Dr. Ifrah Amin

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Profile

- Research expertise in optoelectronic devices, optical communication networks.
- Experience in modeling and simulation, using MATLAB, optisystem.
- Computer skills: Windows/Linux, MS Office, LaTeX, Origin.

Education

NIT, Srinagar, J&K, India
Ph.D. Electronics & Communication Engg.,2023

PTU, Jallandhar, India
M. Tech. Electronics & Communication Engg., 2013.

IUST, Awantipora, J&K, India
B.Tech, Electronics & Communication Engg., 2011.

Research Experience

NIT, Srinagar, J&K, India
*Researche*r, August 2018-April, 2023

- Analyzed various Optical amplifiers
- Introduced novel performance evaluation parameters for hybrid optical amplifiers
- Proposed novel hybrid optical amplifier with improved performance for ultra-dense WDM networks
- Proposed MDM-WDM hybrid network for improved performance

Teaching Experience

- SSM College of Engineering, J&K, India

Assistant Professor, April, 2013 - August, 2014

- NIT Srinagar, J&K, India

Assistant Professor (on contract), August, 2014 – December, 2014

- IUST Awantipora, J&K, India

Assistant Professor (on contract), March, 2015 – December, 2015

- IUST Awantipora, J&K, India

Assistant Professor (on contract), March, 2016 – March, 2017

- NIT Srinagar, J&K, India

Assistant Professor (on contract), March, 2017 – December, 2017

- NIT Srinagar, J&K, India

Assistant Professor (on contract), March, 2018 – July, 2018

Scholastic Achievements

- Qualified **NET June-2018** in Electronic Science.
- Qualified **JKSET 2018** in Electronic Science.

Technical Skills

- Design and modeling of novel hybrid optical amplifiers
- Numerical analysis and simulation of HOAs
- Design and analysis of Multimode EDFA
- Hybrid MDM-WDM networks

Grants & Fellowships

Junior Research Fellowship,
MHRD, Govt. of India. July, 2018 – July, 2020

Senior Research Fellowship,
MHRD, Govt. of India. August, 2020 – July,2023

Journal Publications

- Suhail Khursheed Naik, **Ifrah Amin** and Gausia Qazi, Design of parabolic refractive index 2 mode-EDFA with ultra-low deviation in gain and noise figure across 2 × 16 channels for MDM-WDM system, Optics & Laser Technology (SCI, IF:5), 174, 110693, 2024.

- **Ifrah Amin**, Dr. Gausia Qazi, RFA pump- initiated gain augmented spectrum linearization of ASE re-injected EDFA-RFA hybrid amplifier for ultra-dense WDM systems, Optical and Quantum Electronics (SCI, IF:3), 54(7),1-23, 2022.

- **Ifrah Amin**, Dr. Gausia Qazi, Analytical investigation and numerical modelling of optimum EDFA-RFA hybrid optical amplifier for augmented gain and reduced differential spectral gain in ultra-dense WDM environment, Optical and Quantum Electronics (SCI, IF:3),55,2023.

- **Ifrah Amin**, Gulzar Ahmad Dar, Dr. Hardeep Singh Saini, Routing strategies insurvivable optical networks, International Journal of Computers & Technology 9(2), 1055-1062, June 2010.

- Gulzar Ahmad Dar, **Ifrah Amin**, Dr. Hardeep Singh Saini, Algorithm for wavelength assignment in optical networks, Scientific Research and Essays (SCI), Vol.10(6), pp. 243-250, March 2015

Book Publications

- Algorithm for survivable routing optical network, photon ebooks UBN:015-A94510112046