Dr. Divya Sharma

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Vastu Khand-3, Gomti Nagar, Lucknow
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Objective

To utilize my skills and enhance my potential in today's innovative and challenging era and to intervene student centric learning in the educational environment to make benefitted the concerned organization as well as to me.

Work Experience

- 3 years post PhD experience in **Thapar institute of Engineering & Technology, Patiala, Punjab** as Assistant Professor (contractual-III) since 15 May 2018 till 20 May 2021.
- 1 year experience in **Shri Ram Murti Smarak College of Engineering & Technology, Unnao**.
- 2.5 years' experience in **Institute of Engineering and Technology, Lucknow** as Contractual faculty in Electronics & Communication Engineering department.

Technical Qualification

Motilal Nehru National Institute of Technology, Allahabad
PhD (**6 January 2015 to 15 December 2018**)
Area of specialization: High speed Coherent communication
Thesis Title: Performance evaluation of advanced modulation techniques for lower and higher optical transmission rates
Overall Pointers: **[9.75]**

Bundelkhand Institute of Engineering & Technology, Jhansi
M.Tech, [**2010 – 2012**]
Digital Communication,
Thesis title: Planner Waveguide using Unconventional Material
Overall Percentage: **[76.15%]**

Feroze Gandhi Institute of Engineering & Technology, Raebareli
Bachelor of Technology
Electronics & Communication Engineering
Overall Percentage: **73.72% [2004-2008]**

Academic Qualification

Jawahar Navodaya Vidyalaya, Raebareli
Higher Secondary Examination [Class 12]
Central Board of Secondary Education, New Delhi
Overall percentage: **65.8% [2004]**

Jawahar Navodaya Vidyalaya, Raebareli
All India Secondary School Examination [Class 10]
Central Board of Secondary Education, New Delhi
Overall percentage**: 80.8% [2002]**

Journal

Total IF: 20.624

1. Shikha Devi, **Divya Sharma,** Y. K. Prajapati, R. Tripathi, "Independent and mixed transmission of 166.5Gb/s PM-8QAM and 222Gb/s PM-16QAM Nyquist-WDM superchannel for long haul metro network", ***International Journal of Communication Systems, vol.*** 34, no. 7, pp. e4735, 2021. *ISSN 1099-1131* **(I.F.2.047) DOI:** *https://doi.org/10.1002/dac.4735*
2. **Divya Sharma** , Y. K. Prajapati, R. Tripathi, "0.55 Tb/s heterogeneous Nyquist-WDM superchannel using different polarization multiplexed subcarriers", ***Photonic Network***

Communications , vol.39, pp.120–128, 2020. *DOI: 10.1007/s11107-019-00872-w ISSN 1572-8188* **(I.F. 2.028)**

3. **Divya Sharma** , Y. K. Prajapati, R. Tripathi, "Success Journey of Coherent PM-QPSK Technique With Its Variants: A Survey," ***IETE Technical Review***. vol. 37(1), pp. 36-55, 2018. *DOI:10.1080/02564602.2018.1557569. ISSN 0974-5971* **(I.F. 2.2)**
4. **Divya Sharma,** Y. K. Prajapati, and Rajeev Tripathi, "Spectrally efficient 1.55 Tb/s Nyquist-WDM superchannel with mixed line rate approach using 27.75 Gbaud PM-QPSK and PM-16QAM," ***Optical Engineering,*** vol. 57(7), pp. 076102.1-12, 2018, *DOI: 10.1117/1.OE.57.7.076102. ISSN 1560-2303* **(I.F. 1.084)**
5. **Divya Sharma**, A. Verma, Y. K. Prajapati, V. Singh, and J.P. Saini, "Forward and backward wave propagation in multilayer planar waveguide using metamaterials layer," ***Optical and Quantum Electronics,*** vol. 45(2), pp. 105-114. 2013. *DOI 10.1007/s11082-012-9607-7,* ISSN: 0306-8919 **(I.F. 2.084)**
6. Anurag Upadhyay, Shivam Singh, **Divya Sharma**, Sofyan A. Taya, A highly birefringent bend-insensitive porous core PCF for endlessly single-mode operation in THz regime: an analysis with core porosity, ***Applied Nanoscience,11(3), 2021, pp. 1021-1030.*** *https://doi.org/10.1007/s13204-020-01664-9* , ISSN: 2190-5517 ***(I.F. 3.674)***
7. Anurag Upadhyay, Shivam Singh, **Divya Sharma,** Sofyan A. Taya, Analysis of Proposed PCF with Square Air Hole for Revolutionary High Birefringence and Nonlinearity, ***Photonics and Nanostructures - Fundamentals and Applications,*** 43, 100896, ***2021*** ISSN: 1569-4410 ***(3.008).***
8. Anurag Upadhyay, Shivam Singh, **Divya Sharma,** Sofyan A. Taya, *"An Ultra-High Birefringent and Nonlinear Decahedron Photonic Crystal Fiber Employing Molybdenum Disulphide (MoS2): A Numerical Analysis"*, ***Material Science and Engineering B*** , 270 (2021) 115236. ***(I.F. 4.054)*** ISSN: 0921-5107.
9. **Divya Sharma,** Shrish Bajpai, Y. K. Prajapati, R. Tripathi, "112 Gb/s Coherent NG-PON2 Downstream Transmission using Advance Polarization Multiplexed Modulation Formats", ***Optoelectronics and Advanced Materials-Rapid Communication (OAM-RC),*** Vol. 14 (5-6), pp. 224 - 232 May-June 2020. ISSN: 20653824 **(I.F. 0.445)**
10. **Divya Sharma,** Y. K. Prajapati, "Performance Analysis of DWDM System for Different Modulation Schemes Using Variations in Channel Spacing", **Journal of optical communication**, De Gruyter, vol. 37 (4), pp. 401-413, March 2016. *DOI: https://doi.org/10.1515/joc-2016-0011* ISSN 2191-6322 **(Scopus indexed)**
11. **Divya Sharma**, Y. K. Prajapati, "Analytical study of DWDM optical long haul network with symmetrical dispersion compensation", Indian Journal of Science and Technology, 11(17), pp.1-12, May 2018. *DOI: 10.17485/ijst/2018/v11i17/102339,* ISSN 0974-5645 **(Web of Science indexed)**
12. **Divya Sharma,** Vinit Jaiswal, Y. K. Prajapati and Rajeev Tripathi, "Performance Optimization of Carving Signal RZ-DQPSK Modulation Scheme", A. Khare et al. (eds.), Recent Trends in Communication, Computing and Electronics, **Lecture Notes in Electrical Engineering** vol. 524, pp. 1-7, *DOI: 10.1007/978-981-13-2685-1_3.* ISBN 1876-1100 **(Book chapter; Scopus indexed)**
13. **Divya Sharma,** Shikha Devi, Y. K. Prajapati, "832.5 Gb/s PM-8QAM superchannel with 5 b/s/Hz spectral efficiency", in Harvey D., Kar H., Verma S., Bhadauria V. (eds) Advances in VLSI, Communication, and Signal Processing. **Lecture Notes in Electrical Engineering,** vol 683. Springer, Singapore. pp. 67-74, 2021. ISBN *978-981-15-6840_4_6,* 483865_1_En, **(Book chapter 6; Scopus indexed)**
14. Divya Sharma, Shivam Singh, Anurag Upadhyay, Sofyan A. Taya, "Flexi- Grid Technology: A necessity for Spectral Resource Utilization", Chapter 23, **CRC Press, Taylor and Francis** 2021(in press)

International Conference

1. **Divya Sharma**, Y. K. Prajapati, J.P. Saini and Vivek Singh, "Dispersion Characteristics of metamaterial based planar waveguide", International conference on Communication & Electronics (ICCE-2012), 304-307, October, 2012 in KIET, Ghaziabad. ISBN 978-93-81583

2. **Divya Sharma**, J. B. Maurya, Y. K. Prajapati, "Effect of noise on constellation diagram of 100 Gbps DP-QPSK systems under influence of different digital filters", In Microwave and Photonics (ICMAP), International Conference on IEEE, ISM Dhanbad, pp. 1-2, December, 2015. *DOI: 10.1109/ICMAP.2015.7408787.* ISBN:*978-14673-6898-8*
3. A. Singh, **Divya Sharma**, Y. K. Prajapati "Comparison of DPSK and QAM modulation schemes in Passive optical network", In International Conference on Fibre Optics and Photonics, pp. Tu4A-56. Optical Society of America, December 2016. *DOI: 10.1364/PHOTONICS.2016.Tu4A.56* . ISBN 978-93-81583
4. **Divya Sharma**, Y. K. Prajapati, "Comparative aspect of different multi-channel DWDM optical network", International Conference on Advance in Computing, Control and Communication Technology, (IAC3T) University of Allahabad, vol. 1, pp. 155, March 2016. 9789385926204 .
5. **Divya Sharma**, Shrish Bajpai, and Y. K. Prajapati, "Next generation PON using PM-BPSK and PM-QPSK modulation," In Multimedia, Signal Processing and Communication Technologies (IMPACT), 2017 International Conference on, pp. 10-12. IEEE, November, 2017. *DOI: 10.1109/MSPCT.2017.8363963. 978-1-5090-6674-2*
6. **Divya Sharma**, Y. K. Prajapati, "Terabit nyquist superchannel transmission using PM-QPSK subchannels", In Microwave and Photonics (ICMAP), 2018 3rd International Conference on, pp. 1-2, IEEE, February, 2018. *DOI:10.1109/ICMAP.2018.8354503. 978-1-5386-0933-0*
7. **Divya Sharma,** Y. K. Prajapati and Anurag Upadhyay, "16×40 Gb/s, 32×40 Gb/s And 64×40 Gb/s DWDM Network", in Computational and Characterization Techniques in Engineering & Sciences (CCTES-18) IEEE, 173-176, September, 2018 in Integral University, Lucknow. **DOI:** 10.1109/CCTES.2018.8674065 978-1-5386-4254-2
8. **Divya Sharma**, Y. K. Prajapati and Shrish Bajpai, "Heterogeneous N-WDM superchannel transmission," Proceedings of Photonics-2018, 12-15 December 2018 in IIT Delhi, pp. FP152, *978-93-88653-41-1.*
9. A. Anurag, P. Giri, and **Divya Sharma**, "Analytical Study of Clad Waveguide Sensor with Metamaterial." In 2017 IEEE Workshop on Recent Advances in Photonics (WRAP), Mahindra École Centrale (MEC) College of Engineering, ***Hyderabad*** pp. 1-3. IEEE, 2017. *DOI: 10.1109/WRAP.2017.8468596. 978-1-5386-6838-2*
10. S. Devi, **Divya Sharma,** & Y. K. Prajapati, "5× 222 Gb/s PM-16QAM Nyquist-WDM Superchannel," International Conference on Sustainable Computing in Science, Technology & Management (***SUSCOM-2019***) Available at SSRN 3351800, 2019.

Reviewer of Journals	Silicon, Indian Journal of Physics, Journal of Low Temperature Physics, Microwave and optical technology letters
Technical Skill Set	Languages : MATLAB Simulators : Multisim , Rsoft Optsim, Optisystem, Comsol Package : MS Office
Training	Did summer training at BSNL, Raebareli during second year in B.Tech. Did summer training at "IGRUA airfield, Fursatganj, Raebareli in Radio shop" on during pre-final year in B.Tech. Prepared summer training report on "Study of Navigational Instruments".
Awards and Honors	➢ Invited talk on "Terabit Nyquist Superchannel Transmission using polarization multiplexed subcarriers" in International Conference on Computational and

Characterization Techniques in Engineering & Sciences (CCTES-18), 14-15 September, 2018, at Integral University Lucknow

- Session chair in International Conference on Computational and Characterization Techniques in Engineering & Sciences (CCTES-18) 14-15 September, 2018, at Integral University Lucknow
- Receiving fellowship under Visveswaraya scheme from DEITY, Government of India during my PhD.
- Received MHRD assistantship during M. Tech studies at Bundelkhand Institute of Engineering & Technology, Jhansi.

Achievements

- GATE 2010 qualified with score 364 and all India rank 11661 in electronics and communication.
- UGC NET June 2013 qualified for lectureship with 63.43% in electronic science

Hobby: Composing and reciting poetries

Co - Curricular Activities

- Participation in school and college level sports and cultural activities
- Duet Anchoring in few competitive events

Personal Details

Date of Birth	:	30/11/1987
Gender	:	Female
Marital Status	:	Married
Nationality	:	Indian
Languages	:	English & Hindi

References

1. Prof. Rajeev Tripathi, Director, Professor, ECED, MNNIT Allahabad ,Prayagraj UP

2. Dr. Y.K. Prajapati, Associate Professor, ECED, MNNIT, Allahabad ,Prayagraj UP

I hereby declare that the above furnished details are true and correct to the best of my knowledge.

Date: 21/07/2021

Place: Lucknow

(**Divya Sharma**)