


FACULTY PROFILE

Title	Dr.	First Name	Alok Darshan	Last Name	Kothiyal	
Designation	Assistant Professor					
Dept.Name	ASHD					
Address:	Department of ASHD (Mathematics) GBPIET, Ghurdauri, Pauri Garhwal					
Phone No.	9548095819					
Email	1. alokkothiyal81@gmail.com			2. Nil		
WebPage(ifany)						
SubjectsTaught	Engineering Mathematics					
Areas of Interest/Specialization	Fluid Dynamics					
Experience(inyears)	Total	14 years				
	Industry	Nil				
	Teaching	12				
	Research	14				
Educational Qualifications	UG	B. Sc. (PCM)				
	PG	M.Sc. (Mathematics)				
	Doctorate	Ph. D. mathematics(Fluid Dynamics)				
	Anyother					
Research Publicationsin Journals	<ol style="list-style-type: none"> 1. A note on Vorticity of Hydromagnetic two-phase flow through two parallel plates in a rotating system. (2021) Scopus index, Springer ISSN: 2524-7565. 2. An improvement in key domain maximization technique by entropy maximization. (2021) ISSN: 2524-7565) Scopus index, Springer. 3. Hydrodynamic and thermal performance of twisted tape insert provided in heat exchanger tubes: a review. Frontiers in heat and mass transfer Vol 12, Pages: 95 (2019) SCI 					

Journal, Scopus index, Impact Factor. 1.86 ISSN: 2151-8629

4. Selection of optimal performance parameters of alumina/water nanofluid flow in ribbed square duct by using AHP-TOPSIS techniques. Intelligent communication, control and devices. Springer, Singapore Pp. 95-103 (2020) **Springer, Scopus index.**
5. Fluid flow and heat transfer enhancement in wings with combined solid ring twisted tape inserts circular heat exchanger tube. Thermal Science & engineering, Pages: 95-103 (2019) **SCI Journal, Scopus Impact Factor. 1.94** ISSN. 0354-9836.
6. Numerical analysis of thermal hydraulic performance of $Al_2O_3-H_2O$ nanofluid flowing through a protrusion obstacles square mini channel. Case studies in thermal engineering Vol. 9 PP.108–121 (2017) **SCI Journal, Scopus Impact Factor. 6.51** ISSN. 2214-157X.
7. Turbulent heat transfer and nanofluid flow in a protruded ribbed square passage Results in Physics (Elsevier) Vol. 7 Pp.3603–3618, (2017) **SCI Journal, Scopus index Impact Factor. 4.565** ISSN. 2211-3797.
8. Some generalized problems in thermo-elasticity. Journal of emerging technologies and innovative research Volume 5 (12) Pp. 238-241(2018) ISSN-2349-5162.
9. A review of flow and heat transfer behaviour of nanofluids in micro channel heat sinks. Thermal Science and Engineering Progress Vol. 8 Pp477–493, (2018) **SCI Journal, Scopus index Impact Factor. 4.63** ISSN.2451-9049.
10. A study of generalized information measures & their inequalities Journal of emerging technologies and innovative research Volume 5 (12) Pp. 228-235(2018) ISSN-2349-5162.
11. Effects of surface tension on the stability of two superposed viscoelastic fluids in a magnetic field. JETIR December 2018, volume 5, issue 12, pp 242-248.
12. Some generalized problems in thermoelasticity. JETIR December 2018, Volume 5, Issue 12, PP. 236-241.
13. Effect of nanofluid and protrusion ribs on performance in square channel an experimental investigation. Journal enhanced heat transfer (Begell House), Vol. 26(1) Pp 75–100, (2019) **SCI Journal, Scopus index Impact Factor. 2.0** ISSN1065-5133
14. Effect of square wing with combined solid ring twisted tape inserts on heat transfer and

fluid flow of a circular tube heat exchanger. International Journal of Green Energy (Taylor & Francis) Vol. 15(12) Pp 663-680(2018) **SCI Journal, Scopus index Impact Factor 2.459** ISSN 1543-5075

15. Effects of surface tension on the stability of two superposed visco-elastic fluids in a magnetic field inequalities. Journal of emerging technologies and innovative research Volume 5 (12) Pp. 242-247(2018) ISSN-2349-5162.
16. Development of new correlations for heat transfer and friction loss of solid ring with combined square wing twisted tape inserts heat exchanger tube. Experimental heat transfer (Taylor & Francis) Vol. 15(12) Pp 663-680 (2018) **SCI Journal, Scopus index Impact Factor 2.449** ISSN: 0891-6152.
17. Effect of ratio of protrusion height to print diameter on thermal behaviour of Al₂O₃-H₂O nanofluid flow in a protrusion obstacle square mini channel. intelligent communication, control and devices **Springer, Scopus index Vol. 15(12) Pp 277-289 (2017)**
18. Selection of optimal performance parameters of alumina/water nanofluid flow in ribbed square duct by using AHP-TOPSIS techniques. Intelligent communication, control and devices. Springer, Singapore Pp. 95-103 **Springer, Scopus index.**
19. A study of vorticity of MHD visco-elastic boundary layer flow through porous medium with free convection past a continuous moving surface. International journal of scientific & engineering research volume 4(6) pp. 391-401 (2013).
20. Note on vorticity MHD flow of viscous fluid past impulsively moving isothermal vertical porous medium with chemical reaction and heat source. International transactions in mathematical sciences and computer volume 2(1) pp. 143-147 (2009).
21. On the vorticity of unsteady MHD free convection flow through porous medium with heat and mass transfer past a porous vertical moving plate with heat source /sink. Chemical and process engineering research volume 21(1) Pp 52-59 (2014).
22. Unsteady MHD flow of an incompressible conducting fluid through cylindrical porous ducts with parabolic. International Transaction in Mathematical Sciences and Computer, Volume 1(1) Pp. 15-26 (2008).

	<p>23. A note on vorticity of MHD flow of continuously moving vertical surface with uniform heat and mass transfer International Journal Of fluid Mechanics. Volume 3(1) Pp. 1-8 (2013).</p> <p>24. Unsteady Hydromagnetic flow of an incompressible conducting fluid through porous ducts with parabolic section. International journal Of Mathematica, Vol.1(1) Pp. 5-13 ISSN 2348-831X (2014).</p> <p>25. On the vorticity of unsteady MHD free convection flow with mass transfer through Porous medium past a porous vertical moving plate. International Journal Of fluid Mechanics. Volume 3(1) Pp. 19-26 (2013).</p> <p>26. Note on vorticity of unsteady flow of a dusty conducting viscous fluid through concentric circular cylinders International Transaction in Mathematical Sciences and Computer. Volume 2(2) Pp. 253-259 (2009).</p> <p>27. A study of vorticity of hydromagnetic free convection flow past an infinite vertical plate International Journal of Mathematica Volume 1(1) PP 41-45 (2014)</p> <p>28. A note on vorticity of hydromagnetic free convection flow and heat transfer of a visco-elastic fluid on a continuously moving vertical surface. International Journal of Mathematica. Volume 1(1) Pp. 5-13 (2014).</p> <p>29. A note on vorticity of unsteady MHD free convective and mass transfer flow through porous medium in rotating system. International Journal of Mathematica. Volume 1(1) Pp. 28-34(2014).</p> <p>30. Unsteady free convective flow between two heated vertical parallel plates Acta Ciencia Indica. Volume 34(4) Pp. 1989- 1992(2008).</p> <p>31. A note on magnetic field effects on the vorticity the free convection flow through porous medium due to infinite vertical plate with uniform suction and constant heat flux. Acta Ciencia Indica. Volume 35(2) Pp. 373-380 (2008).</p> <p>32. A note on vorticity of hydromagnetic rivlin – ericksen fluid flow down an inclined plane. Acta Ciencia Indica. Volume 34(4) Pp. 1989- 1992(2008).</p>
Papers Published in Conference Proceedings	<p>1. 1st International virtual conference on integrated intelligence enable networks &</p>

	<p>computing Springer, Scopus and IEEE chaired a Special session 5-7 September 2020.</p> <p>2. 1st International virtual conference on integrated intelligence enable networks & computing Springer, Scopus and IEEE organizing committee member5-7 September 2020.</p> <p>3. 1st International virtual conference on integrated intelligence enables networks & computing Springer, Scopus and IEEE. 5-7 September 2020 (Full length Paper Present).</p> <p>4. 1st International virtual conference on integrated intelligence enables networks & computing Springer, Scopus and IEEE. 5-7 September 2020 (Full length Paper Present</p>
<p>Books Authored/Book Volume Chapters</p>	<p>1. A note on vorticity of hydromagnetic two-phase flow through two parallel plates in a rotating system. Proceedings of Intelligence Enable Networks and Computing. ISBN 978-981-33-63-6307-6, Springer 2020</p> <p>2. An improvement in key domain maximization technique by entropy maximization, Proceedings of Intelligence Enable Networks and Computing. ISBN 978-981-33-63-6307-6, Springer 2020.</p> <p>3. Selection of optimal performance parameters Duct by using AHP-TOPSIS techniques Intelligent Communication, Control and Devices ISBN 978-981-13-8618-3 Springer 2020.</p> <p>4. Differential Equations for UG & PG Students ISBN. 978-93-87253-96-4, 2021.</p> <p>5. Numerical Methods for B. Tech Students ISBN 978-93-82975-39-1. 2013</p> <p>6. Engineering Mathematics-I for B. Tech Students ISBN. 978-93-82975-40-3. 2013</p>

No.of Conferences	National	Attended	Organized
		02	Nil
	International	05	02
Research Guidance	Awarded	PG	Doctorate
		Nil	05
	Undergoing	Nil	01
Research Projects	Completed	Nil	
	Undergoing		
Awards & Distinctions	Nil		
Administrative Assignments Handled			
Association with Professional Bodies			
Any other Achievements	Chief-Editor: "International Journal of Mathematica (Online ISSN: 2393-9346 and Print (2348- 831X)" Published by Shoolini University, Solan, Himachal Pradesh.		
Short Term Course/FDP	<ol style="list-style-type: none"> 1. Two weeks (40 hours) online certificate course on " Numerical & Engineering Computation, Optimization for Physicists, Scientists & Engineers using OpenSource-SCILAB", jointly organized by the Electronics and ICT Academies at IIT Roorkee, MNIT Jaipur, and NIT Patna, during 21st Feb to 05th March, 2022 under the "Scheme of financial assistance for setting up of Electronics and ICT Academies". 2. One week Short term course entitled "Optimization & Statistical method and tools" Organized by Department of Mathematics NIT Jalandhar 26th -30th August 2020. 3. Two week Faculty Development Program entitled "Data Science for All" Organized by NIT Warangal, IIITDM Jabalpur and NIT Patana 27 July- 8 August 2020. 4. Two week Online International Faculty Development Program entitled "Experiment and Numerical Methods for Mechanical Engineers organized by G. B. Pant Institute of 		

Engineering & Technology Pauri Garhwal, Uttarakhand 17th -28th August 2020.

5. Ten days webinar series entitled “Basic Mathematics Workshop (BMW) Organized by Chitkara University Chandigarh 11th -20 June 2020.
6. One week Faculty Development Program on Energy Conservation and Management organized by Guru Nanak Dev Engineering Govt. College, Ludhiana 27th April- 1st May 2020.
7. One week Online Faculty Development Program entitled “ Blockchain and its Applications Engineers organized by G. B. Pant Institute of Engineering & Technology Pauri Garhwal, Uttarakhand 20th -24th July 2020.
8. One day “Uttarakhand State Geoinformatics Meet 2020” Organized by Uttarakhand Space Application Centre (USAC) Department of Information & Science Technology Govt. Of Uttarakhand, Dehradun 10th February 2020.