PROFILE



Dr. A. MUJIBER RAHMAN **Associate Professor**

PG and Research Department of Physics Hajee Karutha Rowther Howdia College (Autonomous) Uthamapalayam-625 533 Tamilnadu, INDIA

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01	Name		Dr. A. MUJIBER RAHMAN				
	Present Position	n &	Associate Professor				
			PG and Research Department				
02	Address		of Physics				
			Hajee Karutha Rowther Howdia College				
			(Autonomous)				
Uthamapalayam – 625533.							
03	Date of Birth &	Gender	20.01.1973 - Male				
04 Educational Qualifications:							
	Degree	Institution		University	Class	Year	
	B.Sc (Physics)	T.A.G. Govt. Arts College, Tindivanam		University of	First	1993	
				Madras			
	M.Sc (Physics)	Pachiayappa's College, Kanchipuram		University of	First	1995	
				Madras			
	M.Phil	De	partment of Physics	Bharathidasan	First	2004	
	(Physics)	(Physics)		University			
	Ph.D (Solar	Department of Theoretical Physics,		Madurai	Thesis –	2014	
	Astrophysics)	School of Physics,		Kamaraj	Highly		
		Madı	ırai Kamaraj University	University	commended		
			Madurai.				

Position Held

Designation	Office Address	Period		Nature of Duties/	
Designation	Office Address	From	То	responsibility	
Guest Lecturer	Department of Physics,			Teaching	
	T.A.G. Govt Arts College,				
	Tindivanam	7.8.1996	11.2.2000		
Lecturer in Physics	Department of Physics,			Teaching	
	Islamiah College,				
(FIP Vacancy)	Vaniyambadi	13.2.2000	25.3.2001		
Associate Professor	Department of Physics,			Teaching	
	H.K.R.H. College,				
	Uthamapalayam	27.3.2001	Till date		

06	Professional recognition, distinction, awards, fellowships received: - State Level Educational Testing (SLET) for Lectureship, Accredited by UGC, Conducted by Bharathidasan University, Tiruchirappali, 1999. - UGC-Faculty Development Program, for pursuing full time research work from 2009 to 2011 at School of Physics, Madurai Kamaraj University, Madurai. Research Collaboration with Radio Astronomy Centre, National Centre for Radio Astrophysics, Tata Institute of Fundamental Research (NCRA-TIFR), Ooty. -Associate Member, Astronomical Society of India, Bangalore.					
	Courses handled:					
07	Modern Physics Electromagnetism Optics & Spectroscopy Classical and Statistical Mechanics Electricity & Electronics	Astrophysics Classical Mechanics Electromagnetic Theory Biomedical Instrumentati Opto electronics	ion			
08	Research Interest: SolarAstropysics: Coronal Mass Ejections, Type II and III radio bursts, Solar flares, Prominence eruptions, Geomagnetic storms					
09	Research Guidance: M.Phil., Awarded: 10; Ph.D. ongoing: 04 H-Index, Citations: h-Index: 5; Citations ~ 75					
10	No. of International: 07 Publications National: 03	Conference papers : 08	Invited and Special Lectures : 23			

List of papers published in peer reviewed Journals:

- 1. Propagation Characteristics of Coronal Mass Ejection and their effects near-Earth: 2010, A. Mujiber Rahman, P.K. Manoharan and S. Umapathy, Indian Journal of Radio and Space Physics, 39, 276-279.
- 2. Coronal mass ejections-Propagation time and associated internal energy: 2011, P.K. Manoharan and A. Mujiber Rahman, Journal of Atmospheric and Solar-Terrestrial Physics, 73, 671–677.
- 3. Solar and interplanetary parameters of CMEs with and without type II radio bursts: 2012, A. Mujiber Rahman, S. Umapathy, A. Shanmugaraju, Y. -J. Moon, Journal of Advances in Space Research, 50, 516-525.
- **4.** Propagation of normal and faster CMEs in the interplanetary medium: 2013, **A. Mujiber Rahman,** S. Umapathy, A. Shanmugaraju, Journal of Advances in Space Research, 52, 1168–1177.
- **5.** A Statistical Study of Stand-off distance of interplanetary coronal mass ejections:2013, A. Mujiber Rahman, S. Umapathy, A. Shanmugaraju and Y.-J. Moon, Journal of Atmospheric and Solar Terrestrial Physics, Journal of Atmospheric and Solar-Terrestrial Physics, 106, 181-190.
- 6. Investigations on Geo-effective parameters of Halo-Coronal Mass Ejections: 2014, A. Mujiber Rahman, S.Umapathy, V.Vasanth, International Journal of Scientific footprints, 2(5),34-47.
- 7. Multiwavelength study of a Prominence eruption and its consequences in the interplanetary medium:2015, A. Mujiber Rahman, International Journal of Scientific footprints, 3(1), 1-18.
- 8. Empirical Relationship between CME parameters and Geoeffectiveness of Halo CMEs in the Rising phase of Solar Cycle 24 (2011-2013): 2015, A. Shanmugaraju, M.Syed Ibrahim, Y.-J.Moon, A. Mujiber Rahman, S.Umapathy, Solar Physics.
- **9.** Study of Viscosity Modeling of Coronal Mass Ejection: 2020, S. Prasanna Subramanian, A. Mujiber Rahman, W. Hannah Blessy, A. Ansar Ahamed, Journal of Research in Physics and Applied Sciences.
- 10. Study of Fast and Wide CMEs Associated with Kilometric Type II Bursts with Frequency below 100 kHz and their IP Shock Propagation: 2020, W. Hannah Blessy, A. Mujiber Rahman, S. Prasanna Subramanian, A. Ansar Ahamed, Journal of Research in Physics and Applied Sciences.

List of papers presented in International/National Worskshops

- Investigation on Coronal Mass Ejections and their geomagnetic effects, A. Mujiber Rahman, S. Umapathy, P.K. Manoharan, UGC sponsored National Seminar on "Recent Advances in Physics", September 22-23, 2005, Arul Anandar College, Karumathur, Madurai.
- 2. Investigation on Coronal Mass Ejections and their associated activities during the Solar Maximum period, A. Mujiber Rahman, S. Umapathy, Shanmugaraju, P.K. Manoharan, 1st Indo Chinese Workshop in Recent Advances in Solar Physics, November 07-11, 2005, Indian Institute of Astrophysics, Bangalore.
- 3. Propagation Characteristics of Coronal Mass Ejections, A. Mujiber Rahman, P.K. Manoharan, S. Umapathy, Young Astronomers Meet, January 03-05, 2007, Indian Institute of Astrophysics, Bangalore.
- 4. Propagation of Characteristics of Coronal Mass Ejections and their effects at Earth, A. **Mujiber Rahman**, P.K. Manoharan, S. Umapathy, International Heliophysical Year Workshop, May 07-10, 2007, Aryabhatta Research Institute of Observational Sciences (ARIES), Nainital, Himachal Pradesh, India.
- 5. Statistical Analysis of CMEs with and without type II radio bursts, A. Mujiber Rahman, S. Umapathy, A. Shanmugaraju. UGC sponsored seminar on Recent Trends in Physics, March 23-24, 2009, Jayaraj Annapackiam College for women, Periyakulam.
- 6. A Prominence eruption on 29 July 2004 and its consequences in the interplanetary medium, A. **Mujiber Rahman,** P.K. Manoharan, S. Umapathy, 3rd Indo-China workshop on Solar Physics and 1st Asia-Pacific Solar Physics meeting, March 21-24, 2011, Indian Institute of Astrophysics, Bangalore.
- 7. Investigations on Characteristics of DH type II bursts associated with Flares and CMEs, **A. Mujiber Rahman**, National Conference of Advances in Astronomy and Space Technology, January 29, 2018, Arul Anandar College (Autonomous), Karumathur, Madurai.
- 8. A Study on Unsolved Kinematical Issues of CME Propagation, **A. Mujiber Rahman**, 5th Asia Pacific Solar Physics Meeting, Inter University Center for Astronomy and Astrophysics (IUCAA), Pune, Maharashtra, February 3 5, 2020.

Administrative Responsibilities held

Acting as a SPOC, National Program Technology Enhanced Learning (NPTEL)/SWAYAM, since 20.01.2018.

NPTEL/SWAYAM Courses Completed

Completed the NPTEL/SWAYAM Course on **Developing Soft Skills and Personality** conducted by Indian Institute of Technology (IIT), Kanpur during August-October, 2018.

Completed the NPTEL/SWAYAM Course on **Enhancing Soft Skills and Personality** conducted by Indian Institute of Technology (IIT), Kanpur during February-April, 2019.

Orientation/Refresher Courses Attended

Program	Organizer	University/Institute	Duration
Orientation Course	UGC-ASC	Pondicherry University	09-03-2004 to
In Information Technology			04-04-2004
Refresher Course in	UGC	Inter University Centre	16-05-2005 to
Astronomy and Astrophysics		for Astronomy and	17-06-2005
		Astrophysics (IUCAA),	
		Pune	
Refresher Course in	UGC-ASC	University of Madras	03.02.2012 to
Education Technology			23.02.2012
Refresher Course in Physics	UGC-ASC	Madurai Kamaraj	16.11.2012 to
		University	06.12.2012

Research Guideship

Obtained Research Guideship from Madurai Kamaraj University on 07.11.2017 (Guideship Number: **1687**) to guide students for research.

Conference/Seminar/Workshop organized

An inter-college meet on **India based Neutrino Observatory (INO) Outreach Program,** "A **Window to the Universe**" organized at our College on 18.02.2014. This program is sponsored by Tata Institute of Fundamental Research (**TIFR**), Mumbai.

Invited Talks given in State/National level Seminar/Workshops

- 1. Resource Person and Subject Expert in PG Content Enrichment Training for PG Physics Teachers of Theni District held at Theni Kammavar Sangam Educatonal College, Theni, on 13.10.2017.
- 2. Resource Person in the Orientation program for PG Physics teachers of Theni district at DIET, Uthamapalayam, from 20.12.2018 to 21.12.2018.
- 3. Acted as a Judge in 46th Jawaharlal Nehru District Level Science Exhibition Organized New Delhi National Educational Research and Training Institute and District School Education Department, held on 08.10.2018 at Sri Vikasha Vidyalaya Matriculation Higher Secondary School, Uthamapalayam Theni district.
- 4. Resource Person in the Department of Physics, Bharat Niketan Engineering College, Aundipatti, Theni District on 26.10.2018.
- 5. Chief Guest and Guest Lecture given in 'Galvamo Association', Department of Physics, Parvathy's College, Dindigul, on 07.01.2019.
- 6. Chief Guest and Guest Lecture given in PG Department of Physics and Chemistry, Nadar Saraswati College for Women, Theni, on 13.01.2019.
- 7. Chief Guest and Guest Lecture given at Department of Physics, Kammavar Sangam College of Arts and Science, Theni, on 01.02.2019.
- 8. Chief Guest and Guest Lecture given at Department of Physics, Sri Adi Chunchanagiri College for Women, Cumbum, on 11.02.2019.
- 9. Resource person in National Seminar on Recent Trends in Astrophysics, Department of Physics, Mary Matha College, Periyakulam, on 13.02.2019.
- 10. Resource Person in National Seminar on Astrophysics, N.M.S. Sermathai Vasan College for Women, Madurai, on 22.02.19.
- 11. As a Resource Person and Judge in District Level Science Exhibition Organized District School Education Department under the SCOPE (Specific Concept Oriented Programme) project, held on 26.02.2019 at Sri Vikasha Vidyalaya Matriculation Higher Secondary School, Uthamapalayam. Theni district.
- 12. Resource Person in Science Exhibition conducted by The Crescent Matriculation Higher Secondary School, on 03.11.2019.
- 13. Resource Person in One day State Level Seminar, Department of Physics, Mangayarkarasi College of Arts and Science for Women, Paravai, Madurai, on 09.01.2020.

- 14. Resource Person in One day Seminar, Department of Physics, Sacred Heart College, Dindigul on 22.01.2020.
 - 15. Resource Person in Intercollegiate Seminar, Department of Physics, Sri Ramakrishna College of Arts and Science, Coimbatore on 25.01.2020.
 - Resource Person in National Level Conference, Department of Physics,
 Vivekanandha College, Tiruvvedagam, Madurai on 28.01.2020
 - 17. Resource Person in One day Intercollegiate Seminar, Department of Physics, Islamiah College, Vaniyambadi on 26.02.2020
 - 18. Acted as a Judge and Resource Person for the Paper Presentation Competition organized by the Science Communication Club, Hajee Karutha Rowther Howdia College, Uthamapalayam on 28.02.2020.
 - 19. Resource Person in One day State Level Seminar, Department of Physics, Thiyagarajar College, Madurai on 29.02.2020.
 - 20. Resource Person in Refresher Course on Physics for College Teachers conducted by Department of Physics, A.P.A. College of Arts and Culture, Palani on 26.06.2020.
 - 21. Resource Person in The Legacy of S. Chandrasekhar and his contributions in Astrophysics, N.M.S. Sermathai Vasan College for Women, Madurai, on 19.10.2020.
 - 22. Resource Person in National Science day and World renewable Energy day celebrations, jointly conducted by Department of Physics, Maths, Chemistry and Zoology, G.T.N. Arts College, Dindigul, on 17.03.2021.
 - 23. Resource Person in Higher Education Guidance for +2 Students, conducted by Cardamon Planter's Association (CPA) College, Bodinayakkanur, on 18.06.2021.

National/International Workshops Participated

- 1. Participated in Seminar on Computer Simulation in Physics (UGC-DRS Program), School of Physics, Madurai Kamaraj University, 04.02.2002 to 05.02.2002.
- 2. Participated in Three Day Workshop on Research Methodology and application of SPSS software, held at Pondicherry University, from 02.04.2004 to 04.04.2004.
- Participated in two day production workshop of the Radio Serial for All India Radio, sponsored by Vigyan Prachar, Department of Science and Technology, New Delhi, from 09.09.2005 to 10.09.2005.

- 4. Participated in Intercollegiate Meet on Solid State Physics, held at Devanga Arts College, Aruppukottai, on 25.10.2005.
- 5. Participated in International Heliospheric Year (IHY) Graduate School, held at Kodaikanal Solar Observatory, Kodaikanal, from 10.12.2007 to 22.12.2007.
- 6. Participated in the Two day Workshop on Recent Trends in Astrophysics, held at School of Physics, Madurai Kamaraj University, from 28.01.2010 to 29.01.2010.
- 7. Participated in the India based Neutrino Observatory Inter Institutional Centre for High Energy Physics (IICHEP) Meeting held at Madurai, on 19.09.2014.
- 8. Participated in NPTEL SPOC Workshop at IIT Madras, 25.01.2018.
- 9. Participated in NPTEL SPOC Workshop at IIT Madras, 14.07.2018.
- 10. Participated in NPTEL SPOC Workshop at IIT Madras, 25.01.2020.

List of Books Published

- 1. 'Introduction to Astrophysics' (ISBN: 978-93-86712-25-7), KAMS Publications, Uthamapalyam. This book is recommended as a Text book for B.Sc., Physics students of Madurai Kamaraj University in 2018. https://scitechpublications.com/shop/physics/introduction-to-astrophysics-2/
- 2. 'Concepts of Astrophysics' (ISBN: 978-93-85983-73-3), SCITECH Publications (INDIA) Pvt. Ltd, Chennai. This books is followed by Mother Teresa Women's University and various Universities/Autonomous Colleges across India. https://scitechpublications.com/shop/physics/concepts-of-astrophysics/
- 3. 'Medical Physics' (ISBN: 9789385983788), SCITECH Publications (INDIA) Pvt. Ltd, Chennai. This book is following as a text book by Madurai Kamaraj University. Also to be recommended as a text book by many Indian Universities. https://scitechpublications.com/shop/physics/medical-physics-2/
- 4. 'Solar Energy' (ISBN: 978-93-85983-84-9), SCITECH Pubications (INDIA) Pvt. Ltd, Chennai. This book is following as a text by the students of Madurai Kamaraj University.

https://scitechpublications.com/shop/physics/solar-energy/

List of Candidates completed M.Phil. degree under my Guidance

Sl.No.	Name of the Student	Regitration Number	University	Year
1.	T. Saranya	603043070601	Vinayaka Mission	2009
	-		University, Salem	
2.	John Santiagu	A7A6224515	Madurai Kamaraj	2014
			University, Madurai	
3.	V. Jaganisha	A7A6224046	Madurai Kamaraj	2014
	Begum		University, Madurai	
4.	I. Srisabari	B6815341	Madurai Kamaraj	2018
	Ranjani		University, Madurai	
5.	K. Deivakani	B6815309	Madurai Kamaraj	2018
			University, Madurai	
6.	K.J. Sri Nehru	B6815364	Madurai Kamaraj	2018
			University, Madurai	
7.	P. Velmurugan	B6815366	Madurai Kamaraj	2018
			University, Madurai	
8.	K. Anitha Rani	B6815305	Madurai Kamaraj	2018
			University, Madurai	
9.	V. Suguna	EPH181013	Madurai Kamaraj	2020
	-		University, Madurai	
10.	K. Shanthi	EPH181015	Madurai Kamaraj	2020
	Rajaram		University, Madurai	

List of Candidates registered for PhD

- 1. W. Hannah Blessy, Assistant Professor of Physis, The American College, Madurai, Register number: P5501, date: 10.10.2018.
- 2. M. Pradeepa, PG Assistant in Physics, Govt Higher Secondary School, Theni, Register number: P5651, date: 03.01.2019.
- 3. S. Umadevi, PG Assistant in Physics, Govt Higher Secondary School, Dindigul, Register number: P5765, date 22.04.2019.
- 4. A. Ansar Ahamed, Assistant Professor of Physics, H.K.R.H. College (Autonomous), Uthamapalayam, Register number: P5466, date: 15.11.2019.