


Title	Dr.	Name	Ganpat Ahirwar	Photograph
Department	School of Studies in Physics, Vikram University, Ujjain			
Designation	Assistant Professor			
Address	F-2/18 Vikram University, Campus, Ujjain (M.P.)			
Phone- Office	-			
Residence	8435642546			
E-Mail	ganpat.physics@gmail.com			
Educational Qualifications				
Degree	Institution	Year		
Ph.D.	Dr. H. S. Gour University, Sagar (M.P.)	2006		
PG	Dr. H. S. Gour University, Sagar (M.P.)	2000		
UG	Dr. H. S. Gour University, Sagar (M.P.)	1998		
Other				
Career Profile				
Area of Interest/ Specialization				
Space Plasma Physics & Electronic circuit analysis and design				
Subjects Taught				
<ul style="list-style-type: none"> ▪ M. Sc. Physics (Ist IInd, IIIrd & IVth Sem.) , M. Phil (Physics) and Ph.D. Course work <p style="margin-left: 40px;">I thought the course like Plasma Physics, Quantum Physics, X-ray diffraction, absorption, Mathematical Physics, Electrical Engineering Fundamentals, Analysis and Design of Linear Circuits, Electronic circuit analysis and design, Digital Electronics, Physics of Semiconductor Devices.</p>				
Publication Profile				

Research Papers:

(A). Journal Papers:

International:

1. Study of electromagnetic ion-cyclotron instability in the presence of a parallel electric field with general loss-cone distribution function-Particle aspect analysis, **G. Ahirwar**, P. Varma and M. S. Tiwari, *Annales Geophysicae*, **24**, 1919-1930, **2006**.
ISSN: 0992-7689, Impact Factor- 1.648
2. Study of parallel electric field on Alfvén wave in thermal magnetoplasma, P. Varma, S. P. Mishra, **G. Ahirwar** and M. S. Tiwari, *Planet. Space Sci.*, **55**, 174-180, **2007**.
ISSN: 0032-0633, Impact Factor- 2.313
3. Beam effect on electromagnetic ion-cyclotron waves with general loss-cone distribution function in an anisotropic plasma-Particle aspect analysis, **G. Ahirwar**, P. Varma and M. S. Tiwari, *Annales Geophysicae*, **25**, 557-568, **2007**.
ISSN: 0992-7689, Impact Factor- 1.648
4. EMIC waves around the plasma-pause region, P. Varma, **G. Ahirwar** and M.S. Tiwari, *Planet. Space Sci.*, **56**, 1023-1029, **2008**. **ISSN: 0032-0633, Impact Factor- 2.313**
5. Effect of kappa distribution with general loss cone distribution function on EMIC waves in magneto-plasma. **G. Ahirwar**, *Int. J. Sci. Res. Pub.*, **2**, 1-5, **2012**.
ISSN: 2250-3153, Indexed
6. Effect of general loss-cone distribution on (EMEC) waves in Saturn's magnetosphere. **G. Ahirwar**, *Int. J. Eng. & Sci. Res.*, **4**, 1427-1431, **2012**.
ISSN: 2277-2685, Impact Factor- 0.2
7. Alfvén waves in the presence of parallel electric field in Saturn's magnetosphere- Particle aspect approach. **G. Ahirwar**, *Int. J. Sci. Res. Pub.*, **2**, 1-3, **2012**.
ISSN: 2250-3153, Indexed
8. Effect of general loss-cone with plasma densities on EMIC waves in multi-ions magnetospheric plasma. **G. Ahirwar**, and **Jivan Sharma**, *Int. J. Eng. Sci. Res.*, **03**, 882-887, **2012**.
ISSN: 2230-8504; e-ISSN: 2230-8512, Impact Factor- 2.
9. Maximum limit of rotational energy transfers in C2-He system and power gap law. **G. Ahirwar et. al.**, *IOSR Journals*, **Vol.3, Issue 3, Mar- Apr 2013**.

Nationals:

1. Study of electromagnetic ion-cyclotron wave with general loss-cone distribution function, **G. Ahirwar**, P. Varma and M. S. Tiwari, **Ind. J. Phys.**, **80**(12), 1179-1187, **2006**. **ISSN: 02529262, Impact Factor- 1.226**
2. Study of electromagnetic ion-cyclotron waves with general loss-cone distribution and multi-ions plasma-particle aspect approach, **G. Ahirwar**, P. Varma and M. S. Tiwari, **Ind. J. of pure & appli. Phys.**, **48**, 334-342, **2010**. **ISSN: 0975-7465, Impact Factor- 0.246**
3. Beam effect on EMIC waves in presence of parallel electric field with different plasma densities by Particle aspect approach **G. Ahirwar**, P. Varma and M. S. Tiwari, **Ind. J. of pure & appli. Phys.**, **49**,384-392, **2011**. **ISSN: 0975-7465, Impact Factor- 0.246**
4. Ion beam with general loss-cone distribution function on EMIC waves in multi-ions magnetospheric plasma. **G. Ahirwar**, **Res. J. Eng. Sci.**, **1**(5), **25-30**, **2012**. **ISSN: 2278-9472, Indexed**
5. Study on electromagnetic electron cyclotron (EMEC) waves around plasma-pause region. **G. Ahirwar**, **Res. J. Eng. Sci.**, **Vol. 1**(6), **1-4**, **2012**. **ISSN: 2278-9472, Indexed**
6. Rotational Energy Transfer in Molecular Collisions and Hard Ellipsoid Potential Model. Narendra K. Dabkara, Dharmendra S. Firozia and G. Ahirwar, **J. Pure Appl. & Ind. Phys.** **437-443**, **2012**. **ISSN: 2277-2502, Indexed**
7. Study on EMIC Waves in multi-ions around the Plasmopause Region, **G. Ahirwar** and J. Sharma, **Res. J. Physical Sci.**, **1**(3), **26-29**, **2013**. **ISSN 2320–4796, Indexed**
8. A Study on Structural and Optical Properties of $Mg_xZn_{1-x}O$ thin films using Pulsed Laser Deposition (PLD), Vishnu Prasad Ahirwar, and G. Ahirwar, **Res. J. Physical Sci.** **1**(4), **11-14**, **2013**. **ISSN 2320–4796, Indexed**
9. Electromagnetic ion-cyclotron waves in Saturn's magnetosphere. **G. Ahirwar**, **Res. J. Recent. Sci.**, **2**(5) **34-38**, **2013**. **ISSN: 2277-2502, Indexed**
10. **Maximum limit of rotational energy transfer on O_2 collision with He and hard ellipsoid**

potential model. Narendra K. Dabkara, Dharmendra S. Firozia and G. Ahirwar, **J. Pure Appl. & Ind. Phys.** 437-443, 2012. **ISSN: 2277-2502, Indexed**

(B). Conference Papers:

Nationals:

1. Alfvén waves in space plasma, J. Shrivastava, B. V. Tiwari, **G. Ahirwar** and M. S. Tiwari, National Science Day Celebrations, 28th Feb. 2003, New Frontiers of Science, Dr. H. S. Gour University Sagar (M. P.), 2003, India.
2. Effect of loss-cone distribution function on EMIC waves, **G. Ahirwar**, P. Varma and M.S. Tiwari, National Science Day Celebrations, 28th Feb. 2007, New Frontiers of Science, Dr. H. S. Gour University Sagar (M.P.), 2007, India.
3. Effect of thermal anisotropy on EMIC waves with general loss-cone distribution function- Particle Aspect Approach, **G. Ahirwar**, P. Varma * and M.S. Tiwari*, 22nd National Symposium on Plasma Science & Technology, Ahmedabad, Plasma-2007, India.
4. Study of electromagnetic ion cyclotron waves around the plasmopause region, **G. Ahirwar**, P. Varma and M.S. Tiwari, presented in 94th Indian Science Congress Association Earth System Science Division, P. 18, held at Annamalai University, Chidambaram, Jan., 3-7, 2007.
5. Effect of general loss-cone distribution function on electromagnetic ion cyclotron waves with multi-component plasma in auroral acceleration region by **G. Ahirwar**, P. Varma and M.S. Tiwari, presented in **15th National Space Science Symposium, (NSSS-08), Radio Astronomy Centre, NCRA-TIFR, Udhagamandalam (Ooty), PS 2-P156, Feb. 26-29, 2009.**

Books Published:

Authors name(s), Title of the book, name of the publisher, year

Research Guidance

Supervision of awarded Doctoral Thesis:

Scholar's name, year, Title of dissertation

Supervision of Doctoral Thesis, under progress:

1. **Theoretical study of rotationally inelastic collisions in molecular system** by Dharmendra Sing Firojia -2013. (Submitted)
2. **A study on electromagnetic ion cyclotron waves in multi-ions Saturn, magnetosphere plasma** by Jivan Sharma-2011. (Registered)

Supervision of M.Phil dissertations:

1. **A Study of EMIC Instability in Space Plasma**, by Ramda Kanesh, School of Studies in Physics, Vikram University, Ujjain M.P (2008-09).
2. **Effect of General Loss-Cone Distribution Function with Temperature Anisotropy on Electromagnetic Ion Cyclotron Waves**, by Anamika Sharma, School of Studies in Physics, Vikram University, Ujjain M.P (2009-10).
3. **Study of Kinetic Alfven Waves in Inhomogeneous Dusty Plasma**, by Mahesh Chandna, School of Studies in Physics, Vikram University, Ujjain M.P (2009-10).
4. **Environment Mediated Variation in the Intermediate Electronic Level of the Praseodymium III : A Possible Laser Probe**, by Shubha Mishra, School of Studies in Physics, Vikram University, Ujjain M.P (2009-10).
5. **A Study of Electromagnetic Ion Cyclotron Instability in Multi-Ions Magnetospheric Plasma**, by Jivan Sharma, School of Studies in Physics, Vikram University, Ujjain M.P (2010-11).
6. **A study of electromagnetic electron-cyclotron waves in saturn's magnetospheric plasma**, by Deepak Kaithwas, School of Studies in Physics, Vikram University, Ujjain (M.P.) (2011-12)
7. **Superconducting Tc and normal state resistivity of iron-based superconductor La [O_{1-x} Fx] FeAs**, by Dharmendra Mewada, School of Studies in Physics, Vikram University, Ujjain (M.P.) (2011-12)
8. **Studies on structural and optical properties of Mg_x Zn_{1-x} O thin films grown by pulsed laser deposition**, By Vishnu Ahirwar, School of Studies in Physics, Vikram University, Ujjain (M.P.) (2011-12)
9. **A study on electromagnetic ion-cyclotron waves by kappa distribution in magnetospheric plasma**, By Reena Sisodhiya, School of Studies in Physics, Vikram University, Ujjain (M.P.) (2011-12)

Conferences Organized

Organization of a Conference

**National Conference on Emerging Interfaces of Physics and Technology (EIPT-2011)
School of Studies in Physics, Vikram University, Ujjain (M.)**

Conferences / Seminars etc. Attended

1. **G.Ahirwar**, Participated in National Seminar on Change Image of Teaching and Madhya Pradesh Act-1973, Vikram University, Ujjain, 18 &19 Feb.-2012.
2. State level workshop “**Developmental Initiative and Role of Community Education**” (March,2008) held jointly by Vikram University, Ujjain and I.S.C.E., Ahemdabad.
3. **G. Ahirwar**, Participated in the Laboratory Workshop for PG Teachers Sponsored by IAPT and dedicated to late Prof. Babulal Saraf held at IPS Academy, Indore from 14th to 18th Dec., 2009.
4. Participated in **Orientation Programme** in UGC-Academic Staff College, Davi Ahilya University, Indore from 16/09/2010 to 14/10/2010.
5. Participated in **Refresher Programme** in UGC-Academic Staff College, Davi Ahilya University, Indore from 28/09/2011 to 18/10/2011.
6. Participated in Two Days National Workshop on General Poor Classes-Welfare and Empowerment, Vikram University, Ujjain, 22 &23 Dec.-2009.

Research Projects

Name of Project: Research project DST (SERC) New Delhi.
 (“Study of electromagnetic ion-cyclotron waves in multi-ions plasma”)
Position in Project: Ongoing research project.
Period: 3 Years (2012-2014)
Grant: 3,96,000/-

Fellowship Under My Supervision

A Study of EMIC Instability in Space Plasma, by Ramda Kanesh,
UGC-RGNF-2008.

A study of Alfven waves in multi-component plasma by Vishnu Prasad Ahirwar,
UGC-RGNF-2011.

Awards and Distinctions

Award- Research Associate, CSIR-2007(09/150/0094/2007/EMR-1)

Association with Professional Bodies

Committees and Boards

- Worked as a **Flying Squad** in Vikram University Examination 2008-2009.
- Worked as a **Team Manager** Yuva utsava, 2009, Vikram University, Ujjain.
- Worked as a **Flying Squad** in Vikram University Examination 2009-2010.
- Worked as a **P. I.** in Vikram University Examination 2009-2010.
- Member of M. Phil committee in S.S. in Physics, Vikram University, Ujjain.
- Member of student election committee in S.S. in Physics, Vikram University, Ujjain.
- Worked as a **P. I.** in Vikram University Examination 2010-2011.
- Worked as a **P. I.** in Vikram University Semester Examination 2011.
- Member of M. Phil admission committee in S.S. in Physics, Vikram University, Ujjain, 2011.
- Co-ordinator of Anti Ragging committee in S.S. in Physics, Vikram University, Ujjain, 2011-12.
- Worked as a **A.S.** in Vikram University, MBA Semester Examination 2011-12.
- Worked as a **In charge Student Union** in Vikram University 2011-12.
- Worked as a **A.S.** in Vikram University, Semester Examination 2011-12.
- Member of **Flying Squad** in Vikram University Examination 2011-2012.
- **Co-ordinator of central valuation**, Vikram University, Ujjain, 2011-12.
- **Assistant Procter**, Vikram University, Ujjain, 2012-13.
- **Co-ordinator** of Anti Ragging committee in S.S. in Physics, Vikram University, Ujjain, 2012-13.
- Worked as a **S.S.** in Vikram University, Semester Examination 2012-13.
- **Chairman** of M.Sc. / M. Phil admission committee in S.S. in Physics, Vikram University, Ujjain, 2012-13.
- **Chairman** of M.Sc. / M. Phil admission committee in S.S. in Physics, Vikram University, Ujjain, 2013-14.
- **Co-ordinator of central valuation**, Vikram University, Ujjain, 2013-14.
- **Secretary** of Teachers Association in Vikram University, Ujjain, 2013-14.

Memberships

- Life Membership of PSSI.
- Member of Teachers Association in Vikram University, Ujjain.
- Member of IAPT.

Other Activities

Popular Article

- Study of electromagnetic ion-cyclotron instability in the presence of a parallel electric field with general loss-cone distribution function-Particle aspect analysis, **G. Ahirwar**, P. Varma and M. S. Tiwari, *Annales Geophysicae*, **24**, 1919-1930, **2006**.
ISSN: 0992-7689, Impact Factor- 1.648
- Study of parallel electric field on Alfvén wave in thermal magnetoplasma, P. Varma, S. P. Mishra, **G. Ahirwar** and M. S. Tiwari, *Planet. Space Sci.*, **55**, 174-180, **2007**.
ISSN: 0032-0633, Impact Factor- 2.313
- Beam effect on electromagnetic ion-cyclotron waves with general loss-cone distribution function in an anisotropic plasma-Particle aspect analysis, **G. Ahirwar**, P. Varma and M. S. Tiwari, *Annales Geophysicae*, **25**, 557-568, **2007**.
ISSN: 0992-7689, Impact Factor- 1.648
- EMIC waves around the plasma-pause region, P. Varma, **G. Ahirwar** and M.S. Tiwari, *Planet. Space Sci.*, **56**, 1023-1029, **2008**. **ISSN: 0032-0633, Impact Factor- 2.313**