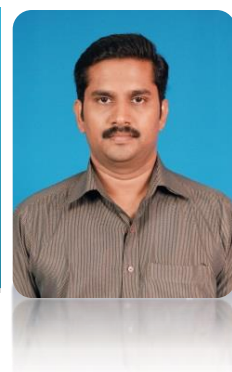


Dr.S.SHEK DHAVUD

ASSOCIATE PROFESSOR



PG and Research Department of Physics
Jamal Mohamed College (Autonomous)
Tiruchirappalli-620020.
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POSITIONS HELD

- ◆ **Assistant Department Coordinator
DBT Star College Scheme (2020-2023)**
- ◆ **Departmental Placement Officer (2017-2023)**
- ◆ **Physics Association Vice-President (2016-2017)**
- ◆ **Hostel Deputy Warden (2018-2019)**
- ◆ **Hostel Sub warden (2007-2008)**

EDUCATION

Ph.D – 2019

PG and Research Department of Physics
Government Arts College, Tiruchirappalli

M.Phil–2005

PG and Research Department of Physics, Jamal Mohamed College
(Autonomous), Tiruchirappalli - 620020

M.Sc – 2001

PG and Research Department of Physics, Jamal Mohamed
College(Autonomous), Tiruchirappalli – 620020

PUBLICATIONS, RESEARCH AND TEACHING EXPERIENCE

	Number of Articles/Books Published	Research Experience	Teaching Experience
Research Publications			(UG & PG)
Peer-Reviewed International Journal	15		
International Conferences (Presentation)	07	07 years	17 year s
National Conferences (Presentation)	10		

DETAILS OF EMPLOYMENT

- ◆ **Assistant Professor**
PG and Research Department of Physics, Jamal Mohamed College, Trichy. **29-08-2007 – 31-05-2023**
- ◆ **Associate Professor**
PG and Research Department of Physics, Jamal Mohamed College, Trichy. **01-06-2023**

AREA OF RESEARCH

- ◆ Crystal Growth
- ◆ Thin films
- ◆ Nanomaterials

SEMINAR ORGANIZED

National Seminar on “Advanced Materials (NSAM 2020)”
[Under UGC Autonomous Grant] 23rd January 2020

EDITOR OF THE BOOK

Book Title **Advanced Materials**
Publisher **JAZYM Publication, India**

Orientation / Refresher Course

Name of the Course	Academic Staff College, University	Duration	Date
Orientation Course	UGC Academic Staff College Bharathidasan University Tiruchirappalli	28 days	20.05.2010 to 16.06.2010
Refresher Course I	UGC Academic Staff College Bharathidasan University Tiruchirappalli	21 days	27.01.2012 to 16.02.2012
Refresher Course II	UGC Academic Staff College, Bharathidasan University, Tiruchirappalli	21 days	17.02.2016 to 08.03.2016
Refresher Course III	UGC Academic Staff College, Bharathidasan University, Tiruchirappalli	21 days	20.12.2017 to 09.01.2018

MEMBERSHIP IN SCIENTIFIC SOCIETIES

- ❖ **Life Member, Indian Society of Systems for Science & Engineering (ISSE).**
- ❖ **Indian Association for Crystal Growth**

LIST OF PUBLICATION IN INTERNATION JOURNALS

- 1. Effect of amino acid dopants on the spectral, optical, mechanical and thermal properties of potassium acid phthalate crystals for possible optoelectronic and frequency doubling applications**
Optics & Laser Technology, 72 (2015) 108-115
- 2. Influence of L–Histidine Monohydrochloride Dihydrate on the Growth and Properties of Potassium Acid Phthalate Single Crystals for Nonlinear Optical Applications**
International Journal of Nano Corrosion Science and Engineering, 2 (2015) 146-156
- 3. Growth and Characterization of L-proline Doped ADP Crystals for Optoelectronic Applications**
Material Science Research India, 12 (2015) 22-27
- 4. Investigations on the Structural, Optical, Mechanical and Microstructural properties of L-Arginine doped SAP crystals- A potential material for NLO applications**
International Journal of Advanced Scientific Research & Development, 2 (2015) 149-158
- 5. Effect of semiorganic additive on the growth and characterization of NLO properties of NaAP single crystals for optoelectronic applications**
International Journal of Advanced Research, 4 (2016) 685-695
- 6. Investigation on Synthesis, Characterization and Third order NLO Properties of Undoped and Amino Acid Doped ZTS Crystals for Nonlinear Optical Applications**
International Journal of Research in Pharmaceutical and Nano Sciences, 5 (2016) 187-200
- 7. Investigations on the Effect of Amino Acid doping on the Growth and Characterization of Alkali Metal Acid Phthalate Single Crystals**
International Journal of Advanced Research, 5 (2017)1542-1553

8. **Influence of Amino Acid Dopants on the Growth and Properties of Potassium Hydrogen Phthalate Single Crystals for Nonlinear Optical Applications**
International Journal of Advanced Research, 5 (2017) 886-897
9. **Remarkable Effect of Alkali Metal Doping on the Properties of Potassium Hydrogen Phthalate Single Crystals for Optoelectronic and Nonlinear Optical Applications**
International Journal of Scientific Research in Science, Engineering and Technology, 3 (2017) 106-117
10. **Role of Al³⁺ in Enhancing the Physical Properties of Sodium Para-Nitrophenolate Dihydrate Crystals for Optoelectronic and Nonlinear Optical Applications**
International Journal of Scientific Research in Science, Engineering and Technology, 3 (2017) 1-14
11. **Effect of F doping on the properties of zinc tin oxide thin films for UV photodetector applications prepared by low-cost nebulizer spray pyrolysis method**
Optical Materials 123 (2022) 111862
12. **High responsivity n-ZnO/p-CuO heterojunction thin film synthesized by low-cost SILAR method for photodiode applications**
Optical Materials 128 (2022) 112410
13. **Corrosion resistance effect of Dinonyl Sulphide (DNS) on Zinc Metal immersed in 0.5N Hydrochloric Acid**
Bulletin of Environment, Pharmacology and Life Sciences Special Issue, 1 (2022) 403-414
14. **Anti-Biocorrosive and Biocidal Efficacy of Hydroxyquinoline Derivative as Seawater Corrosion Inhibitor**
International Journal of Zoological Investigations 9 (2023) 128-137
15. **Adsorption and corrosion inhibition of mild steel by benzoinoxime inhibitor in sea water solution**
European Chemical Bulletin, Special Issue 12, (2023) 1935-1948

RESEARCH PAPERS PRESENTED IN NATIONAL/INTERNATIONAL CONFERENCES

1. Presented a research paper with the title of **“Growth and characterization of undoped and L-Valine doped ZTS single crystals for SHG applications”** in the National Seminar on Recent Trends in Crystal Growth and Nano materials (NSCGNM 2014) organized by PG and Research Department of Physics, National College (Autonomous), during 7th- 9th August 2014, Tiruchirappalli-620001.
2. Presented a research paper with the title of **“Effect of semiorganic additive on the growth and characterization of NLO properties of NaAP single crystals for optoelectronic applications”** in the Second National Conference on Recent Advances in Materials (NCRAM-2014) organized by Department of Physics, B.S. Abdur Rahman University, during 3 & 4 September 2014, Chennai-600048.
3. Presented a research paper with the title of **“Synthesis, growth and characterization of undoped and amino acid doped ZTS single crystals for frequency conversion applications”** in the 19th National Seminar on Crystal Growth (NSCG 2015) organized by Department of Physics, VIT University, during 12-14 March 2015, Vellore.
4. Presented a research paper with the title of **“Investigations on the structural, optical, mechanical and microstructural properties of L-Arginine doped SAP crystals - A potential material for NLO applications”** in the UGC Sponsored National Seminar on Laser and Its Applications (LAIA-2015) organized by PG and Research Department of Physics, Jamal Mohamed College (Autonomous), on 16th March 2015, Tiruchirappalli-620020.
5. Presented a research paper with the title of **“Effect of amino acid dopants on the spectral, optical, mechanical and NLO properties of KAP single crystals for optoelectronic applications”** in the TEQIP-II Sponsored International Conference on Recent Advancement in Materials (ICRAM-2015) organized by Department of Physics, Bharathidasan Institute of Technology, Anna University, on 16th& 17th October 2015, Tiruchirappalli – 620024.
6. Presented a research paper with the title of **“Influence of L-Histidine monohydrochloride dihydrate on the growth and properties of potassium acid phthalate single crystals for nonlinear optical applications”** in the International Conference on Chemical and Environmental Research (ICCER 2015) organized by PG and Research Department of Chemistry, Jamal Mohammed College (Autonomous), on 17th December 2015, Tiruchirappalli-620020.

7. Presented a research paper with the title of **“Influence of amino acid dopants on the growth and properties of Potassium Hydrogen Phthalate single crystals for Nonlinear optical applications”** in the International Conference on Recent Trends in Materials Science and Applications (ICRTMSA-2016) organized by PG and Research Department of Physics, Jamal Mohammed College (Autonomous), on 29th February 2016, Tiruchirappalli-620020.
8. Presented a research paper with the title of **“Investigations on the effect of amino acid doping on the growth and characterization of alkali metal acid phthalate single crystals”** in the International Conference on Recent Trends in Materials Science and Applications organized by PG and Research Department of Physics, Sri Meenakshi Government Arts College for Women (Autonomous), on 6th January 2017, Madurai-625002.
9. Presented a research paper with the title of **“Role of Cd²⁺ in enhancing the properties of potassium acid phthalate crystal for nonlinear optical applications”** in the International Conference on Chemical and Environmental Research organized by PG and Research Department of Chemistry, Jamal Mohammed College (Autonomous), on 7th January 2017, Tiruchirappalli-620020.
10. Presented a research paper with the title of **“Effect of Al³⁺ on the growth, structural and physical properties of Sodium para-nitrophenolate dihydrate crystals”** in the 21th National Seminar on Crystal growth and applications organized by PG and Research Department of Physics, National College (Autonomous), during 6th-8th March 2017, Tiruchirappalli-620001.
11. Presented a research paper with the title of **“Growth, Structural, Optical, Dielectric, Thermal, Mechanical and Non-linear Optical Studies of semiorganic Crystal for optoelectronic applications: L-alanine ammonium chloride”** in the National Conference on Recent Developments in Chemistry Organized by PG & Research Department of Chemistry, Jamal Mohamed college, Trichy-20 on 20-01-2018.
12. Presented a research paper with the title of **“Effect of semiorganic additive L-Hisidine monohydrochloride dihydrate on ADP single crystals for optoelectronic and nonlinear optical applications”** in the National Seminar on Solid State Physics and its Applications. (NaSSSPA-2018) organized by PG & Research Department of Physics, Jamal Mohamed college, Trichy-20 on 28-02-2018.

13. Presented a research paper with the title of **“Remarkable effect of alkali metal doping on the properties of potassium Hydrogen Phthalate single crystals for optoelectronic and nonlinear optical applications”** in the National Conference on Recent Advanced Material and Mathematical analysis organized by Department of Mathematics, Physics and Chemistry, Sri Balamurugan Arts & Science, Sathappadi, Salem from 06-02-2019 to 08-02-2019.
14. Presented a research paper with the title of **“Structural, Optical and Thermal Characterization of Amino Acid Doped ADP Single Crystals For Optoelectronic Applications”** in the National Seminar on Advanced Topics in Physics (NSATP-19), Department of Physics, Jamal Mohamed College, Trichy on 06-03-2019.
15. Presented a research paper with the title of **“Role of Al³⁺ in enhancing the physical properties of sodium Para-Nitrophenolate Dihydrate crystals for optoelectronic applications”** in the 4th International conference on Chemical and Environmental Research, Department of Chemistry, Jamal Mohamed College, Trichy on 19-12-2019.
16. Presented a research paper with the title of **“Remarkable effect of amino acid doped ADP single crystals for optoelectronic applications”** in the 5th International conference on Chemical and Environmental Research (ICCER-2020), Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 08-01-2020.
17. Presented a research paper with the title of **“Effect of amino acid doping on crystal growth and properties of ammonium dihydrogen phosphate single crystals”** in the National Conference on Advanced functional Materials (NCAFM-2020), Department of Physics, National College (Autonomous), Tiruchirappalli on 13-02-2020.

PARTICIPATION IN CONFERENCES / SEMINARS / WORKSHOPS

1. Participated in the National Seminar on “The MHRD Draft proposal for Higher Education Commission of India (Repeal of UGC Act, 1956) Act 2018”, Jamal Mohamed College, Trichy on 14-07-2018.
2. Participated in the UGC CPE Sponsored Two-day Workshop on Professional Development for Academic Leadership in Curriculum Design, Curriculum Development Cell, Jamal Mohamed College, Trichy from 18-01-2019 to 19-01-2019.
3. Participated in the Two-Week MOOC Workshop for College Teachers on Management of Environment and its Resources jointly organized by the Department of Chemistry & Research, Nesamony Memorial Christian College, Marthandam and Department of Chemistry & Research, St. Xavier College, Palayamkottai, Tirunelveli from 28-04-2020 to 11-05-2020.
4. Participated in an Online Workshop on Spectroscopy Techniques organized by the Department of Physics, Immaculate College for Women, Kallakurichi on 30-04-2020.
5. Participated in the National Webinar on Role of ICT in Smart Teaching and Scientific Writing, organized by the Department of Physics and Computer Science, Government College, Andhra Pradesh on 02-05-2020.
6. Participated in the National level Webinar on Principle and Applications of Electronic Spectroscopy organized by the Department of Chemistry, Annai College of Arts & Science, Kumbakonam on 07-05-2020.
7. Participated in the Webinar on Crystallography and its Applications organized by the Department of Science & Humanities, Er. Perumal Manimekalai College Engineering, Hosur on 08-05-2020.
8. Participated in the Webinar on Micro & Nanotechnology and its Applications organized by Department of Physics, G.T.N. Arts College, Dindigul on 14-05-2020.

9. Participated in the International Webinar on Functional Novel Materials for Electrochemical Sensors and Energy Storage devices organized by Thiagarajar College, Madurai on 15-05-2020.
10. Participated in the International Webinar on Advanced Materials organized by the Department of Physics, LRG Government Arts College, Tirupur on 03-06-2020.
11. Participated in the International Webinar on Recent Advances in Materials Science & Nanotechnology organized by the Department of Physics, Bannari Amman Institute of Technology, Erode during 04-06-2020 to 06-06-2020.
12. Participated in the International Webinar on Materials and their Applications organized by the Department of Chemistry & Physics, SSM Institute of Engineering and Technology, Dindigul on 18-06-2020 & 19-06-2020.
13. Participated in the Webinar on “Career opportunities for Physics Students after Graduation” organized by the Department of Physics, Vivekananda College, Madurai, on 22.06.2020
14. Participated in the International Webinar Series on Astronomy and Astrophysics organized by the Department of Applied Physics, Karunya Institute of Technology and Sciences, Coimbatore on 24-07-2020.
15. Participated in the Webinar on Preparation methods and Deposition Techniques of Nanostructures organized by the Department of Physics, National College, Trichy on 25-07-2020.
16. Participated in the National Webinar on Sensor Materials and Applications organized by the Department of Physics, B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai on 26-07-2020.
17. Participated in the Webinar on National Education Policy-2020 organized by Internal Quality Assurance Cell of Jamal Mohamed College, Trichy on 08-08-2020.
18. Participated in the International Webinar on Scientific Advancements on Solutions and Testing in Industry organized by the Department of Science & Humanities- Physics, University College of Engineering, Nagercoil on 10-08-2020.

19. Participated in the Webinar on "Best Practices in Acquiring Scholarly Knowledge" organized by the Department of Library and Internal Quality Assurance Cell, Jamal Mohamed College (Autonomous), Tiruchirappalli, on 16-08-2020.
20. Participated in the National Level Webinar on Great Contribution of Physics to Chemistry and Life Sciences for Structural Engineering: XRD organized by the Department of Science and Humanities-Physics, C. Abdul Hakeem College of engineering and Technology, Melvisharam on 10-09-2020.
21. Participated in the Five-day National Level Workshop on "Functional Materials, Dye-sensitized Solar Cells and Perovskite Solar Cells" organized by the Department of Physics, School of Science and Humanities, Kongu Engineering College, Erode, during 21-09-2020 to 25-09-2020.
22. Participated in the International Webinar on Recent Trends in Materials Science organized by the Department of Physics, Jamal Mohamed College, Trichy on 10-11-2020.
23. Participated in the Webinar on Nanostructured oxide materials for thermoelectric applications organized by the Department of Physics, National College, Trichy on 24-12-2020.
24. Participated in the Webinar on Synthesis, Structure Explication and Spectral Characterizations of Macro and Nano Crystals organized by the Department of Physics, Arasu Engineering College, Kumbakonam on 30-01-2021.
25. Participated in the International Virtual Conference on Novel Nanomaterials for Innovative Research organized by the Department of Physics, Rathinam College of Arts and Science, Coimbatore on 29-04-2021 and 30-04-2021.
26. Participated in the National level Webinar on Microstructural Characterization of Pozzolanic Materials organized by the Department of Physics, St. Joseph University, Nagaland on 28-05-2021.
27. Participated in a One Day Seminar on "Energy Materials", organized by Centre of Excellence for Energy Research, Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai, on 04-06-2021.

28. Participated in the International Webinar on “Synthesis and Catalytic Applications of Supported Metal Nanoparticles” organized by the PG & Research Department of Chemistry, Sadakathullah Appa College (Autonomous), Tirunelveli on 15-06-2021.
29. Participated in the National Webinar on Magnetic Smart Materials organized by the Department of Physics & Research Centre and IQAC, Nesamony Memorial Christian College, Marthandam on 17-06-2021.
30. Participated in the Webinar on Fast Forward to Energy Sustainability organized by the Department of Applied Physics, Karunya Institute of Technology and Sciences, Coimbatore on 22-06-2021.
31. Participated in the Webinar on Sensors and its Applications organized by the Department of Physical Science, CSI Bishop Newbigin College of Education, Chennai on 23-06-2021.
32. Participated in the webinar on Diversity and Inclusion – An Epitome of Unity (DIEU ‘21) organized by NITT-OSA and NITT-SPIE Student Chapters, Department of Physics, National Institute of Technology, Tiruchirappalli on 25-06-2021.
33. Participated in the One Day International Webinar on “Current Status and Future Prospects of Perovskite Solar Cells”, organized by Centre of Excellence for Energy Research, Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai, on 30-06-2021.
34. Participated in the International Webinar Series on Astronomy and Astrophysics organized by the Department of Applied Physics, Karunya Institute of Technology and Sciences, Coimbatore on 01-07-2021.
35. Participated in the National Virtual Conference on Recent Trends in Energy Materials organized by the Department of Physics, Arumugam Pillai Seethai Ammal College, during 14-07-2021 and 15-07-2021.
36. Participated in the International Webinar on Light Matter Interaction (ICLMIN-2021), organized by Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, India during 19-05-2021–21-05-2021.