automated Nebulizer Spray Pyrolysis (ANSP)", Journal of Materials Science: Materials in Electronics, Vol. 29 No.4, pp. 392 – 401, January 2018, ISSN: 0957-4522, (Indexed in SCOPUS).
- V. Gopala Krishnan, P. Elango, V. Ganesan, "Role of Molar Concentration in Structural, Optical and Gas Sensing Performance of Anatase Phase TiO<sub>2</sub> Nanofilms: Automated Nebulizer Spray Pyrolysis (ANSP) Technique", Applied Physics A, Vol.123, Issue.7, pp. 498 (1-9), July 2017, ISSN: 0947 8396, (Indexed in SCOPUS).
- V. Gopala Krishnan, P. Elango, A. Purushothaman, A. Chandra Bose, "Automated Nebulizer Sprayed Tin Doped Titanium Dioxide (Sn<sub>X</sub>Ti<sub>1-x</sub>O<sub>2</sub>) Anatase Nanofilms Properties, Gas Sensing Performance", Materials Chemistry and Physics, Vol. 199, pp.113-121, September 2017, ISSN: 0254 0584, (Indexed in SCOPUS).
- V. Gopala Krishnan, P. Elango, "Influence of Ba Doping Concentration on the Physical Properties and Gas Sensing Performance of ZnO Nanocrystalline Films: Automated Nebulizer Spray Pyrolysis (ANSP) Method", Optik, Vol. 141, pp. 83-89, July 2017, ISSN: 0030-4026, (Indexed in SCOPUS)
- 10. V. Gopala Krishnan, A. Purushothaman, P. Elango, "Effect of Thickness on the Physical Properties and Gas Sensing Application: Anatase Titanium Dioxide Nanofilms

by Automated Nebulizer Spray Pyrolysis (ANSP)", Journal of Materials Science: Materials in Electronics, Vol. 28 Issue. 15, pp. 11473 – 11481, August 2017, ISSN: 0957-4522, (Indexed in SCOPUS).

- 11. Vijayan Gopala Krishnan, Annadurai Purushothaman, and Palaniappan Elango, A Study of the Physical Properties and Gas-Sensing Performance of TiO<sub>2</sub> Nanofilms: Automated Nebulizer Spray Pyrolysis Method (ANSP), Physica Status Solidi A, Vol.214, Issue.10, pp. 1700020, October 2017, ISSN : 1862-6300, (Indexed in SCOPUS).
- 12. V Gopala Krishnan, P Elango, M Ragavendar, P Sathish and G Gowrisankar, "Effect of Doping on the Surface Modification of Nebulizer Sprayed Ba<sub>X</sub>Zn<sub>1-x</sub>O Nanocrystalline Thin Films". Materials Research Express, Vol. 4, Issue.3, pp. 036401 – 036410, March 2017, ISSN: 2053-1591, (Indexed in SCOPUS).
- 13. V. Gopala Krishnan, P. Elango, V. Ganesan, P. Sathish, "pH Deeds on Structural, Optical, Electrical and Gas Sensing Performance of TiO<sub>2</sub> Nanofilms by Automated Nebulizer Spray Pyrolysis Technique", Optik, Vol. 127 No.23, pp. 11102 – 11110, December 2016, ISSN: 0030-4026, (Indexed in SCOPUS).
- 14. J.Balavijayalakshmia, N.Suriyanarayanan, R.Jayaprakash, V.Gopala Krishnan, "Effect of concentration on dielectric properties of Co-Cu ferrite nano particles" Physics Procedia 49 (2013) 49 – 57, ISSN: 18753892, (Indexed in SCOPUS).

## **Presentations in Conference**

 EFFECT OF Zr DOPED TiO<sub>2</sub> NANOFILMS BY ANSP METHOD, International Conference on Advanced Materials and its Fabrications (ICAMF -2019), Department of Physics, AVS College of Arts and Science, Salem – 636 106. 10<sup>th</sup> Jan 2019

### **Participation in Conference**

- National conference on "Automation in Solar Thermal Systems with Thin Film Applications", sponsored by UGC & DRDO, organized by Department of Physics, PSG College of Arts & Science, Coimbatore – 641 014, 25 - 27 Sep -08
- International Webinar on "Earth-abundant and Ultra-low Cost Metal Sulfo-Selenides for Photovoltaic Application" organised by PG Department of Physics, G. T. N. Arts College (Autonomous), Dindigul on 29<sup>th</sup> September 2021.

#### **Participation in Seminars**

- E Seminar AI: State Space Search and Charles Darwin on October 21, 2021, Organized by Department of Physics, Dr. N.G.P. Arts and Science College, Dr. N.G.P. - Kalapatti Road, Coimbatore-641048.
- 2. Opportunities in Indo-German Bilateral Funding Programmes" on 22nd July, 2020 jointly organized by the Department of Physics, School of Sciences, National Institute of Technology Andhra Pradesh, and Indo-German Science and Technology Centre (IGSTC).
- E-Webinar on Recent Advancements in Bio & Nanomaterials" held on 30.05.2020 organized by PG and Research Department of Physics, Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, Namakkal.
- E- Lecture on Solid State Physics and Chemistry Organized by PG- Department of Physics and Chemistry, K.S.R. College of Arts and Science for Women, Namakkal. on 15. 05. 2020.
- National seminar on "Advanced Materials and Solar Energy", organized by Department of Physics, KPR Institute of Engineering and Technology, Arasur, Coimbatore – 641 407, 28<sup>th</sup> Oct 2015
- National seminar on "Recent Trends in Crystal Growth, Thin Films and Nano Structured Materials", sponsored by University Grand Commission, organized by Department of Physics, Aditanar College of Arts & Science, Tiruchendur – 628 216, 5 & 6<sup>th</sup> Aug 2009
- International seminar on "Nanostructures for Electronics and Biomedical Applications", organized by Department of Nanoscience and Technology, Bharathiar University, Coimbatore – 641 046, 9<sup>th</sup> Jan 2009

## **Participation in Workshop**

- 1. Two day International virtual workshop on astrophotography, on 24-25, September, 2021, Organized by PG & Research Department of Physics, The New College (Autonomous), Chennai.
- e WORKSHOP ON Phase Identification of Polycrystalline Materials using XRD data in Softwares, On September 25, 2021, Organized by Department of Physics, Dr. N.G.P. Arts and Science College, Dr. N.G.P. - Kalapatti Road, Coimbatore-641048.

- National workshop on "Neural Network and it's Applications", organized by Department of Electronics and Communications Engineering, Karpagam Institute of Technology, Seerapalayam, Coimbatore – 641 105, 8<sup>th</sup> Sep-10
- National workshop on "Physics in Everyday Life", organized by NCSTC Network New Delhi, Tamilnadu Science and Technology Centre – Chennai, and Department of Physics, Sri Ramakrishna Mission Vidyalaya College of Arts & Science, Periyanacikenpalayam, Coimbatore – 641 020, 19 & 20<sup>th</sup> Feb -07

# **Participation in Faculty Development Programme**

- AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Novel Materials: Advances and Application" from 24/09/2021 to 28/09/2021 at National Institute of Technology Raipur.
- Research Funding Projects & IPR (Part II), organized by R&D Cell, IQAC, and Department of EXTC, Computers and IT, K.C. College of Engineering and Management Studies & Research, Thane (E), from 7<sup>th</sup> June 2021 to 9<sup>th</sup> June 2021.
- Online Faculty Development Programme on Examinations in wake of COVID-19 held on 8<sup>th</sup> May 2020 organized by Department of Commerce - Shift II, Patrician College, Chennai in Association with DigitalEdu IT Solution.
- One Week FDP Programme on QUALITY INITIATIVES IN HIGHER EDUCATION, Organized by Consortium of College through Online (Google Meet) From April 13- 20, 2020.
- The IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28<sup>th</sup> April to 22nd May 2020
- Selection of Nanomaterials for Energy Harvesting and storage Application during Jul-Aug 2019, organized by NPTEL – AICTE.
- The Bridge course on Physics, organized by Department of Physics, Anna University, Chennai – 600 025, 20 & 21<sup>st</sup> June -14
- Teacher Behavior and Innovative Practices, organized by Karpagam Institute of Technology, Seerapalayam, Coimbatore – 641 105, 6<sup>th</sup> Jun -11

### Conference / Seminar/ Workshop organized

15. 1. Organizing Secretary, National Conference on Frontiers in Advanced Physics (NCFAP 2019), Vivekananda College of Arts & Sciences for Women, Tiruchengode, Namakkal, 07 & 08 February -19

# Invited Speaker / Session Chair- Conference / Seminar / Workshop

1. Resource Person , Student Intership Programme, Dr. N.G.P. Arts and Science College, Coimbatore, 25<sup>th</sup> June 2019

2. Session Chair, National Conference on Recent Trends in Basic and Applied Sciences, Dr. N.G.P. Arts and Science College, Coimbatore, 2 & 3<sup>rd</sup> March 2020

# **Member in BoS**

1. Physics, Dr. N.G.P. Arts and Science College, Coimbatore, 2019 - 2022

2. Medical Physics, Dr. N.G.P. Arts and Science College, Coimbatore, 2019 – 2022

### **Membership in Professional Bodies**

Name of the Professional Body	Nature of membership	Duration
Indian Association for Crystal Growth (IACG)	Life Member	Life Time
All India Council For Technical Skill Development	Life Member	Life Time

# Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
Best Teacher	Dr. N.G.P. Arts and Science	2020
	College, Coimbatore	