



MAHARAJA AGRASEN COLLEGE
University of Delhi
VASUNDHARA ENCLAVE, DELHI-110096



Curriculum Vitae of Faculty Members

First Name	Sushil	Last Name	Yadav
Designation	Professor	Department	Mathematics
Date of Birth	October 5, 1973	Date of Joining	November 22,2002
Residential Address (Optional)			
Contact No (Optional)		Alternate Contact No (Optional)	
Email Id	syadav@mac.du.ac.in		
Education			
Subject	Institution	Year	Details
Ph.D	University of Delhi, Delhi	2015	Title of Thesis: Resonance Problems in Geo-Synchronous Satellite including Earth’s Equatorial Ellipticity
M.Phil	University of Delhi, Delhi	1998	Applied Mathematics

Masters	University of Delhi, Delhi	1996	Mathematics (Percentage of Marks obtained: 77.7%)
Graduation	University of Delhi, Delhi	1994	Mathematics (Percentage of Marks obtained: 72.9%)
Any other	Qualified National Eligibility Test (NET) Joint CSIR-UGC	1999	

Career Profile (in reverse chronological order)

Organization/ Institution	Post Held	Department	Adhoc/Temp/ Permanent	From	To
A.R.S.D. College, DU	Lecturer	Mathematics	Adhoc	29-08- 2000	22- 11- 2002
Maharaja Agrasen College, DU	Professor	Mathematics	Permanent	22-11- 2002	

Research Guidance

1. Supervision of awarded Doctoral Thesis - 03 (Three)

S. No.	Title	Author/ Co Author	Year	Volume	ISSN No.	Page Nos.	Journal	Scopus/Web of Science/ UGC CARE Listed/ Peer Reviewed
1.	Resonance in a geo-centric satellite due to Earth's equatorial ellipticity	Co Author	2013	347	0004-640X	249-259	Astrophysics and Space Science, Springer	Web of Science™ (WoS)
2	Resonance in the earth-moon system around the sun including Earth's equatorial ellipticity	Co Author	2013	348	0004-640X	367-375	Astrophysics and Space Science, Springer	Web of Science™ (WoS)
3.	Resonance in a geo-centric synchronous satellite under the gravitational forces of the Sun, the Moon and the Earth including it's equatorial ellipticity	Co Author	2014	349	0004-640X	727-743	Astrophysics and Space Science, Springer	Web of Science™ (WoS)
4	Perturbations of a geo-centric satellite	CO Author	2014	353	0004-640X	417-	Astrophysics and Space Science,	Web of Science™ (WoS)

	synchronous with resonance					424	Springer	
5	Perturbed Robe's restricted problem of 2+2 bodies when the primaries form a Roche ellipsoid triaxial system	Joint Author	2016	14	2169-0057	99-117	Journal of Dynamical Systems and Geometric Theories, TARU Publication	MathSciNet
6	Robe's restricted problem of 2+2 bodies with a Roche ellipsoid-triaxial system	Joint Author	2018	65	2195-0571	63-81	Journal of Astronaut Science, Springer	SCI
7	Resonance in the motion of a Geo-Centric Satellite due to Poynting Robertson Drag and Equatorial Ellipticity of the Earth	Corresponding Author	2019	14	1932-9466	416-434	Applications and Applied Mathematics (AAM): An International Journal	MathSciNet Scopus
8	Existence and Stability of Equilibrium Points in the Problem of a Geo-Synchronous Satellite including Earth's Equatorial Ellipticity	First Author	2019	19	1813-7385	537-550	Non-linear Dynamics and Systems Theory. An International Journal of Research and Surveys	Scopus

9	Resonance in the motion of a Geo-Centric Satellite due to Poynting Robertson Drag and Oblateness of the Earth	Joint Author	2019	19	1813-7385	497-511	Non-linear Dynamics and Systems Theory. An International Journal of Research and Surveys	Scopus
10	Thermo-solute natural convection with heat and mass lines in a uniformly heated and soluted rectangular enclosure for low Prandtl number fluids	Joint Author	2019	148	1290-0729	106-160	International Journal of Thermal Sciences, (Elsevier)	SCI
11	The unpredictability of the basins of attraction in photogravitational Chermnykh's problem	Joint Author	2020	365	0004-640X	Article id:101	Astrophysics and Space Science (Springer)	Web of Science™ (WoS)
12	Magnetic field effect on double-diffusion with magnetic and non-magnetic nanofluids	Joint Author	2020	191	0020-7403	106085	International Journal of Mechanical Science	Web of Science™ (WoS)

13	Effect of non-uniform diameter and fractal dimension of Al_2O_3 nanoparticle on double diffusion in tilted enclosure	Joint Author	2020	143	0960-0779	110607	Chaos, Soliton and Fractals Nonlinear Science, and Nonequilibrium and Complex Phenomena, Elsevier	SCI
14	Resonant Curve of geo-synchronous satellite including effect of earth's equatorial ellipticity and resistive force using perturbation technique	First Author	2021	86	1384-1076	105573	New Astronomy Elsevier	SCI
15	Effect of equatorial ellipticity on the Resonant Curve and Phase Portrait of Geo-centric satellite under the gravitational effect of the Earth-Moon-	First Author	2022	13	1432-5411	Id 141	Few-Body systems Springer	SCI

	Sun system by using unperturbed solution							
16	Analysis of resonant curves and phase portrait in the earth-moon system by using its unperturbed solution and earth's equatorial ellipticity	First Author	2022	92	1384-1076	101716	New Astronomy Elsevier	SCI
17	Analysis of Resonant Curve and Phase Portrait Due to Earth's Equatorial Ellipticity In the Earth-Moon System Using Perturbation Technique	First Author	2022	20	2169-0057	275-298	Journal of Dynamical Systems and Geometric Theories, TARU Publication	Web of Science
18	Resonant curves of geo-centric satellite under the gravitational effect of the Earth-Moon-Sun system	First Author	2022	70	0273-1177	3340-3361	Advance in Space Research	SCI

	including Earth's equatorial ellipticity and resistive force using unperturbed solutions							
19	Resonant Curve Due to Perturbations in Geo-Synchronous Satellite Including the Earth's Equatorial Ellipticity and Resistive Force	First Author	2022	66	1063-7729	736-753	Astronomy Reports springer	SCI
20	Resonant Curve due to Perturbations of Geo-Synchronous Satellite including Effect of Earth's Equatorial Ellipticity	First Author	2023	18	1932-9466	Article 20	Applications and Applied Mathematics (AAM): An International Journal	MathSciNet Scopus
21	Analysis of Resonant Curve in a synchronous Satellite under the Gravitational Effect	First Author	2023	67	1063-7729	638-654	Astronomy Reports springer	SCI

	of the Sun, the Moon and the Earth including its oblateness using Poincare Section								
22	Comparison of Analytical and Numerical Methods to Solve Boundary-Layer Natural Convection Problem for Various Prandtl Number Fluids	Joint Author	2024	54	2688-4542	1807-1818	Heat Transfer, Wiley	SCIE	
23	Analyzing the Position and Stability of the Lagrangian Points under the gravitational effect of the Sun, Moon and Earth including its Oblateness	Joint Author	2025	52	2213-1337	100966	Astronomy and Computing Elsevier	SCIE	

	Participation in conferences, seminars, workshops, refresher programmes, orientation courses, FDP, courses attended, summer institutes etc.						
Conferences, seminars, workshops, refresher	State/National International	Title	Organised by	Period from	Period to		

programmes, orientation courses, FDP, courses attended, summer institutes					XX-XX-XXXX
One Week FDP	State	R Programming	Maharaja Agrasen College, University of Delhi	February 21, 2018	February 27, 2018
Ten day FDP	State	MAC eLearning, Portal and Content Creation	Abdul Kalam Centre Maharaja Agrasen College, University of Delhi	April 2019	April 2019
One-week online Short-term Course	State	Essential Tools in Optimization	Department of Mathematics, Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (An Institute of National Importance-Under MHRD, Govt. of India)	June 25, 2020	June 29, 2020
Participated in e-Workshop/Webinar	State	Use of Hindi in Scientific and Technical Terminology in field of Mathematics	Commission of Scientific and Technical Terminology, Department of Higher Education, MHRD,	June 14,2020	June 16,2020
Participated in Webinar	State	Enhancing 'Research Interest' of Research Publications	Internal Quality Assurance Cell, Maharaja Agrasen College, University of Delhi	June 3, 2020	June 3, 2020

Participated in the Webinar	State	Relevance of Mathematics in Today's Fast Changing World'	Motilal Nehru College (Evening), University of Delhi	June 18, 2020	June 18, 2020
One week online Short-Term Course	State	Optimization & Statistical Models and Tools (OSMT-2020	Technical Education Quality Improvement Programme (TEQIP-III)	August 26, 2020	August 30, 2020
One Week FDP	State	Development of Teacher's e-kit and MOOCs in Four Quadrant Format of e-Content	Guru Angad Dev Teaching Learning Centre, S.G.T.B. Khalsa College, University of Delhi (A Centre of MHRD under PMMMNMTT)	September 12, 2020	September 20, 2020
One Week FDP	State	Learning Management System (MOODLE) For Online Teaching-Learning	Guru Angad Dev Teaching Learning Centre, S.G.T.B. Khalsa College, University of Delhi (A Centre of MHRD under PMMMNMTT)	October 11, 2020	October 17, 2020
One Week FDP	State	Decision Making in Management Using R	Guru Angad Dev Teaching Learning Centre, S.G.T.B. Khalsa College, University of Delhi (A Centre of MHRD under PMMMNMTT) and	October 23, 2020	November 1, 2020

			Maharaja Agrasen College		
Participated in One day National Webinar	National	E-Learning, MOOCs and Copyright Issues	Guru Angad Dev TLC under PMMMANMTT, MHRD and Hindu College, Sonapat	November 5, 2020	November 5, 2020
Participated in the Two-Day International Conference (online)	International (within country)	Emerging Trends in Vedic Mathematics & Applications in Science, Technology and Social Sciences Research	Special Centre for E-Learning, JNU, New Delhi	August 16, 2020	August 17, 2020
Participated in the Digital International Conference	International (within country)	Advances in Computational Methods-2020	Department of Mathematics (DST-FIST supported) Gujarat University, Allahabad	September 26, 2020	September 27, 2020
Participated in the National Webinar	National	Impact Centric Research: Funding Opportunities and Challenges in Framing Successful Research Proposal	Research Cell, Shivaji College, University of Delhi	July 11, 2020	July 11, 2020
Participated in the National Webinar	National	Introduction to Wolfram Mathematica	Department of Mathematics and IQAC, Deshbandhu College, University of Delhi	September 7, 2020	September 7, 2020

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Paper presentation in conferences and seminars				
Title of the Paper presented	State/National International Conference/ Seminar	Title of the Conference/ Seminar	Organized by	Period From – to xx-xx-xxxx
Periodically Forced Non-Linear Oscillations And Resonances in the Motion of Geo-Centric Satellite including the effect of Earth's Equatorial Ellipticity (Online)	International Conference (with in Country)	Recent Trends in Mathematics and Its Applications to Graphs, Networks and Petri Nets	School of Computational and Integrative Sciences, Jawaharlal Nehru University, New Delhi	20-07-2020 to 24-07-2020
Periodically Forced Non-Linear Oscillations and Resonances in the Earth-Moon System around the Sun including Earth's Equatorial Ellipticity (Online)	International Conference (with in Country)	Nonlinear Analysis and its Application	Dept. of Mathematics, Dayanand Science College, Latur	27-07-2020 to 29-07-2020
Resonant Curve due to Periodically Non-Linear Forced Oscillations in a Geo-centric Satellite under the Gravitational Effect of the Sun, the Moon and	International Conference (with in Country)	Present Scenario of Mathematical Sciences	Department of Mathematics, Karnatak University's Karnatak Arts	12-09-2020 to 13-09-2020


the Earth including it's Equatorial Ellipticity (Online)			College, Dharwad, Karnataka, India	
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Resource Person/ Invited Speaker		
Title of the talk/ lecture delivered	Organised by Department, College, University (Give full name with details)	Date/Dates xx-xx-xxxx
Applied Mathematics and Career Perspectives (Online)	Placement Cell and Department of Mathematics Smt. Aruna Asaf Ali Govt. P.G. College Kalka, Kurukshetra	19-01-2022

Professional Societies Memberships <ol style="list-style-type: none"> 1. International Astronomical Union (IAU) 2. Ramanujan Mathematical Society
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I certify that the information given above is correct and factual to the best of my knowledge.

Date: 24-06-2025

Signature  **_____**

