



Prof Dr Ghanshyam

E-mail: ghanshyam123@gmail.com

Profile URL :

<https://vidwan.inflibnet.ac.in/profile/136638>

Orcid Id: 0000-0002-4585-9121

Phone: , 919431094733

Address: BIT Sindri ,Jharkhand,India - 828123

Expertise

Energy and Fuels

Self focusing and filamentation of electromagnetic waves and their consequences in plasmas.Laser Plasmas Interaction. Radio wave heating of ionosphere, parametric instability. Space Physics.Engineering Physics.Laser and nonlinear Optics

Work experience

1. Birsa Institute of Technology, Sindri 2019 — Present

Professor and Dean
Jharkhand

2. Birsa Institute of Technology, Sindri 2016 — Present

Training and Placement Officer
Jharkhand

3. Birsa Institute of Technology, Sindri 2010 — Present

Professor
Jharkhand

4. Birsa Institute of Technology, Sindri 2007 — 2010

Associate Professor
Jharkhand

5. Birsa Institute of Technology, Sindri 2004 — 2007

Assistant Professor

Jharkhand

6. Birsa Institute of Technology, Sindri 1999 — 2004

Senior Lecturer
Jharkhand

7. Birsa Institute of Technology, Sindri 1997 — 1999

Lecturer
Jharkhand

8. ANS College Barh, Magadh University 1996 — 1997

Lecturer
Patna

9. KNPG Government College Gyanpur 1995 — 1996

Lecturer
Bhadohi

10. Indian Institute of Technology Delhi 1993 — 1994

Senior Research Analyst
South West Delhi

11. Indian Institute of Technology Delhi 1992 — 1992

Senior Scientific Officer
South West Delhi

12. Indian Institute of Technology Delhi 1992 — 1993

Senior Scientific Officer
South West Delhi

13. Indian Institute of Technology Delhi 1989 — 1992

Senior Research Fellow
South West Delhi

14. Indian Institute of Technology Delhi 1987 — 1989

Junior Research Fellow
South West Delhi

Education

PhD - 1994

Indian Institute of Technology Delhi

2. Pre PhD - 1988

Indian Institute of Technology, Delhi

3. MSc - 1987

University of Delhi

4. BSc - 1984

St Xavier's College

5. I Sc - 1982

St Xavier's College Ranchi

Honours and Awards

1. CERTIFICATE OF RECOGNITION This certificate of recognition is awarded to Dr Ghanshyam of BIT Sindri by The Academic Council of uLektzas one of the Top 50 Training and Placement Officers in Higher Education Across India for the year 2019 - 2020

Academic Council of uLektzas

2. Internshala Award - 2019

AICTE and Internshala

3. Internshala Jharkhand Notable Award - 2018

AICTE INTERNSHALA

4. Chief Editor of Journal of Natural Science Today, BCARD, India - 2013

BCARD

5. Second prize in paper presentation by Ghanshyam in National seminar on Recent advances in materials' sciences (RAMS-08), 15-17 February, 2008, ISMU, Dhanbad. - 2008

1. ISM

6. **Senior Research Fellow - 1989**

MHRD Govt of India

7. **JRF - 1988**

UGC

8. **First prize of Hindi debate competition held on December 20, 1988 at the Hindu College (University of Delhi) Festival, Delhi. - 1988**

Hindu College (University of Delhi) Festival, Delhi.

9. **First prize for Hindi creative writing competition held on December 2, 1985 at the Hindu College festival, University of Delhi. - 1988**

Hindu College festival, University of Delhi.

10. **Certificate of Merit for standing second in Hindi creative writing during Rendezvous 88, IIITD, New Delhi. - 1988**

IIITD, New Delhi.

11. **Qualified GATE- 1987 - 1987**

MHRD Govt Of India

12. **National Scholarship - 1980**

Ranchi University

13. **State merit scholarship - 1976**

Govt of Bihar

Publication

1. **HOLOGRAPHY AND HOLOGRAPHIC OPTICAL ELEMENTS 1 2 H.L.Yadav and Ghanshyam Photonics Laboratory, Department of Physics 1National Institute of Technology Jamshedpur 2Department of physics, BIT Sindri, Jharkhand**

Ghanshyam and HK Yadav
RAPS 2018, Volume , Year 2018, Pages

2. **Social Entrepreneurship: A Step towards Sustainability**

Annupteeti and Dr Ghanshyam
ijarcsms, Volume 2, Year 2014, Pages 210-2016

3. **Filamentation of a uniform laser beam propagating in a homogeneous collisional Plasma including the effect of thermal conduction, ,**

3(1)pp94-99(2013),ISSN 2277-2669.

Ghanshyam

Sci. Revs. Chem. Commun, Volume 3, Year 2013, Pages 94

4. Frequency Control of Smart Grid- A MATLAB/SIMULINK Approach

Vikash kumar,Dr Pankaj Rai and Dr Ghanshyam

IJERT, Volume 2(10), Year 2013, Pages 1351-1357

5. Automatic Generation Control: - A Fuzzy Logic Approach Approach

Alok Kumar,Dr Pankaj Rai and Dr Ghanshyam

International Journal of Engineering and Technical Research , Volume 2(10), Year 2013, Pages 2924-2928

6. Parametric decay of a Gaussian laser beam into two localized Langmuir eigenmodes in the plasma channel induced by laser pump including relativistic effect

Ghanshyam and V K Tripathi

INTERNATIONAL JOURNAL OF ADVANCED SCIENTIFIC RESEARCH AND TECHNOLOGY, Volume 04, Year 2012, Pages 106

7. Simulated Raman scattering instability of laser beam in a plasma channel

Ghanshyam

INDIAN JOURNAL OF PHYSICS, Volume 86, Year 2012, Pages 731--738

8. Self-focusing and Growth of spike on a radio wave in an underdense ionosphere, INCO -2012, Ghanshyam in National seminar on Indian nuclear power program: Challenges and opportunities, April14-15, 2012, Venue: BIT Sindri.

Ghanshyam

Proceeding, Volume , Year 2012, Pages

9. Two Plasmon decay of self-trapped laser radiation in relativistic plasma, INCO – 2012,presented by Ghanshyam in National seminar on Indian nuclear power program: Challenges and opportunities,April14-15,2012, Venue: BIT Sindri.

Ghanshyam

Proceeding, Volume , Year 2012, Pages

10. Self-focusing and growth of a spike on a radio waves in an underdense ionosphere,.IJEST,4(4)pp1538-1543(2012),ISSN No.0975-5462.

R K Verma and Ghanshyam

IJEST, Volume , Year 2012, Pages

11. A mathematical modeling self-Focusing of Langmuir waves in relativistic plasma

R K Verma and Ghanshyam

J. Chem. Pharm. Res., Volume 2, Year 2010, Pages 209

12. Mathematical modeling of SRS instability of laser beam propagating

through collisional plasma in a self- focused filament by Ghanshyam in Recent Trends In Emerging Frontiers Of Physical Sciences, (RTEFPS-2009)November 02-03, 2009, VENUE: B.I.T. SINDRI.

Ghanshyam

Proceeding, Volume , Year 2009, Pages

13. Self- focusing of Laser beams in plasmas including the effect of arbitrary relativistic nonlinearity,

Ghanshyam ,Pankaj Rai and R K verma,

Ghanshyam ,Pankaj Rai and R K verma,, Volume 1, Year 2009, Pages 39

14. Interaction of Laser with kidney and gallstones and application of plasma physics by Ghanshyam in National seminar on Environmental issue on Geotechnics and Mineral Industries from 4-5 April 2008, BIT Sindri, Dhanbad. Ghanshyam Volume , Year 2008, Pages

Ghanshyam

chapter in book Excell Publisher , Volume , Year 2008, Pages

15. Growth of a spike on a whistler wave in magnetized homogeneous plasma

No, Ghanshyam

Conference, Volume 37, Year 2008, Pages 2241

16. Self-focusing of laser beams in the paraxial ray approximation in collisional inhomogeneous plasma for arbitrary large magnitude of nonlinearity 6 (2), pp1021-1031 (2008).ISSN: 0972-768X

Ghanshyam, and R. K. Verma,

Int.J.of Chem.Sci., Volume 6, Year 2008, Pages 1021

17. Steady state self-focusing of Gaussian rippled laser beams in plasmas: Relativistic nonlinearity, 6 (3), pp1562-1570(2008), ISSN: 0972-768X

Ghanshyam, and R. K. Verma, Narayan Kumar,S K jayaswal and Bhrigunandan pd. singh

Int.J.of Chem.Sci., Volume 6, Year 2008, Pages 1562

18. Mathematical Modeling of Self focusing of electromagnetic waves in an Inhomogeneous Plasmas with Arbitrary Large Magnitude of Ponderomotive Nonlinearity, ,,2(1-2),pp79-89,(2008),ISSN: 0973-5240

B P Singh, S K Jayaswal,P, P. Kumari, R. K. Verma, Ghanshyam and P.Rai

P A J M, Volume 2, Year 2008, Pages 79

19. A mathematical modeling on self focusing of Langmuir waves in a relativistic plasma including the effect of landau damping, by Ghanshyam in International symposium on recent advances in mathematics and its applications (ISRAMA)-2006, December 16-18, 2006, Kolkata.

Ghanshyam

Proceeding, Volume , Year 2006, Pages

20. A mathematical modeling on filamentation instability of laser beam in inhomogeneous plasma with exponential density by Ghanshyam in 50th Congress of the Indian Society of Theoretical and Applied Mechanics (An

International Meet) Dec. 14 – 17, 2005, I.I.T. Kharagpur.

Ghanshyam

Proceeding, Volume , Year 2005, Pages

21. Stimulated Raman scattering instability of laser beam propagating through collisional plasma in a self-focused filament,

Ghanshyam and V. K. Tripathi

Stimulated Raman scattering instability of laser beam propagating through collis Indian J. Phys. , Volume 79, Year 2005, Pages 515

22. A mathematical modeling on self-focusing of electromagnetic wave in an inhomogeneous collisional plasma, : pp63-66(2005), ISSN: 0972-6101

Ghanshyam, A. P. Burnwal and R. K. Verma,

J. Curr. Sci 7(1), Volume 7(1), Year 2005, Pages 63

23. Filamentation instability of electromagnetic beams in inhomogeneous collisional plasma: Effect of thermal conduction, , 7(1), pp183-186(2005), ISSN: 0972-6101

Ghanshyam, Arun Prasad Burnwal and S. Kumar

J. Curr Sci., Volume 7, Year 2005, Pages 183

24. Filamentation instability of an electromagnetic waves in an expanding homogeneous plasmas

Ghanshyam, A. P. Burnwal and P. Rai

Indian J. Phys, Volume 79, Year 2005, Pages 1211

25. Filamentation instability of an electromagnetic wave in flowing magnetized homogeneous plasma

Ghanshyam, R and Tripathi, VK and Burnwal, AP and Jayaswal, SK

Physics of plasmas, Volume 12, Year 2005, Pages 052312

26. Stimulated Raman scattering instability of laser beam propagating through a collisional plasma in a self-focused filament

Ghanshyam and Tripathi, VK

Conference, Volume 79, Year 2005, Pages 515--521

27. Filamentation Instability of Electromagnetic Waves in an Expanding Homogenous Plasmas

Burnwal, AP and Rai, Pankaj

Indian Journal of Physics, Year 2005

28. Steady state self-focusing of laser beam in dielectric with saturating: arbitrary nonlinearity, by Ghanshyam in Recent trends in materials science – 2004 (National Symposium in Condensed Matter Physics), March 29 – 30, 2004, University of Department of Physics, T. M. Bhagalpur University, Bhagalpur – 812007.

Ghanshyam

Proceeding, Volume , Year 2004, Pages

29. Magnetic field generation by ion acoustic waves in an inhomogeneous plasma with temperature gradient
Tripathi, VK and others
, Year 2004
30. Self-focusing of electromagnetic waves in collisional plasmas
Singh, MN and Mishra, R and others
Indian Journal of Physics, Volume 76, Year 2002, Pages 53--57
31. Transverse self-focusing and filamentation of a laser beam in a collisional magnetoplasma
Sharma, AK
Indian Journal of Physics, Year 2002
32. Transverse relativistic self focusing of intense electromagnetic beams in magneto plasma by Ghanshyam in 15th National symposium on plasma science and technology (Plasma - 2000), Saha Institute of Nuclear Physics, Calcutta.
Ghanshyam
Proceeding, Volume , Year 2000, Pages
33. Effect of absorption on the transverse self focusing and filamentation of a laser beam in a magneto plasma, by Ghanshyam in 15th National symposium on plasma science and technology (Plasma - 2000), Saha Institute of Nuclear Physics, Calcutta.
Ghanshyam
Proceeding, Volume , Year 2000, Pages
34. Steady state thermal focusing of Gaussian laser beam in dielectric
Ghanshyam
Indian J. Phys., Volume 74(A), Year 2000, Pages 411
35. Transient setting of the ponderomotive nonlinearity and plasma wave excitation, cp/ii/7 by Ghanshyam in National seminar on X-ray, laser, optic-acoustic and electrical studies of solids including minerals and coal, March, 25 - 26 (1998), ISM, Dhanbad in collaboration with SNBNC, Calcutta - 700091.
Ghanshyam
Proceeding, Volume , Year 1998, Pages
36. Effect of absorption on the cross focusing of two coaxial laser beams in collisional plasma, by Ghanshyam in 14th National symposium on plasma science and technology (Plasma-99), December 21 - 24 (1999), Department of Physics, Guru Nanak Dev University, Amritsar - 143005.
Ghanshyam
Proceeding, Volume , Year 1998, Pages
37. Thermal self focusing of laser beam in dielectric, by Ghanshyam in Condensed matter days - 98, August 27 - 29, 1998, T. M. Bhagalpur University, Bhagalpur.

Ghanshyam

Proceeding, Volume , Year 1998, Pages

38. Growth of a Gaussian ripple on a uniform laser beam in a magneto plasma, cp/ii/6 by Ghanshyam in National seminar on X-ray, laser, optic-acoustic and electrical studies of solids including minerals and coal, March, 25 – 26 (1998), ISM, Dhanbad in collaboration with SNBNC, Calcutta – 700091.

Ghanshyam

Proceeding, Volume , Year 1998, Pages

39. Self focusing of a laser beam in inhomogeneous plasma: effect of nonlinear absorption. by Ghanshyam in XIIth National symposium on plasma science and technology, December 2-5, 1997, Institute for plasma research (IPR) Bhat, Gandhinagar.

Ghanshyam

Proceeding, Volume , Year 1997, Pages

40. Plasma-aided radiation guiding in a free-electron laser

R.N. Agarwal ,Ghanshyam ,V.K. Tripathi and P.C. Agarwal

IEEE Transactions on Plasma Science 24(4), Volume 24(4), Year 1996, Pages 1197 - 1201

41. Stimulated Raman scattering of an electromagnetic in a filament including the effect of ponderomotive nonlinearity, by Ghanshyam in 10th symposium on plasma science and technology 16 – 19th October, 1995, B.H.U., Varanasi.

Ghanshyam

Proceeding, Volume , Year 1995, Pages

42. Growth of a spike on a laser beam in a collisional plasma including the effect of saturating nonlinearity, S 86 by Ghanshyam in Uttar Pradesh college academic society, 6th symposium July 7 – 8, 1995, Gyanpur, U.P.

Ghanshyam

Proceeding, Volume , Year 1995, Pages

43. Growth of a spike on a Gaussian radio wave in the lower ionosphere

Pandey, HD and Tripathi, Ghanshyam and Tripathi, VK

Journal of Geophysical Research: Space Physics, Volume 99, Year 1994, Pages 6167--6172

44. Self-focusing and filamentation of laser beams in collisional plasmas with finite thermal conduction

Ghanshyam and Tripathi, VK

Journal of plasma physics, Volume 49, Year 1993, Pages 243--253

45. Filamentation instability of an electromagnetic wave in an expanding plasma

Ghanshyam and Tripathi, VK

Journal of applied physics, Volume 72, Year 1992, Pages 2149--2151

46. Filamentation Instability of electromagnetic wave in expanding plasma by

Ghanshyam in International conference on plasma physics, November 1989, New Delhi, (November 22 - 28, 1989).

Ghanshyam and V K Tripathi

Proceeding, Volume , Year 1989, Pages