Curriculum Vitae

Name : **Dr. Mrs.M.Beaula Ruby Kamalam**

Designation : Assistant Professor

Department : Postgraduate and Research
Department of Physics
The American College, Madurai

Date of Joining : 17.09.2007(2005)

Phone with Extn. No : 0452-2530070

Email : bealthambu10@gmail.com

Academic Qualifications

Examination	Name of the University	Year of Passing	Division / Class / Grade	Subject
Ph.D	Madurai Kamaraj University, Madurai	2019	Awarded	Physics
M.Phil	Madurai Kamaraj University, Madurai	2001	I class	Physics
M.Sc	Madurai Kamaraj University, Madurai	1997	I class	Physics

Appointments held prior to joining this institution:

Designation	Name of the Employer	Period of working
Lecturer	J.A College for Women, Periyakulam	08.07.1997 - 27.07.1999
Junior Lecturer	The American College, Madurai	28.07.1999-30.04.2000
Lecturer	Lady Doak College,Madurai	13.06.2000-30.04.2002
Guest Lecturer	SEEN, Madurai Kamaraj University, Madurai	24.01.2003- 30-04-2005

Post held after appointment at this Institution:

Designation	Department	Period	
		From	To
Assistant Professor	Physics	16.06.2005 – till date	

Period of Teaching Experience

P.G. -17 years

U.G. – 20 years

M.Phil -2 years

Courses Handled:

Classical Mechanics and Nonlinear dynamics, Quantum mechanics, Analog and digital Electronics. Thermodynamics and Statistical mechanics, Astrophysics and Cosmology , Astronomy and Astrophysics, Numerical methods, C++ and MathCAD, Nuclear Physics, Modern Optics, Solar Energy Physics. Condensed Matter Physics, Nanophysics.

Specialization in Research: Experimental Condensed Matter Physics

Research Interests:

Nano materials synthesis and characterization, Energy storage and Super capacitor applications, Photo catalytic and gas sensing analysis of transition metal oxides.Graphene and its Applications, Environment and energy storage applications.

Publications:

Articles Published in International Journals:

1. **Beaula Ruby Kamalam, M.**, Balachandar, B.K. and S. Sethuraman. 2016. Solvothermal Synthesis and Characterization of Reduced Graphene oxide/ Vanadium Pentoxide Hybrid nanostructures. Materials Today Pro.3 (2016) 2132–2140.
2. **Beaula Ruby Kamalam, M.** Balachandar, B.K. and S. Sethuraman. 2015. Graphene oxide vanadium pentoxide nanocomposite for Photocatalytic application. Advanced nanomaterials: 253-258.
3. **M. Beaula Ruby Kamalam**, S.S.R Inbanathan, K. Sethuraman, Enhanced photo catalytic activity of graphene oxide /MoO_3 nanocomposites in the degradation of Victoria Blue Dye under visible light irradiation, Applied surface science,449 (2018) 685-696.
4. Nagaraj Anbu, **Maniveldosss Beaula Ruby Kamalam**, Kunjithapatham Sethuraman and Amarajothi Dhakshinamoorthy, Aerobic oxidation of alcohols Catalyzed by V_2O_5 rods decorated on Graphene Oxide, Chemistry Select, 2018, 3, 12725-127233.

Book Chapter Published

- **M. Beaula Ruby Kamalam**, S.S.R Inbanathan, K. Sethuraman,Graphene Oxide/V_2O_5 Nanocomposite for Photo Catalytic Applications 253-258 (2015), Advanced Nanomaterials:Synthesis and applications, Dr.V.Rajendran,Dr.K.Saminathan,Dr.K.E.Geckler,Bloomsburry, 978-93-85436-74-1

Papers Presented in International/ National Conferences

1. **M. Beaula Ruby Kamalam** and S.S.R. Inbanathan, Growth of diglycine hydrogen selenite acid single crystals and its characterization by XRD, FTIR, UV-Vis NIR, TG-DTA and DSC XVII National Seminar on Crystal Growth, Chennai (Jan 2013).

2. **M.Beaula Ruby Kamalam,** S.S.R. Inbanathan, Growth of nonlinear optical glycine single crystals and is characterization by XRD, FIIR, UV-Vis NIR, TG-DTA. 17 th National seminar on Crystal Growth at Anna University, Chennai. during 9-11 th January 2013 .

3. **M.Beaula Ruby Kamalam,** S.S.R. Inbanathan , K.Sethuraman Enhanced antibacterialactivity of chemically synthesized graphene oxide sheets decorated by silver nano particles, Frontier Vistas in Modern Immunology at The American College, Madurai-2 onDec 2013

4. **M.Beaula Ruby Kamalam,**B.K.Balachandar, K.Sethuraman, Reduced graphene oxide/Vanadium Pentoxide Hybrid nanostructures using solvothermal synthesis. 19 th National Seminar on Crystal Growth held at VIT University, Vellore during 12-14 th March,2015.

5. **M.Beaula Ruby Kamalam**,B.K.Balachandar, K.Sethuraman, Solvothermal synthesis of reduced graphene oxide/Vanadium pentoxide Hybrid nanostructures. RAINSAT-2015 held at Sathya Bama University, Chennai during 8-10 th July,2015.

7. **M.Beaula Ruby Kamalam,** B.K.Balachandar, K.Sethuraman, Graphene oxide Vanadium pentoxide nanocomposite for Photocatalytic Application. NANO-2015 held at KSR college of engineering, Thiruchengode.

8. **M.Beaula Ruby Kamalam,** S.S.R.Inbanathan and K.Sethuraman, Enhanced photocatalytic activity of graphene oxide /MoO_3 nanocomposites in the degradation of Victoria blue dye under visible light irradiation, International conference on Nanoscience and Nanotechnology, SRM University, Chennai,9-11 August 2017.

8. **M.Beaula Ruby Kamalam**, S.S.R.Inbanathan and K.Sethuraman,Investigations on the photocatalytic degradation of Victoria Blue dye by sonochemically synthesized graphene oxide-V_2O_5 nanocomposite under direct sunlight, International Conference on sustainable energy technologies**,** Bharathidasan University, Trichy. 27 and 28 June , 2018.

9. **M.Beaula Ruby Kamalam**, S.S.R.Inbanathan and K.Sethuraman, Investigations on Augumented Photocatalytic Degradation Of Methylene Blue Dye By GO - CdO Nanocomposites under the irradiation of visible light, International Conference on Advanced nanomaterials for Energy, Environment and Health Care Applications,KSR college of engineering, Thiruchengode. July 31 and August 1 , 2018

10. **M.Beaula Ruby Kamalam,** S.S.R.Inbanathan . B.Renganathan and K.Sethuraman, Improved ethanol gas sensing using fiber optic gas sensor, International conference on Nanoscience and Nanotechnology, SRM Institute of Science and Technology, Chennai. 28-30 January 2019

11. **M.Beaula Ruby Kamalam**, S.S.R.Inbanathan . P.Jothilal, R.Kaviya and K.Sethuraman, Visible Light Driven CdO/GO Nanocomposite for the Degradation of Methyl Orange Dye, SRM Institute of Science and Technology, Chennai. 28-30 January 2019.

12. **M.Beaula Ruby Kamalam**, S.S.R.Inbanathan and K.Sethuraman, Synrthesis of GO-CdO nanocomposites for the photocatalytic degradation of methylene blue dye under visible light irradiation,International Conference on recent advances in Materials Science (ICRAMS-2019) , National College, Trichy.4-6 February 2019.

13. **M.Beaula Ruby Kamalam**, S.S.R.Inbanathan and K.Ashok Kumar **,**Structural and Optical Studies of Graphene oxide- Manganese dioxide nanocomposites for Supercapacitor appliactions,International conference on Advanced nanomaterials for Energy, Engineering, biological and Medical appilcations (ICAN-2019), 12-14 December 2019, Department of Physics, Chettinad College of Engineering and Technology, Karur- 639114, Tamil Nadu, India.

14. **M.Beaula Ruby Kamalam**, S.S.R.Inbanathan,Synthesis of Reduced Graphene Oxide And Bismuth Oxide Nanocomposite,1 st International Conference on convergenge of sustainable solutions(ICSS-2020),Thiruvalluvar University College of Arts and Science, Thiruvalluvar.

15. **M.Beaula Ruby Kamalam,** S.S.R. Inbanathan,Synthesis of Graphene oxide-Manganese dioxide nanocomposites from used batteries for supercapacitor applications,1 st International Conference on convergenge of sustainable solutions(ICSS-2020),Thiruvalluvar University College of Arts and Science, Thiruvalluvar.

Conferences/Workshops Participated

- ✓ Participated inUGC sponsoredWorkshop on Research methodology, Writing Practices and Language Skills atSasthraBhavan,Pattom,Thiruvananthapuram,3-4 August 2012.

- ✓ Participated inDAE-BRNS sponsoredNational Seminar on Applications of spectroscopy in materials characterization atFatima College,Madurai during 22-23 August 2012.

- ✓ Participated in Technology transfer in Nanoscience& Technology ,Research to product awareness workshop at Madurai Kamaraj University, Madurai on17 June 2013

- ✓ Participated in Workshop on Materials characterization techniques-AFM & XRDorganized by School of Physics, Madurai Kamaraj University, on 19 November 2014.
- ✓ Participated in National Seminar on Recent trends in Energy technologiesorganized by Department of Physics, The American College, Madurai on 14 th august 2015.
- ✓ Participated in the one day National seminar on Astronomy and Astrophysics organized by Department of Physics, The American College, Madurai.
- ✓ Participated in the two days workshop on Advanced materials characterization techniques organized by School of Physics, Madurai Kamaraj University during 26-27 March 2018.

Extension, Co-curricular

Have been a Member of

- ❖ Science around you programme
- ❖ Member of athletics Committee
- ❖ Science Exhibition
- ❖ Association President-UG
- ❖ Academic Advising
- ❖ Intercollegiate Competition- PHOBOS
- ❖ NAAC Committee criterion Member
- ❖ INSPIRE -2020
- ❖ College day celebrations
- ❖ Autonomy review committee
- ❖ Member of Counseling and performance committee
- ❖ Member of candle lighting committee
- ❖ Hostel Superintendent
- ❖ Member of Senatus
- ❖ Ladies club of The American College

Professional Development Activities

- ➢ Life Member in All India Crystal Growth Association
- ➢ FDP appointment selection committee member at Arul Migu Palaniaandavar College of Arts and Science, Palani.
- ➢ Judge for K.V Regional Science Exhibition
- ➢ Board Of Studies Member of Jayaraj Annapackiam college for Women, periyakulam.

Resource Person

- Delivered a talk in the Astro Club of Lady Doak Collge, Madurai.
- Invited speaker in the **One Day National Seminar On Emerging Trends in Physics** held at Jayaraj Annapackiam College For Women, Periyakulam on 13 december 2019 on the topic **NOVEL MATERIAL- GRAPHENE AND ITS APPLICATIONS.**
- Delivered a talk on **GRAPHENE – THE WONDER MATERIAL AND ITS APPLICATIONS** at C.S.I College of Arts and Science for Women, Madurai-7 on 19 February 2020.

Training Programmes, faculty development programmes attended

S. No.	Programme	Duration	Organized by
1	Orientation Programme	28 days (27.07.2011-23.08.2011)	UGC, Academic Staff college, MKU
2.	Refresher in Physics	21 days (12.11.2013-2.12.2013)	UGC, Academic Staff college, MKU
3.	Refresher in physics	21 days (3.2.2015-23.02.2015)	UGC, Academic Staff college, MKU
4.	Refresher in Basic sciences	21 days (02.11.2016-22.11.2016)	UGC, Academic Staff college, MKU

Students Projects guided

- **U.G level – 25 students**
- **P.G level -15 Students**
- **M.Phil -2 Students**

Ongoing Projects:

TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGYproject sponsored by Department of Science and Technology entitled "**Enhancing the Super capacitor Performance in Graphene and Graphene oxide/Transition metal oxide nanocomposites** " -2019-2021.