**Department of Physics**

**BIT Mesra**

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| **SN** | **Name of Faculty Member** | **Papers Published** |
| 1. | **Dr. S. Konar** | **2021**1. Rohit Mukherjee and **S.Konar** "Electromagnetically Induced Grating and Parity-time Symmetry in Coupled Quantum Wells", **Chinese Physics** **(Accepted, 2021)**
2. **S Konar***,*Parity-time symmetry in photonics with the emphasis to semiconductor quantum wells,**Asian Journal of Physics, Vol 30, No 1, in press (2021)**
3. Rohit Mukherjee, **S. Konar ,** and Puspashree Mishra "Phase-sensitive modulation instability in asymmetric coupled quantum wells" **PHYSICAL REVIEW A 103, 033517 (2021)**

**2020**1. Tanushree Bhattacharya, Tripta Narayan, Soubhik Chakraborty**, Swapan Konar,** Shilpi Singh; Statistics as a Technology to Predict the Seasonal Variation of Air Pollution; **International Journal of Innovative Technology and Exploring Engineering (IJITEE)**9, 1426-1431 (2020). (Scopus)
2. Rohit Mukherjee and**S. Konar;**Parity-Time Symmetry and Asymmetric Diffraction of Light in four-level Triple Quantum Wells; ***Journal of Optics*** **22, 105402 (2020)**(**Impact Factor: 2.379**).
3. Rohit Mukherjee, **S. Konar;**Effect of quintic nonlinearity on self-phase modulation and modulation instability in multiple coupled quantum wells under electromagnetically induced transparency; ***Results in Physics*** **17**, **103090 (2020)** (**Impact Factor: 4.019).**
4. M. Sharma, V. Dixit, **S Konar**, K Ahmed, V. Dhasarathan; Endlessly single-mode photonic crystal fiber with high birefringence for sensing applications; ***Modern Physics Letters B*** 34 **(06), 2050077(2020).** (**Impact Factor: 0.94**).
5. Tripta Narayan Tanushree Bhattacharya,  Soubhik Chakraborty, **Swapan Konar**; Application of Multiple Linear Regression and Geographically Weighted Regression Model for Prediction of PM2.5;***Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci. ( in press ).***    (**Impact Factor: 0.921**).

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2. Mohit Sharma, Vigneswaran Dhasarathan, Julia S. Skibina, Murugan Senthil Mani Rajan, **S. Konar**, Thu Trang Hoang, and Quang Minh Ng; Giant Nonlinear AlGaAs-Doped Glass Photonic Crystal Fibers for Efficient Soliton Generation at Femto-Joule Energy; ***IEEE Photonics Journal*11**, **7102411(2019)** (**Impact Factor: 2.833).**

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