



ऐसे जे ज्ञान । पवित्रिक निधान ।  
जेथ विटाळले मन । चोख कीजे ।।

*Adarsh Education Society's*  
**Arts, Commerce and Science College,**  
**Hingoli**

**Bio-Data and Work Profile**

1. Name in full :HATKAR SACHIN PRALHADRAO  
(Starting with surname)
  2. Date of Birth :03 March 1979
  3. Nationality :Indian
  4. State :Maharashtra
  5. Mother Tongue :Marathi
  6. Caste & Category :Sc(Boudh)
  7. Languages Known :Marathi, Hindi, English
  8. Qualification : M.Sc.,B.Ed.,M.Phil.,Ph.D.
  9. Date of Appointment :01 April 2005.
  10. Pay Band/ AGP : Pay Band :15600-39100(Basic pay Rs.84800)  
AGP:7000/-
  11. Designation : Assistant professor
  12. Specialization : Gravitation and Cosmology
  13. Name of the Department : Mathematics
  14. Experience :
- |                   | Junior | UG | PG |
|-------------------|--------|----|----|
| a) Teaching       |        | 16 |    |
| b) Administration |        |    |    |
| c) Research       |        | 6  |    |

15. Blood Group : B+

16. Residential Address : \_Prabha Nivas, Plot No.4-1307, Bhagya Nagar  
(Vivekanand Nagar) Hingoli

17. Contact No. : Mobile No. 09403061949., 08805499012

18. E-mail – ID : schnhatkar@gmail.com

19. Details of Academic Qualification:

Examination	Name of the Board / University	Year of Passing	Percentage of marks obtained	Division / Class / Grade	Subjects/Title
High School / S.S.C.	Aurangabad	1994	63.42%	I <sup>st</sup> class	Eng., Marathi, Hindi, Mathematics, Science, Social Science,
Intermediate H.S.C.	Aurangabad	1997	47.83%	II <sup>nd</sup> Class	Phy, Chem, Bio, Maths
B.Sc.	SRTMU NANDED	2000	54.04%	II <sup>nd</sup> Class	Phy, Chem, Maths.
M.Sc.	SRTMU NANDED	2004	69.40%	I <sup>st</sup> class	Mathematics
B.Ed.	Shivaji University, Kolhapur	2002	60.	Ist Class	Mathematics, Science
M. Phil.	Alagappa University Karaikudi	2008	72.00%	I <sup>st</sup> class	Mathematics
Ph. D.	SGBAU Amravati	2017	-	-	Unified description of cosmological models in theories of gravitation

20) Academic Activities: Give details of (P.G. Teacher / Ph.D. Guide / Resource Person / Subject Expert, any other)

**P.G. Teacher**

**A) Research Papers Published in Journals / Conference Proceedings with  
ISBN or ISSN No**

<b>Sr. No.</b>	<b>Title of Research Article</b>	<b>Publication Details Name of Journal / Conference /Seminar / Vol No. / Issue No. / Duration / Place &amp; Year</b>	<b>ISSN / ISBN</b>	<b>J/C/S</b>	<b>Impact Factor / UGC approved No.</b>
<b>01</b>	Quark matter coupled to domain walls in Bianchi type II,VIII and IX universe	Pramana J.Physics Vol.83,No.4,619-630,2014	ISSN- 03044 289	<b>J</b>	<b>0.9</b>
<b>02</b>	Homogeneous hypersurface space time with anisotropic dark energy in Brans-Dicke theory of gravitation	Communication in Theor.Physics Vol.62, No.5,768-774,2014	ISSN0253- 6102	<b>J</b>	<b>0.95</b>
<b>03</b>	Unified Description of Bianchi type I in $f(R)$ gravity	Foundation of physics 45(4),409-427,2016	ISSN0015- 9018	<b>J</b>	1.018
<b>04</b>	Domain wall cosmological models with deceleration parameter in modified theory of gravitation	Chinese journal of physics 54 (4),563-573,2016	ISSN0577- 9073	<b>J</b>	0.514
<b>05</b>	Hypersurface homogeneous cosmological models in modified theory of gravitation	Astrophysics Journal 59(4),525-539,2016	ISSN0571- 7256	<b>J</b>	0.55
<b>06</b>	Domain walls in $f(R,T)$ theory of gravitation	International J. Theor.Physics 54(10),3654-3664,2015	ISSN0020- 7748	<b>J</b>	1.086

07	Stability of strange quark matter cosmology in modified theory of gravitation	Pre-space time journal of physics 8(2),2017	ISSN:2153-8301	J	-
08	Some special solutions in Bianchi type VI0 cosmological models with modified chaplygin gas in general relativity	International journal of modern physics D.Vol.24 No.2,1550017,2015	ISSN0218-2718	J	2.476
09	Kaluza Klein universe with magnetized anisotropic dark energy in general relativity and Lyra manifold	New Astronomy Vol.34,172-177,2015	ISSN1384-1076	J	0.938
10	Strange quark matter coupled to string cloud in Lyra geometry	Astrophysics Space Sci. 357,55,2015	ISSN 0004-640X	J	1.622
11	Magnetized anisotropic dark energy cosmological models in scale covariant theory of gravitation	International J. modern physics D Vol.23No.7,1450064,2014	ISSN0218-2718	J	2.476
12	Two fluid cosmological models in $f(R)$ theory of gravitation	Indian journal of physics 90(2),243-252,2016.	ISSN0973-1458	J	0.988
13	Bianchi type III and Kantowski-Sachs Cosmological models in $f(R, T)$ theory of gravitation	Progress of Theoretical and Experimental physics 033E01,2016	ISSN0033-068X	J	2.294

14	Cosmology of string bulk viscosity in $f(G)$ theory of gravitation	International Journal of Geometric Methods in Modern Physics Vol. 15, No. 7 (2018) 1850116 (12 pages)	ISSN0219-8878	J	
15	Anisotropic bulk viscous string cosmological models with heat flux	<i>Journal for Foundations and Applications of Physics</i> , vol. 5, No. 2 (2018)	ISSN 2394-3688 92	J	–
16	Magnetized Anisotropic Dark Energy with Specific Expansion	Prespacetime Journal March 2016   Volume 7   Issue 3   pp. 467-484	ISSN: 2153-8301	J	-
17	Bianchi type VIII cosmological model with perfect fluid in $f(R, T)$ theory of gravitation	International Journal of Mathematical Archive-4(11), 2013, 1-5	ISSN 2229 – 5046	J	-
18	Decelerating and accelerating Bianchi type–VI0 vacuum universe in $f(R)$ gravity	International Journal of Mathematical Archive-4(9), 2013, 52-60	ISSN 2229 – 5046	J	-
19	Bianchi Type-IX Universe with Perfect Fluid in $f(R, T)$ Modified Theory of Gravitation	Prespacetime Journal November 2013   Volume 4   Issue 10   pp. 959-965	ISSN: 2153-8301	J	-
20	Bianchi type II universe with binary mixture of perfect fluid and Dark energy in $f(R, T)$ theory of gravitation	Multilogic in Science Vol II, Issue VII Jan 2014	ISSN 2277-7601	J	-
21	Bianchi type III cosmological model with bulk viscosity and heat flux in $f(R, T)$ modified theory of gravitation	Bul.J.phys. 46,107-116,2019	ISSN1314-2666	J	
22	Dark energy Scenario in metric $f(R)$ formalism	Foundation of physics 49,3,2019	ISSN0015-9018	J	1.018
23	Magnetized anisotropic dark energy models in $f(R)$ theory	Indian Journal of phys and application Vol.4no01,45-60,2019.	ISBN2347-3991	J	
24	Magnetized anisotropic dark energy in the spherically symmetric space time admitting conformal motion	Prespace time journal Vol.10,issue 1,78-89,2019	ISSN: 2153-8301	J	

25	Zero mass scalar field with homogeneous hypersurface space time in $f(R,T)$ theory of gravitation	Review of Research Vol.1,iss.02,2019	ISSN2249-894X	J	
26	Kasner type magnetized string cosmological models in $f(R, T)$ gravity	Serbian Astronomical Journal 197,1-11,2018	ISSN1820-9289	J	
27	Hypersurface homogeneous cosmological model in scale invariant theory	Jamal Academic research journal an interdisciplinary 176-179,2015	ISSN0973-0303	J	
28	Viscous holographic dark energy in Brans-Dicke theory of gravitation	Astrophysics space science Vol.3657,2020	ISSN 0004-640X	J	1.622
29	Anisotropic hypersurface homogeneous with bulk viscosity in $f(R)$ gravity	International journal of Mathematical sciences and engineering applications. Vol.7no.IV,391-402,2013	ISSN 0973-9424	J	
30	Bianchi type II universe with perfect fluid in $f(R,T)$ modified theory of gravitation	Prespace time J. Vol.4 Issue 10,959-965,2013	ISSN: 2153-8301	J	-
31	FRW domain wall in modified $f(G)$ theory of gravitation	Astrophysics.J. Vol.64, Issue 1,2021	ISSN0571-7256	J	
32	Bianchi type I cosmological model with perfect fluid and string in $f(T)$ theory of gravitation	International J. Mod. Phys.D. 2050054,2020	ISSN0218-2718	J	
33	Bianchi I quark and strange quark cosmological models in $f(G)$ theory of gravitation.	Bul.J.Phys. 46,59-74,2020.	1310-0157	J	
34	Variable relation between string densities	New Astronomy 85,101562,2021	ISSN1384-1076	J	
35	Viscous modified Chaplygin gas in Theories of gravitation	Physics AUC 30,97-106,2020	1223-6039	J	
36	Bulk viscous with zero mass scalar field and magnetism in $f(R, T)$ gravity	Prespacetime Joun. 12,3,263-275,2021	ISSN: 2153-8301	J	
37	Kaluza-Klein cosmological models with polytropic equation of state	Prespacetime J. Vol.11 issue 1,17-26,2020	ISSN: 2153-8301		

**D) Details of Participation / Presentation of paper in the Seminars/Conferences / Symposia / Workshop**

Sr. No.	Name of Event	Level	Organizing Agency Date & Place	Attended/ Presented / Resource	Title of Paper
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				Person	
01	Conference	International	IMS & SRTMU NANDED December 27- 30,2011	Presented	Bianchi type VI cosmological models with modified chaplygin gas
02	Conference	National	GSG College Umerkhed Semptember 21,2013	Presented	Bibary mixture of perfect fluid and dark energy in Bianchi type IX universe
03	Conference	National	GSG College Umerkhed Semptember 21,2013	Presented	Study of cosmological models in $f(R)$ theory of gravitation
04	Conference	International	Science college Nagpure December,28- 31,2012	Presented	Anisotropic Homogeneous hypersurface with bulk viscosity in $f(R)$ gravity
05	Conference	International	Khalsa College Patiala March 19-21,2015	Presented	Stability of Bulk Viscous string cosmological models with heat flux in self creation theory of gravitation
06	Conference	National	MIT Engineering college Alandi Pune June 5&6,2014	Presented	Magnetized anisotropic dark energy energy admitting conformal motion
07	Conference	International	Bapurao Deshmukh College of Eng.Sevagram April 16,2016	Presented	Stability of strange quark matter cosmology in modified theory of gravitation
08	Conference	International	Dept of Math. SGBAU Amravati Nov.25-28,2015	Presented	Domain Walls cosmological models with Deceleration Parameter in Modified theory of gravitation
09	Conference	National	Mungasaji Maharaj Mahavidyalaya Darwha September 12- 13,2015	Presented	Bianchi type III and Kantowski Sachs domain walls cosmological models in $f(R,T)$ theory of gravitation
10	Conference	National	Mungasaji Maharaj Mahavidyalaya Darwha September 12- 13,2015	Presented	Two Fluid cosmological models in Scale covariant theory of gravitation
11	Conference	National	Sant Gadge Baba Amravati University June 17-18,2016	Presented	Bianchi type III holographic dark energy cosmological model in Brans Dicke theory of gravitation

12	Conference	International	Dayanand Science college, Latur March 5-9,2017	Presented	Cosmological consequences of magnetized string in Kasner Universe
13	Conference	International	Osmania University Hyderabad July 14-16,2017	Presented	Cosmological consequences of cosmic string in $f(T)$ theory of gravitation
14	Conference	International	Innani mahavidyalaya Karanja March 22-23,2018	Presented	Bianchi type I quark and strange quark cosmological models in $f(G)$ theory of gravitation
15	Conference	International	Dr.Babasaheb Ambedkar Marathwada University December,9-11,2017	Presented	Cosmology of string bulk viscosity in $f(G)$ theory of gravitation
16	Conference	National	MIT Engineering college Alandi Pune June 6&7,2013	Presented	Dynamics of Bianchi type II, VIII and IX universe
17	Conference	International	Andhra University Visakhapatnam Feb28-March 1,2019	Presented	Dark energy scenario in metric $f(R)$ formalism
18	Conference	International	RSTMUniversity Nagpur January 20-23,2014	Presented	Reconstruction of FRW cosmological models in $f(R,T)$ theory of gravitation
19	conference	International	RSTMUniversity Nagpur ICAPCM-2020 Feb,13-16,2020	Presented	FRW domain walls in modified $f(G)$ theory of gravitation
20	conference	State	GDM,Arts, KRN Commerce and MD Science college Jamner Decemb.16-17,2013	Presented	Bianchi type-II cosmological model with magnetized anisotropic dark energy.
21	Conference	National	Jalana Education Society's Science college Jalana January 10-12,2011	Attended	-
22	Conference	International	Coniaps XIII June 14-16,2011	Attended	-
23	Workshop	State	Shri Havagiswami College, Udgir, March 10-11,2012	Attended	-

24	Workshop	University	Sant Gadge Baba Amravati University March-06,2011	Attended	
25	Workshop	University	Sant Gadge Baba Amravati University January 10-11,2015	Attended	
26	Seminar	University	Mungasaji Maharaj Mahavidyalaya Darwa Feb,16,2014.	Participation	
27	Workshop	University	Bahirji Smarak Mahavidyalaya August 04,2017	Attended	
28	Workshop	University	Digambarrao Bindu Arts, Commerce & Science College Bhokar August 1,2019	Attended	
29	Workshop	University	Adarsh Education Society's Arst,Commerce & Science college,Hingoli Dec.27-28,2010	Attended	
30	Conference	National	Department of Mathematics, IQAC, Sant Gadge Baba Amravati University and R.D.I.K & K. D. College, Badnera-Amravati 27/03/2021	Presented	Viscous chaplygin gas In theories of gravitation
31	Conference	National	Shri Datta Arts, Commerce and Science college 12/5/2021	Presented	Repercussion of parameterization on domain walls in modified theory of gravitation
32	conference	International	Department of Math. BITS-Pilani Hyderabad March 9-11,2021	participated	-

33	conference	National	Indira Gandhi Kalay Mahavidyalay Ralegaon 28 <sup>th</sup> Sept 2021	Presented	Decelerating Kasner type Bianchi I viscous cosmological models in $f(R,T)$ theory
34	Conference	International	Department of Mathematics, BITS-Pilani, Hyderabad Campus Oct 26-28,2021	Presented	Electromagnetized Modified Chaplygin Gas in Bianchi type IX Universe”

**B) Details: Chapters in book /Editor / Author / Co- Author: -**

Sr.No.	Title	authors	Publication
01	Accelerating Bianchi type II, VIII & IX cosmological model in $f(R)$ gravity	M.M.Sancheti S.P.Hatkar	Proceedings of International Conference of ‘Benchmarks in Engineering Science and Technology’(IC-BEST) 7-8 September 2012 ISBN 978-81-923623-0-4
02	Magnetized variable modified chaplygin gas in $f(R)$ theory of gravitation	S.D.Katore, R.J.Baxi, M.M.Sancheti, S.P.Hatkar	Proceedings of Einstein foundation International ISBN 978-81-88763-62-7 vol.12,2013
03	<b>Introduction to Linear Algebra</b>	S.P.Hatkar	Zorba Book Pvt. Ltd. ISBN-9789390011407

**C) Guest Lecture delivered / Invited lecture :-**

Sr.No.	Workshop/sem/conf.	level	details
01	workshop	state	Sant Gadge baba Amravati University
02	seminar	college	Narayanrao Waghmare College Akhada Balapur

03	Guest lecture	College	Yashwantrao Chavan College Mangrulpir
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**21) Membership of Academic / Research Bodies / Journal etc.**

i) Member of Board of Studies, SRTMU Nanded

**22) Details of FIP/ Orientation/Refresher/Short Term Course /Summer & Winter Schools attended by the faculty**

<b>Sr. No.</b>	<b>Event FIP /OP / RC / STC /SS / WS</b>	<b>Duration</b>	<b>Organizing Agency</b>
01	OP	03 – 31 Jan 2013	UGC HRDC Amaravati
02	RC	01-21 Oct 2015	UGC HRDC Nagpur
03	RC	08-28 June 2017	UGC HRDC Indor
04	STC	June 2018	UGC HRDC Jaipur
05	STC	June 2019	UGC HRDC Rajkot
06	STC	28 May to 3 <sup>rd</sup> June 2020	UGC HRDC Ahmedabad
07	FDP	27 <sup>th</sup> April to 2 <sup>nd</sup> May 2020	SRTMU Nanded
08	FDP	11 <sup>th</sup> to 13 <sup>th</sup> May 2020	Toshniwal college Sengaon
09	STC	7 <sup>th</sup> Dec. to 13 <sup>th</sup> Dec.2020	UGC HRDC Ahmedabad
10	FDP	22 June to 29 <sup>th</sup> June 2020	SRTMU Nanded And Toshniwal College Sengaon
11	STC	01 <sup>st</sup> to 10 <sup>th</sup> Oct.2021	UGC HRDC Ahmedabad

**23) Examination Work:** (Chairman / Paper Setter / Conduction of Exam /  
Vigilance – Squad Member / M. Phil. / Ph.D. Referee.)

i) Worked as Paper setter

ii) Worked as Chief Superintendent

iii) Worked as Assistant Chief Superintendent

iv) Worked as Joint Chief Superintendent

v) Worked as Vigilance Squad Member

**24) Extension Work / Community Service: -**

i) Treasures of Boudha Sanskritic Mandal, Hingoli

ii) Member of Sanchi Bahuudeshiya sanstha

**25) Awards: -**

i) best poster presentation in National conference at Sandhu College Nagpur

ii) best poster presentation in National conference at Toshniwal College Sengaoon.

iii) Gaurav certificate of Government of Maharashtra.

**26) Membership of Professional Organized Bodies:**

i) Life member of Marathwada Mathematical Society

ii) Life member of Indian Mathematical Society

iii) Life member of University Teacher Association.

iv) Treasures, Local SWAMUCTA

**27) Membership of College Committees:**

i) Member of UGC Committee

ii) Member of NAAC report writing committee.

iii) Member of Sanskritic Committee.

iv) Member of Annual Magazine publication committee.

v) Co-Ordinator of Research, Innovation and Extension Criterion of RAR.

vi) NSS program officer

vii) Member IQAC committee

**28) Any other Highlights:**

i) Participated in pedagogical training for mathematics teacher during 02<sup>nd</sup> - 08<sup>th</sup> July 2015 by NBHM and SRTMU Nanded.

**Signature**

**Name: - Sachin Pralhadrao Hatkar**