UNIVERSITY INSTITUTE OF ENGINEERING & TECHNOLOGY
PANJAB UNIVERSITY, CHANDIGARH - 160014

FACULTY PROFILE

1. **Name** : JYOTI SHARMA

2. **Designation** : ASSISTANT PROFESSOR

3. **Date of Birth** : 28-05-1981

4. **Contact Number :** 9915461114

5. **E-mail id :** jyoti.maths@gmail.com

6. **Educational background**

Degree	Institute Name	Year of Passing
B.Sc. (HONS. SCHOOL)	PANJAB UNIVERSITY	2002
M. Sc. (HONS. SCHOOL)	PANJAB UNIVERSITY	2004
Ph. D.	PANJAB UNIVERSITY	2017

7. Teaching experience: 14 years

8. Main area of work : Thermal and Thermosolutal Instability of Nanofluids.

9. Achievements: Research award of the year 2017 for publication "Modified Model for Binary Nanofluid Convection with Initial Constant Nanoparticle Volume Fraction", Journal of Applied Fluid Mechanics, 10 (5) 1387-1395 (2017) awarded by U.I.E.T., Panjab University, Chandigarh.

List of Publications
Papers in Journals

1. **J. Sharma**, U. Gupta, S. Shukla, A Revised Model for Magneto Convection in Binary Nanofluids, International Journal of Mathematical, Engineering and Management Sciences (SCOPUS indexed) 4 (1), 131–138 (2019) ISSN: 2455-7749

2. **J. Sharma**, U. Gupta, V. Sharma, Modified Model for Binary Nanofluid Convection with Initial Constant Nanoparticle Volume Fraction, Journal of Applied Fluid Mechanics (SCI, SCOPUS indexed), 10 (5) 1387-1395 (2017).

3. U. Gupta, **J. Sharma**, V. Sharma, Instability of binary nanofluid with magnetic field, Applied Mathematics and Mechanics (SCI, SCOPUS indexed) (Springer) 36 (6) 693-706 (2015).

4. **J. Sharma** , U. Gupta , R. K. Wanchoo, Numerical Study on Binary Nanofluid Convection in a Rotating Porous Layer, Differ Equ Dyn Syst (SCOPUS indexed) (Springer), DOI 10.1007/s12591-015-0268-4, (2016).

5. **J. Sharma**, U. Gupta , R. K. Wanchoo, Magneto binary nanofluid convection in porous medium, International Journal of Chemical Engineering (Hindawi) (SCOPUS indexed), Volume 2016 , Article ID 9424036, 8 pages (2016).

6. J. Ahuja, **J. Sharma**, U. Gupta, R.K. Wanchoo, Hydromagnetic Stability of a Nanofluid Layer Using Darcy-Brinkman Model, Journal of nanofluids (SCOPUS indexed) (American Scientific Pub.) 5(3) 436-443 (2016).

7. **J. Sharma**, U. Gupta, Double-diffusive nanofluid convection in porous medium with rotation: Darcy-Brinkman model, Procedia Engineering (SCOPUS indexed) (Elsevier), 127C 783-790 (2015).

8. **J. Sharma**, U. Gupta, R. K. Wanchoo, J. Ahuja, An analytical and numerical study for thermosolutal nanofluid convection using revised model, Perspectives in Science (Elsevier), (2016), DOI:10.1016/j.pisc.2016.05.006.

9. **J. Sharma**, U. Gupta, Binary nanofluid convection for Darcy-Brinkman model in hydromagnetics, Research Journal of Science and Technology, 9 (1), 93-100 (2017).

10. **J. Sharma**, U. Gupta, Binary nanofluid convection subjected to rotation, International Journal of Electrical, Electronics and Mechanical Fundamentals (IJEEMF). ISSN (Online): 2278-3989 (2017).

Book Chapters

11. U. Gupta**, J. Sharma**, R.K. Wanchoo, Effect of magnetic field on top heavy binary nanofluid layer in porous medium, Nanotechnology: Novel Prospects and Perspectives (McGraw-Hill,U.S.A), ISBN: 13: 978-93-39221-09-6.

12. U. Gupta, **J. Sharma**, Double diffusive convection in a horizontal nanofluid layer with vertical magnetic field, International conference on Information and Mathematical Sciences, 24-26 Oct., 2013 (Elsevier) ISBN: 9789351071624.

Papers in Proceedings

13. U. Gupta, **J. Sharma**, R. K. Wanchoo, Thermosolutal convection in a horizontal nanofluid layer: Introduction of oscillatory motions, Recent Advances in Engineering and Computation Sciences, IEEE, Chandigarh, India (SCOPUS indexed) (2014) Print ISBN: 978-1-4799-2290-1.

14. **J. Sharma**, U. Gupta, Instability of a rotating binary nanofluid layer: Darcy model, Recent Advances in Engineering and Computation Sciences, IEEE, Chandigarh, India (2015) (SCOPUS indexed) Print ISBN: 978-1-4673-8253-3.

Papers Presented in Conferences

1. The effect of magnetic field on the convection of binary nanofluid layer, Mathematical Modeling and Computational Techniques, 27-28 Sept., **2013**, U.I.E.T., P.U., Chandigarh (National)

2. Double diffusive convection in a horizontal nanofluid layer with vertical magnetic field, Information and Mathematical Sciences, 24-26 Oct., **2013**, Baba Farid College of Engg. & Tech., Bathinda. (International)

3. Effect of magnetic field on top heavy binary nanofluid layer in porous medium, Nanotechnology in service of Health, Environment and Society, 13-15 Feb., **2014**, Panjab University, Chandigarh.(International).

4. Thermosolutal convection in a nanofluid layer in porous medium, 8th Chandigarh Science Congress, 26-28 Feb., **2014**, Panjab University, Chandigarh.(State)

5. Thermosolutal convection in a nanofluid layer: Introduction of oscillatory motions, Recent Advances in Engg. and Computational Sciences, 6-8 March, **2014**, U.I.E.T., P.U. (International)

6. Thermosolutal convection in a rotating nanofluid layer in porous medium, Emerging areas of Mathematics for Science & Technology, 30 Jan-1 Feb., **2015**, Dept. of Mathematics, Punjabi University, Patiala (International)

7. Binary nanofluid convection under vertical magnetic field in porous medium, Sustainable renewable energy generation-current scenario, 21 March, **2015**, Energy Research Centre, P.U., Chandigarh. (National)

8. Effect of rotation on thermosolutal nanofluid convection in porous medium, 2nd National conference on Advanced Oxidation Processes, 15-16 Oct, **2015**, Dr. S.S.B.UICET & Energy Research Centre, P.U., Chandigarh. (National)

9. Instability of a Rotating Binary Nanofluid Layer: Darcy Model, Recent Advances in Engineering and Computational, 21-22, Dec **2015**, U.I.E.T., P.U., Chandigarh (International)

10. Onset of Magneto-Convection Saturating a Porous Medium for a binary Nanofluid Layer, Fascination of light and photonics for life, 22 Jan , **2016**,G.C.G., Sector 11, Chandigarh(National)

11. Binary nanofluid convection for Darcy-Brinkman model in hydromagnetics, National conference on Advances in Mathematics, 21-22 December **2016**, Department of Mathematics, Netaji Subhash Chander Bose Memorial Government College, Hamirpur, Himachal Pradesh (National).

12. Binary nanofluid convection subjected to rotation, International Conference on Interdisciplinary Research for Sustainable Development (IRSD-2017), 6-7 November **2017**, NITTTR Chandigarh. (International).

13. A revised model for magneto convection in binary nanofluids, International Conference on Responsible Research and Innovation in Science, Management and Education (ICRRIMSE-2018) 4- 6 April **2018**, Panjab University, Chandigarh. (International)

Faculty Development Programs

1. TEQIP sponsored faculty development program on "Effective Teaching", 9-14 January, **2017**.

2. TEQIP sponsored faculty development program on "Role of basic sciences in engineering", 11-16 Nov., **2013**.

3. TEQIP sponsored faculty development program on "Achieving excellence in technical education", 16-19 July, **2013**.

4. TEQIP sponsored faculty development program on "Teaching and soft skills", 26-29 December, **2012**.

5. Summer school on "Effective curriculum implementation" conducted by N.I.T.T.R., Chandigarh, 14-18 Sept., **2009**.

6. Winter school on "Strategic management for excellence" conducted by N.I.T.T.R., Chandigarh, 19-23 Jan, **2009**.

Signature