

## CURRICULUM VITAE

Name : Dr. K. DHANABALAN  
Designation : Assistant Professor of Physics  
Qualification : M.Sc., M.Phil., Ph.D., PGDCA.  
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Teaching Experience : 15 Years



S.No	Name of the Institution	Period of Service
1.	PEE GEE College of Arts and Science, Dharmapuri.	04.10.2004 to 01.06.2006
2.	Electronics in PGP College of Arts and Science, Namakkal.	02.06.2006 to 10.01.2009
3.	J.J. College of Arts and Science (Autonomous), Pudukkottai.	10.06.2009 to Till Date

### Publications

Research papers : 06  
Citations / h – index / i 10 - index : 53 / 04 / 02  
Cumulative Impact Factor : 2.292  
Book (s) Published : Nil  
Book Chapter : Nil

- A.T. Ravichandran, **K. Dhanabalan**, A. Vasuhi, R. Chandramohan, and Srinivas Mantha, “Morphology, Bandgap, and Grain Size Tailoring in Cu<sub>2</sub>O Thin Film by SILAR Method”, IEEE Transaction on nanaotechnology, <http://dx.doi.org/10.1109/TNANO.2014.2369438>
- A. T. Ravichandran, **K. Dhanabalan**, S. Valanarasu, A. Vasuhi & A.Kathalingam, “Role of immersion time on the properties of SILAR deposited CuO thin films”, J Mater Sci: Mater Electron, DOI 10.1007/s10854-014-2483-0.
- A.T. Ravichandran, **K. Dhanabalan**, K. Ravichandran, R. Mohan, K. Karthika, A. Vasuhi, “Tuning the structural and optical properties of SILAR deposited Cu<sub>2</sub>O films through Zn doping”, Acta Metal. Sin. (Engl. Lett.), DOI 10.1007/s40195-015-0292-y
- **K. Dhanabalan**, A.T. Ravichandran, K. Ravichandran, S. Valanarasu, Srinvas Mantha, “Effect of Co doped material on the structural, optical and magnetic

properties of Cu<sub>2</sub>O thin films by SILAR technique” Journal of Material Science; Material in Electronics, DOI 10.1007/s10854-016-6072-2

- A. Vasuhi, R. John Xavier, R. Chandramohan, S. Muthukumar, **K. Dhanabalan**, M. Ashokkumar & P. Parameswaran, Effect of heat-treatment on the structural and optical properties of Cu<sub>2</sub>S thin films deposited by CBD method, J Mater Sci: Mater Electron, DOI 10.1007/s10854-013-1652-x
- S. Satheeskumar, S. Vadivel, **K. Dhanabalan**, A. Vasuhi, A.T. Ravichandran, K.Ravichandran, “Enhancing the structural, optical and magnetic properties of Cu<sub>2</sub>O films deposited using a SILAR technique through Fe-doping”, Journal of Materials Science: Materials in Electronics, <https://doi.org/10.1007/s10854-018-8966-7>

#### Paper Presentation in Conference/Seminar/Workshop

S.No.	Presented/ Participated	Date & Place	Topic
1	Presented	07.08.2012 to 09.08.2012 Bishop Moore College, Mavelikara, Kerala, India	Growth and Characterizations of Strontium tartrate single crystal by gel method
2	Presented	11.09.2013 to 13.09.2013 SASTRA University, Thanjavur, India.	Synthesis and optical characterization of copper oxide thin films by modified – chemical bath deposition(M-CBD) techniques
3	Presented	05.12.2013 to 07.12.2013 B.S. Abdur Rahman University, Chennai, Tamilnadu, India.	Preparation and characterization of CuO nano structured powders from CuO thin films by modified chemical bath deposition technique
4	Presented	21.10.2011 & 22.10.2011 Mannar Thirumalai Naicker College, Madurai, Tamilnadu, India.	Growth and Characterization studies of Strontium tartrate single crystals
5	Presented	11.11.2011 & 12. 11.2011 K.S. Rengasamy College Technology, Tiruchengode, Namakkal District, Tamilnadu, India.	Growth of Ammonium tartrate single crystals in gel method
6	Presented	15.03.2012 & 27.03.2012, National College(A), Tiruchirappalli, Tamil Nadu, India- 620 001.	Growth and comparization studies of Pure and L-Arginine doped ADP single crystal
7.	Presented	24.02.2014 to 26.02.2014, SSN College of	Morphological study by M-SILAR growth copper oxide thin films on glass substrate

		Engineering, Kalavakkam, Tamilnadu, India.	
8.	Presented	03.03.2015 & 04.03.2015, A.V.V.M. Sri Pushpam College(A), Poondi, Thanjavur – 613 503	The comparative study of structural, optical and magnetic properties of Co doped and Fe doped Cu <sub>2</sub> O films
9.	Presented	07.10.2015, KSR College of Arts and Science for Women, Tiruchengode, Tamilnadu, India.	Structural, Optical and Magnetic properties of Undoped and Fe doped Cu <sub>2</sub> O thin films deposited by SILAR technique
10	Presented	06.03.2017 to 08.03.2017, National College(A), Tiruchirappalli, Tamil Nadu, India- 620 001.	Effect of Sn doping on the structural and optical properties of CuO nanopowders synthesized using soft chemical method
11	Presented	15.07.2017, Sree Sevugn Annamalai College, Devakottai, Tamil Nadu, India.	Tuning the structural and optical properties of SILAR deposited Cu <sub>2</sub> O films through Zn doping
12	Presented	22.03.2018 to 23.03.2018, National College(A), Tiruchirappalli, Tamil Nadu, India- 620 001.	Enhancement of the structural and optical properties of Cd doped CuO nanopowders prepared by a simple soft chemical method
13	Presented	04.02.2019 to 06.02.2019, National College(A), Tiruchirappalli, Tamil Nadu, India- 620 001.	Enhancing the magnetic properties, optical properties and surface morphology of CuO nanopowders through Sn doping level using a simple soft chemical method
14	Participated	05.12.2003, Jamal Mohamed College, Trichy.	Non-Linear dynamics and Ultrasonic application
15	Participated	04.02.2004 & 05.02.2004 Poondi Pushpam College , Thanjavur.	Non – Linear dynamics
16	Participated	22.12.2006 & 23.12.2006 PGP College of Arts and science, Namakkal.	Three days Orientation Programme
17	Participated	12.01.2011 to 14.01.2011, St. Joseph's College (A),	INDO-US Workshop on Nanoscience and Ultrasonic (IUWOU - 2011) and International Conference on Nano

		Tiruchirappalli, Tamilnadu, India.	technology and Ultrasound (ICNU - 2011)
18	Participated	01.11.2011, Sree Sevugan Annamalai College, Devakkottai, Tamilnadu, India.	Recent Advances in Materials Synthesis and Characterization -2011 (RAMSSAC'11)
19	Participated	28.08.2012, Shrimathi Indira Ganthi College, Tiruchirappalli, Tamilnadu, India.	National level Seminar on Material Research
20	Participated	28.10.2012, Rajah Serfoji Government College (A), Thanjavur, Tamilnadu, India.	Workshop on Nano and Thin Film Materials.
21	Participated	21.07.2012, Sree Sevugan Annamalai College, Devakottai, Tamilnadu, India.	National Conference on "Advanced in Materials Synthesis"
22	Participated	24. 08.2013, Sathyabama University, Chennai, Tamilnadu, India	National Seminar on " Research & Developments in Nanosensors
23.	Participated	10.11.2013,Sree Sevugan Annamalai College, Devakkottai, Tamilnadu, India	One Day Cluster Workshop on "Scientific Writing"
24.	Participated	26.01.2014, Sree Sevugan Annamalai College, Devakottai, Tamilnadu, India.	International Seminar on Advanced Materials.
25.	Participated	20.03. 2014 & 21.03.2014, Alagappa University, Karaikudi, Tamilnadu, India.	International Workshop on Advanced Materials
26	Participated	09.08.2014 to 09.08.2014, National College (A), Tiruchirappalli, Tamilnadu.	Crystal Growth and Nano Materials
	Participated	11.02.215 &12.02.2015 Sacred Heart College (Autonomous) Tirupattur, Tamilnadu, India.	International Conference on Smart Materials (ICSM-2015)
27	Participated	18.03.2016 & 19.03.2016, School pf Physics, Bharathidasan University, Tiruchirappalli -24	2 <sup>nd</sup> National Conference on nanophotonics

## Research Guidance

1	<b>Ph.D.</b>	Guiding : Nil	Completed : Nil
2	<b>M.Phil.</b>	Guiding : 01	Completed : 02

## Awards and Achievements

### 1. Patent Awarded:

**Patentee:** Srinivas Mantha, A. T. Ravichandran, **K. Dhanabalan**, A. Vasuhi  
Dhanabalan and R. Chandramohan.

**Title:** Morphology, bandgap and grain size tailoring in Cu<sub>2</sub>O thin film by modified  
chemical bath deposition technique and methods employed thereof

**Application No.:** 201641016501

**Patent No.:** 321095

2. **Board of studies** in Physics from 02.02.2019 onwards, J.J. College of Arts and  
Science, Pudukkottai.