Kumaun University, Nainital Curriculum Vitae

Name : Dr. S. K. Chanyal

Designation : Assistant Professor

Department : Department of Mathematics

Contact Information

• Email Address : <u>skchanyal1432@rediffmail.com</u>;

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Vidwan ID : ---

Educational Qualification:

Degree	University	Subjects	Year
Ph. D.	Kumaun University	Mathematics	2013
	Nainital		
M. Sc.	-do-	-do-	2005
B. Sc.	-do-	Mathematics, Physics,	2003
		Computer Science	
Other (NET)	CSIR	Mathematical Sciences	2005

Work Experience:

Position	Department	University/Organization	Year
Teaching	Department of	Kumaun University Nainital	03
Personnel	Mathematics	-	
Assistant	-do-	-do-	14
Professor			

Administrative Responsibilities:

Equipped with the experience of contributing in the following academic / administrative responsibilities.

- In charge of departmental computer lab committee.
- Member of B. Sc. I Semester (NEP) admission committee.
- Member of M. Sc. I and M. Sc. III admission committee.
- Member of departmental library committee.
- Member of external flying squad team of Kumaun University.
- Assistant superintendent of examination (Evening session).

Research Interests: Riemannian Geometry, Differentiable Manifolds.

- Exploring the properties of structures defined on (pseudo)Riemannian manifolds.
- Working on problems of slant submanifolds in smooth manifolds equipped with pseudo-Riemannian metric and maps between them.

Publications:

a) Research Papers:

- Bhawana Chaube and **S. K. Chanyal**, "Quarter-symmetric metric connection on a p-Kenmotsu manifold", CUBO, vol. 26(1), 153–166, (2024)
- **S. K. Chanyal,** "Quasi-hemi slant submanifolds of para-Hermitian manifolds", Filomat, Vol.38(6), 2023–2033, (2024)
- Naveen Mehra, Garima Pant and S. K. Chanyal, "Growth of solutions of complex differential equations with entire coefficients having a multiply-connected Fatou component", Indian J Pure Appl Math, Vol.54, 895-906, (2023)
- Pawan Bhatt and **S. K. Chanyal**, "η-Ricci soliton on nearly-Sasakian manifolds", GANITA, Vol.72(1), 327-334, (2022)
- Pawan Bhatt and **S. K. Chanyal,** "LP-Kenmotsu Manifold Admitting Schouten-Van Kampen Connection", Jnanabha Vol.52(2), 28-37, (2022)
- S. K. Chanyal "Slant submanifolds in an almost paracontact metric manifold", ANALELE STIINTIFICE ALE UNIVERSITATII "AL.I. CUZA", IASI, LXVII, 213-229, (2021)
- B. C. Chanyal and **S. K. Chanyal**, "Dual number coefficient octonion algebra, field equations and conservation laws", Anal. Math. Phys., vol. 7, 319-334, (2017)
- Bhupesh Chandra Chanyal, **Sunil Kumar Chanyal**, Ozcan Bekta and Salim Y" uce, "A new approach on electromagnetism with dual number coefficient octonion algebra", International Journal of Geometric Methods in Modern Physics, Vol. 13, 1630013 (22 pages), (2016)
- B. C. Chanyal, **S. K. Chanyal**, Virendra Singh and A. S. Rawat, "Proca-Maxwell Equations for Dyons with Quaternion", Applied Mathematics and Physics, Vol. 4, No. 1, 9-15, (2016)
- Jaya Upreti and **S. K. Chanyal,** "Conharmonic curvature tensor on (k,\mu) -contact metric manifold" ANALELE STIINTIFICE ALE UNIVERSITATII "AL.I. CUZA", IASI, LXII, 2, 681-694, (2016)
- Anita Kumari and **S. K. Chanyal,** "On the T Curvature Tensor of Generalized Sasakian Space Form", IOSR Journal of Mathematics, Vol. 11 (3), 61-68, (2015)
- Jaya Upreti, S. K. Chanyal and C. S. Prasad, "Semi-Symmetric Metric Connection in an LPS-Riemannian Manifold", Tensor New Series, vol. 74 (2), 209-211, (2013)
- Jaya Upreti and **S. K. Chanyal** "Pseudo-Slant submanifolds of a generalised almost contact metric structure manifold", Journal of The Tensor Society, vol. 4, 57-68, (2010)
- Jaya Upreti and S. K. Chanyal, "On Generalised semi-symmetric connection", Bulletin of Calcutta Mathematical Society, Vol.102(2), 159-168, (2010)
- Jaya Upreti and S. K. Chanyal, "A semi-symmetric non-metric sp-connection in an LSP-Sasakian manifold", Journal of National Academy Mathematics, vol. 22, 1-10, (2008)

b) Conference Publications/Proceedings:

- Naveen Mehra and **S. K. Chanyal,** "Solutions of Second Order Homogenous Linear Differential Equation", 7th International Conference on Computing, Communication and Security (ICCCS), Seoul, Republic of Korea, 1-4, (2022).
- Jaya Upreti and **S. K. Chanyal,** "Hypersurfaces of a Generalised r-contact product metric structure manifold", Interface between Statistics, Mathematics and Allied Sciences (proceeding), 87-94, (2011).

Patents/Books/Book Chapters/Projects: Nil

Teaching details:

- Taught courses like calculus, geometry, vector analysis, group theory and ring theory, differential equations, analysis, linear algebra etc. at UG level
- Taught differential geometry, Riemannian geometry, linear algebra, real analysis, complex analysis, tensor calculus, abstract algebra at PG level.
- Initiated teaching of programming-based courses like mathematical computation and computer programming etc. with practical assignments in the department.

Professional Memberships:

SI. No.	Name of the Association/Organizations	Status of the membership
1	The Tensor Society India.	Life member
2	The National Academy of Mathematics India.	Life member
3	Bharat Ganita Parishad	Life member
4	Vijnana Parishad of India	Life member

Conference Presentations:

S1.	Title of the paper	Title of conference/seminar	Year
No.			
1	Clairaut Semi-invariant	International conference on Differential	May 18-
	Submersions from Sasakian	Geometry and Relativity	May 20,
	Manifolds		2023
2	Slant Submanifolds of an	International conference on Differential	Nov. 08 –
	almost para-contact pseudo-	Geometry and Relativity	Nov. 10,
	Riemannian manifold		2019
3	M-Projective curvature	National conference on advances in	March 17
	tensor on a trans-Sasakian	Mathematics and its Applications	- March
	manifold	(NCAMA-2018)	18, 2018
4	Some results on (κ, μ)	8 th conference of the Indian Science	Oct. 14 –
	contact metric manifolds	congress Association (Haridwar	Oct. 15,
			2017

	T.		
		Chapter) "Reaching the unreached	
	0 () '0 11 '4	through Science and Technology"	0 4 17
5	On (κ, μ) -manifolds with	19 th International conference of	Oct. 17 –
	respect to semi-symmetric	International Academy of Physical	Oct. 19,
	non-metric connection	Sciences (CONIAPS-XIX)	2016
6	M-Projective curvature	1 st National conference on Progressive	Oct. 24 –
	tensor on a (κ, μ) -contact	Sciences and Engineering (NCPSE-	Oct. 25,
	manifold	2016)	2016
7	Conharmonic curvature	6 th Uttarakhand State Science &	Nov. 14 –
	tensor on (κ, μ) manifold	Technology Congress-2011	Nov. 16,
			2011
8	Some Curvature Tensors on	4 th Annual Conference of The Tensor	Oct. 08 –
	(κ, μ) manifold with respect	Society on Application of Tensors and	Oct. 09,
	to Semi-symmetric Non-	Differential Geometry in Engineering	2011
	metric Connection	and Physical Sciences	
9	An Introduction to Tensors	International Colloquium on History of	May 16 –
		Mathematical Sciences & Symposium	May 19,
		on Non-Linear Analysis	2011
10	Hypersurfaces of a	National seminar on Interface Between	Nov. 20 –
	generalized almost contact	Statistics, Mathematics and Allied	Nov. 22,
	product metric structure	Sciences	2010
	manifold		
11	On Trans-Sasakian Manifold	National conference on Recent Trends	July 24 –
	satisfying certain conditions	in Pure & Applied Mathematics	July 25,
	on Concircular curvature	(CORTPAM-2010)	2010
	tensor	, , , , , , , , , , , , , , , , , , ,	
12	Semi-symmetric metric	National conference of The Tensor	Oct. 02 –
	connection in LPS	Society on Development of Differential	Oct. 03,
	Riemannian Manifold	Geometry	2009
13	Pseudo-slant submanifolds	XXIII Annual Conference of the	Dec. 29 –
	of a generalised almost	Mathematical Society	Dec. 30,
	contact metric structure		2007
	manifold		
	l .		

Any other Information:Organised the following conferences:

Sl.	Status as	Title of the conference/seminar	Year and
No.	organizer		dates
1.	Academic	8th Conference of The Indian Science Congress Association	October 14-15,
	Secretary	(Haridwar Chapter) on "Reaching The Unreached Through	2017
		Science And Technology", organized by Department of	
		Mathematics and Department of Computer Science, DSB	
		Campus, Nainital	
		Venue: Dynasty Resort, Khurpatal, Nainital	
2.	Co-Convener	19th International Conference of International Academy of	October 17-19,
		Physical Sciences (CONIAPS XIX) & Symposium on Fixed	2016,
		Point Theory and Dynamical Systems, organized by	
		Department of Mathematics and Department of Computer	
		Science, DSB Campus, Nainital	
		Venue: Dynasty Resort, Khurpatal, Nainital	

3.	Joint Secretary	National Conference on Development of Differential	October	2-3,
		Geometry, organized by The Tensor Society	2009	ļ
		Venue: Akash Ganga Guest House, Swargashram, Rishikesh		

- Resource person in the following workshops:
 - 1. Two days interactive National Workshop on "Abstract Algebra" organised by Department of Mathematics, LSM Campus Pithoragarh (SSJU Almora), Sponsored by USERC during March 17-18, 2023.
 - 2. National workshop on "Real Analysis" organised by Department of Mathematics, SSJ University, Almora, Sponsored by USERC during Mar 28-Apr 02, 2022.
- Participated in the following faculty development programs:
 - 1. Introduction to SageMath organized by ICT Mumbai Category I Deemed to be University (MHRD/UGC) during May 20 –June 29, 2020 sponsored by TEQIP-III and MTTS Trust.
 - 2. Instructional School for Lecturers (ISL) in Linear Algebra at from sponsored by National Board for Higher Mathematics (NBHM) organized by CEMS Department of Mathematics, Kumaun University, S. S. J. Campus, Almora during March 17 –March 29, 2014.
 - 3. Instructional School for Lecturers (ISL) in Differential Geometry at from sponsored by National Board for Higher Mathematics (NBHM) organized by CEMS Department of Mathematics, Kumaun University, S. S. J. Campus, Almora during May 21 –June 09, 2012.
 - 4. Instructional School for Lecturers (ISL) in Algebra from sponsored by National Board for Higher Mathematics (NBHM) organised by CEMS Department of Mathematics, Kumaun University, S. S. J. Campus, Almora during Feb. 20 –March 03, 2012.
- Explored the subject with active participation on the following programme:
 - 1. International Symposium in Honor of Great Mathematician Srinivasa Ramanujan organised by the Department of Maths and Stats, Dr. Harishingh Gaur Vishwavidyalaya (A Central Univ.) Sagar on Dec. 22, 2021.
 - 2. Two days national webinar series on Recent Developments in Mathematics-2021 (NWSRDM-2021) organised by the Department of Mathematics, Davangere University, Davangere Karnataka during June 10-11, 2021.
 - 3. Two days national webinar on Linear Algebra and Complex Analysis organised by the Depertment of Mathematics, ANJA College (Autonomous) Sivakasi during June 18-19, 2020.
 - 4. International Webinar on "Recent Trends in Algebraic and Differential Geometry" organised by the Department of Maths and Stats, Dr. Harishingh Gaur Vishwavidyalaya (A Central Univ.) Sagar during June 15-16, 2020.
- Attended the following workshops:
 - Workshop on Algebra and Number Theory organized by Department of Mathematics, S. S. J. Campus, Almora during March 22 –March 24, 2012.
 - 2. National Workshop on Optimization- Theory and Practice sponsored by Uttarakhand State Council for Science & Technology (UCOST)

organized by Department of Mathematics, S. S. J. Campus, Almora during Nov. 15 –Nov. 19, 2010.

- Attended the following Specific Refresher Courses:
 - 1. Refresher Course in Mathematics at Teaching learning center, Ramanujan College, University of Delhi during Aug. 31–Sept. 14, 2021.
 - 2. Refresher Course in Mathematics at UGC-HRDC University of Hyderabad during July 04 July 24, 2018.
 - 3. Refresher Course in Statistics & Mathematics at Academic Staff College Nainital during Nov. 10 Nov. 30, 2010.
- Computer and Programming Skills:
 - ✓ Mathematical Software- MATLAB, SageMath
 - ✓ Programming Language- C, C++, Python
 - ✓ Document Preparation Systems- Latex and MS Office
 - ✓ Operating Systems- Windows and Linux
 - ✓ Database Handling- MS Access, Sql

Signature of the faculty member