

## Resume

### I General Information

Name : Dr. K.UMA MAHESWARI

Father's Name : K.Krishnan

Age & Date of Birth : 57 Years

Designation : Associate Professor & Head  
Department : Physics

Mobile No : 9486726991  
Email ID : [umamaheswarivvvcollege.org@gmail.com](mailto:umamaheswarivvvcollege.org@gmail.com) & [umannt@gmail.com](mailto:umannt@gmail.com)

Service in other colleges :                      Years                      Months  
Date of appointment : 20.05.1985  
Date of retirement : 31.05.2020



### II Educational Qualification

Examination Passed	Board/University	Subject	Year of Passing	Class / Percentage
SSLC	Board of Secondary Education	Tamil, English, Mathematics, Science & History & Geography	1978	I
PUC/ Higher Secondary	Board of Higher Secondary Education	Physics Chemistry Biology	1979	I
Bachelor's Degree	Madurai Kamaraj University. Madurai	Physics	1982	I
Master's Degree	Madurai Kamaraj University. Madurai	Physics	1984	I
M.Phil	Madurai Kamaraj University. Madurai	Physics	1992	I
PhD	M .S University Thirunelveli	Physics	2018	

III Teaching Experience : UG : 34 Years  
PG : 4 Years  
M.Phil : - Years  
PhD : - Years

Field of Specialization : Thin Films & Solar Thermal Energy Technology  
 Awards won : -

IV **Research Experience**

**Minor Research Project**

Topic	Period	Funding Agency	Amount sanctioned in `
Experimental investigation on Conical shaped Desalination system used for irrigating medicinal plants	2008-2010	UGC	56,640

No. of articles published in Journals

International : 1

National : 2

No. of papers presented in Seminars / Conferences

International : 4

National : 9

No. of articles published in Books / Conference Proceedings :

Year	Book title / Conference	ISBN	Article title
2010	Renewable Energy Research.	ISBN: 978-81-908283-7-6 Page no : 67-71	Experimental investigation on conical shaped Desalination system
2011	Innovative Strategy for Technical Developments and Designing New Business Model in Renewable Energy Sector.	ISBN::978-81-910426-6-5 Page no : 40-45	Experimental Estimation The Thermal Performances of Copper, Aluminium and Mild Steel Absorber Integrated solar collectors' -
2011	Energy Conservation and Renewable Energy Technology	Page no : 22	Optical and Thermal Characteristics of integral components of solar thermal gadgets.
2011	Challenges of Commerce Education in the Twenty first century	Page no :316	A Study on viability of selected Solar Gadgets
2012	Science and Technology for Clean and Green Environment	Page no : 88-89	Experimental assessment of the Energy, Environmental and Economic benefits of Flat Plate Collector assisted Solar Thermal Systems.
2013	Multidisciplinary Research Journal of VVVColege	ISSN:2347-3967 Volume 1- Number 2	Characterization of nano-chromium based absorptive coating on solar Fins

2014	National Seminar on Advances in Material Science	ISBN: 978-93-81402-16-0 Page no : 147-149	Thermal analysais on solar collector with nano-chromium coated absorbers
2014	Solutions to Ecological Challenges: Multidimensional perspectives	ISBN: 978-81-926370-2-0 Page no : 130-135	Solar heating and cooking systems: An assessment on technical feasibility, thermal performance and mitigation of pollutants
2015	Modern Trends in Chemistry	ISBN: 978-93-85109-02-7 Page no :24-28	Studies on Nano-sized carbon coated fin, C/Al <sub>2</sub> O <sub>3</sub> coated absorber and TiO <sub>2</sub> /Si O <sub>2</sub> /Ag thin film coated Reflector.

### Articles published

1. Uma Maheswari, K., and Jeba Rajasekhar, R.V., (2015), Absorptive coating with nano sized carbon and aluminum oxide: Preparation, characterization and estimation of thermal enhancement in solar absorber, *International Journal of Recent Scientific Research* 6 :( 3), 3226-3228
2. Uma Maheswari, K., and Jeba Rajasekhar, R.V., (2016), Experimental estimation of the thermal performances of copper, aluminum and mild steel absorber integrated solar collectors, *International Journal of Applied Research* 2(11): 459-461
3. Uma Maheswari, K., and Jeba Rajasekhar, R.V., (2017), Preparation and characterization of nano-carbon and aluminum oxide based fins and their applications in solar water heating collector, *Renewable Energy* 102: 44515-44519

### Papers presented

Date	Seminar / Conference	Title of the paper	Venue
21.01.2010 - 23.01.2010	National Conference	Design, Fabrication and Performance Evaluation of low cost Conical Shaped Desalination System- UGC Sponsored	V.H.N.S.N .College, Virudrunagar.
15.10.2010	National Conference	Experimental Investigations on Novel Conical Shaped Desalination System	Government Arts College, Melur, Madurai, Tamilnadu.
03.04.2011 - 04.03.2011	National Seminar	Experimental Estimation The Thermal Performances of Copper, Aluminium And Mild Steel Absorber Integrated solar collectors'- sponsored by MNRE, Government of India	V.H.N.S.N .College, Virudrunagar.

22.09.2011 - 23.09.2011	National Seminar	A Study on viability of selected Solar Gadgets'- UGC Sponsored	Département of Commerce, V.V.V.Collège
03.01.2012	National Conférence	Estimation of Thermal Performance of Solar flat plate collectors with variations in number of black chrome coated copper absorber fins.	V.V.V College
09.02.2013	National Seminar	Experimental Investigations Solar Arrays- UGC Sponsored	Amman College of Atrs & Science, Dindugal.
29.09.2014	National seminar	Thermal analysis on solar collector with nano-chromium coated absorbers- UGC Sponsored	Manonmanium Sundaranar University, Tirunelveli.
11.12.2014 - 13.12.2014	International Conférence	Solar heating and cooking systems: An assessment on technical feasibility, thermal performance and mitigation of pollutants	Fatima College, Madurai
06.01.2017	UGC sponsored International Conférence	Experimental assessment gain and performance of nams structural solar absorber with carbon & Ferric oxide coating	Sri Meenakshi Government Art and College For Women , Madurai

#### Articles published in Books / Conference Proceedings

#### Books published / edited

Year	Book title	Published / edited	ISBN	Publisher
2013	Heat, Thermodynamics & Statistical Physics	Published	ISBN:978-81-921895-0-5	Daisy & Darein Publisher Lld, Madurai.

#### V Seminars/Conferences/Workshops attended

Date	Seminar / Conference/ Workshop	Title of the Conference	Venue
22.08.2007	Workshop	Renewable Energy –Today and Tommorrow	KCET, Virudhunagar
22.12.2009 To 07.01.2009	-	Refresher Course in Experimental Physics	Indian Academy of Sciences, Bangalore, Indian National Science

			Academy, Delhi, National Academy of Sciences of India & M KUniversity
15.02.2010 & 16.02.2016	Seminar	Recent Trends in Condensed Matter Physics	M KUniversity Madurai
08.09.2011	State level Seminar	Utilization & Conservation of Energy	Sermathai Vasan College for Women
30.01.2012	State level Seminar	Recent Trends in Medical Imaging and Radiation Oncology Awareness Programme	Vivekananda College, Thiruvudagam (West)
22.01.2013	National level Seminar	Current trends in Crystal Growth and Solar Energy	Sri Meenakshi College For Women (Autonomous ) Madurai
10.01.2014	State level Seminar	Emerging trends in Physics of Materials	The Madura College (Autonomous) Madurai
19.02.2014	International Symposium	Nano structures for Photovoltaic Applications	Fatima College, Madurai
20.02.2014	State level Seminar	Recent Trends in Solar Technologies	The American College, Madurai
04.09.2014 & 05.09.2014	Lecture Workshop	Understanding properties of Materials using Quantum Mechanics	Government Arts College, Melur, Madurai, Tamilnadu
07.11.2014 & 08.11.2014	Short Term Programme	Nano structured Materials : Processing and Characterization	NIT, Tiruchirapalli
19.11.2014	Workshop	Material Characterization Techniques-AFM& XRD	Madurai Kamaraj University, Madurai
09.01.2015	TNSCST sponsored Lecture	Multifunctional Materials::From Home Appliances to the Space Applications	
14.08.2015	National Seminar	Recent Trends in Energy Technologies	The American College, Madurai
19.02.2016	Workshop	Astronomy and Astrophysics	The American College, Madurai
29.09.2016 & 30.09.2016	National Level Workshop	The Role of National Skills Qualifications Framework in Designing the Curriculum	V.H.N.S.N .College, Virudrunagar.

**VI Course attended (Refresher / Orientation / any other )**

Name of the Course	Venue	Duration
Orientation Course	Bharathidhasan University, Trichy.	03.10.1988 – 31.10.1988
Refresher course in Energy Science	Madurai Kamaraj University, Madurai	26.02.1996 – 18.03.1996
Refresher course in Physics	Madurai Kamaraj University, Madurai .	01.02.2000 – 21.02.2000
Refresher course in Value education	Vivekananda College Thiruvudagam, Madurai	23.04.2001 – 14.05.2001

**VII Role in Academic Bodies**

**As a member of Board of Studies**

University / College	Period	Board
Sri Meenakshi Govt .Arts College For Women, Madurai.	2007-2008, 2012-2013	B.Sc, Physics
Devanga Arts College, Aruppukkottai.	2012-2013	B.Sc, Physics
Madurai Kamaraj University, Madurai	2014-2016	B.Sc., Physics
Sri Kaliswari Cllege (Autonomous) Sivakasi.	2014-2016	B.Sc, Physics
Mannar Thirumalai College Madurai	2015-2017	B.Sc, Physics
Mannar Thirumalai College Madurai	21.01.2017	B.Sc, Physics
Sri Meenakshi Govt. Arts College For Women, Madurai.	12.01.2017	B.Sc, Physics
Madurai Kamaraj University, Madurai	01.01.2017- 30.06.2017	B.Sc., Physics
Sri Ramasamy Naidu Memorial College	04.03.2017	B.Sc., Physics
Vivekananda College, Thiruvudagam (West)	2019-2020	B.Sc, Physics

**As a member in  
Inspection Commission / Interview Panel / others**

Particulars	Date	Venue	Course / Post
CSIR-Research Associate Interview Selection	01.07.2011	Government Arts & Science College, Melur, Madurai, Tamilnadu	Selection committee member.
Selection committee member for the Best Exhibit –INSPIRE AWARD	31.10.2011	K.V.Sala Higher Secondary School, Virudrunagar.	Selection of the Best Exhibit – INSPIRE AWARD Science Exhibition-TNSCST, Chennai
Faculty Development Programme- UGC XII Plan	23.09.2015	Arulmigu Palaniandavar College Arts Culture, Palani	University Nominee for the Verification Process
Appointment of Assistant Professor	08.11.2016	ANJA College Sivakasi	Selection committee member
44 <sup>th</sup> Jawaharlal Nehru State level Science Exhibition, Department of School Education, Tamilnadu	26.11.2016	O.C.P.M.Girls Higher Secondary School, Madurai	Judge
Appointment of Assistant Professor	26.04.2017	SN College Madurai	Selection committee member
B.Sc, Course	18.05.2017	R.V. S. College of Arts And Science. Dinugal	Commission Member
Appointment of Assistant Professor	20.10.2017	S.F.R College for Women, Sivakasi	Selection committee member

**VIII Resource person / Chairperson**

Activity	Date	Topic / Theme	Event	Venue
Guest Lecture	28.01.2016	Fundamental properties of nano-structured materials	-	Vivekananda College, Thiruvudagam(West)

**IX Seminars / Conferences / Workshops organized**

Date	Level	Theme
08.10.2014	National Conférence	Recent Trends in Astro Physics.
18.01.2017	National Seminar	Recent Trends in Medical Physics

11.01.2018	Workshop	Nano materials and Characterization Techniques
01.02.2019	National Seminar	Recent Trends in Material science

X **Student – oriented Service** :  
Staff – in – charge of various activities in the

i. **Institution :**

2011 -2012	Academic audit Member
2012 – 2013	Member of Academic audit & Governing body Member
2013 -2014	Governing body Member
2014 -2015	NAAC Steering Committee member
2015-2016	NAAC Steering Committee member
2016-2017	IQAC Coordinator
2017-2018	NAAC Coordinator& Dean Science
2017-2018	Examination Committee Member
2017-2018	Governing body Member
2018-2019	College Council Member
2019-2020	Student Council Member

**Department :**

2010 – 11	Time Table, Mark register, library in Charge, Work adjustment register, PTA meeting, Counselling
2011 – 12	Mark register, Remedial coaching
2012 – 13	Time Table, Association in Charge, Equipment in charge, Remedial coaching, Extension activity, Result analysis
2013 – 14	library-in-Charge, Work load, Time Table, Equipment in charge
2014 – 15	Work load, Time Table, Equipment in charge,
2015 – 16	PTA meeting, Work load, Time Table, Equipment in charge,
2016 – 17	Study tour, Work load, Time Table, Equipment in charge, In charge for Extra credit paper
2017 – 18	Work load, Time Table, Equipment in charge
2018 - 19	Work load, Time Table, Equipment in charge, In charge for Extra credit paper
2018 - 19	Work load, Time Table, Equipment in charge

ii. Any other information (Membership in various academic related bodies / societies / associations)

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Duraismy Nagar,  
Bye-pass Road,  
Madurai-625016