Curriculum Vitae

1. Name: Dr. Suman Ranjan

2. Department: Electrical Engineering

3. Email id: sumanranjan.ee@bitsindri.ac.in

4. Phone Number: 07004864974

5. Office Address: E-04, Dept. of Electrical Engg., B.I.T. Sindri, Dhanbad.

6. Qualification:

S. No	Degree(UG, PG, PhD)	Specialization	Institute
1	B.Tech (2011)	Electrical Engineering	B.I.T. Sindri, Dhanbad
2	M.Tech (2014)	Power System Engg.	IIT (ISM) Dhanbad
3	PhD (2020)	Electrical Engineering	IIT (ISM) Dhanbad

7. **Area of Specialization:** Microring Resonator, Optical Filters, Power System Protection

8. Professional Experience:

I) Teaching Experience:

Sl. No.	Position held	Name of Organization	from	to
1.	Assistant Professor (On Contract)	B.I.T. Sindri. Dhanbad	04/01/2018	27/12/2022
2.	Assistant Professor	B.I.T. Sindri. Dhanbad	28/12/2022	Till Date

II) Research Experience:

Sl. No.	Position held	Name of Organization	from	to
1.	Junior Research Fellow	IIT (ISM) Dhanbad	14/07/2014	13/07/2016

2.	Senior Research Fellow	IIT (ISM) Dhanbad	14/07/2016	03/01/2018

9. Publications:

I) International Journal:

Sl. No.	Title of the paper	Authors	Name of the journal in which publication has been made	Vol/No.	Publication Year	Pages
1.	Quadruple micro optical multiple asymmetric ring resonator performance analysis as optical filter	Suman Ranjan, Sanjoy Mandal and Suchita Lakra	Optik: **(SCI: *Thomson Reuters)***	127	2016	11075 - 11085
2.	Performance Analysis of Triple Asymmetrical Optical Micro Ring Resonator with 2 × 2 Input-Output Bus Waveguide	Suman Ranjan and Sanjoy Mandal	Brazilian Journal of Physics **(SCI: *Thomson Reuters)***	48	2018	74-84
3.	Performance analysis of triple asymmetrical optical multiple ring resonator with a 1 × 3 input-output waveguide for application as an optical filter	Suman Ranjan and Sanjoy Mandal	Applied Optics **(SCI: *Thomson Reuters*)**	57(9)	2018	2040-2049
4.	Performance analysis of quadruple asymmetrical optical micro ring resonator as optical filter	Suman Ranjan and Sanjoy Mandal	Optik: **(SCI: *Thomson Reuters)***	171	2018	821-832
5.	Optimal coordination of directional overcurrent relays in complex distribution networks using sine cosine algorithm.	Kumari Sarwagya, Paresh Kumar Nayak and **Suman Ranjan**	Electric Power Systems Research **(SCI: *Thomson Reuters)***	187	2020	
6	Modelling and Analysis of Quadruple Asymmetrical Optical Micro-Ring Resonator for Biosensing Application,	**Suman Ranjan,** K. Sarwagya, S. Mandal and P. Rai,	IEEE Sensors Journal,	vol. 21	2021	
7	Performance investigation of triple unsymmetrical micro	Susanna Kisku,	*Optical and Quantum*	vol. 55	2023	

	ring resonator as optical filter as well as biosensor	Kumari Sarwagya, & **Suman Ranjan**	*Electronics*			
8	Adaptive coordination of directional overcurrent relays for meshed distribution networks with distributed generations using dragonfly algorithm	K Sarwagya, P K Nayak & **S Ranjan**	Electrical Engineering	105	2023	1-10
9	Modelling and analysis of quadruple unsymmetrical micro-ring resonator based optical filter	S Marandi, Kumari Sarwagya, & **Suman Ranjan**	*Optical and Quantum Electronics*	vol. 55	2024	1-10
10	Triple Micro Optical Multiple Asymmetric Ring Resonator Performance Analysis as Optic al Filter	S Marandi, Kumari Sarwagya, & **Suman Ranjan**	*Journal of Optics and Photonics Research*.		2024	1-10

II) International Conference :

Sl. No.	**Title of the paper**	**Name of the Conference in which publication has been made**	**Vol/No.**	**Publication Year**	**Pages**
1.	Enhanced FSR Triple Ring Resonator	3rd Int'l Conf. on Recent Advances in Information Technology	**DOI:** 10.1109/RAIT.2016.7507982	2016	1-4
2.	Mathematical modelling of extrinsic Fabry-Perot Interferometer cavity	3rd International Conference on Microwave and Photonics (ICMAP 2018)	**DOI:** 10.1109/ICMAP.2018.8354514	2018	1-2
3.	Performance Analysis of Quadruple Asymmetrical Optical Microring Resonator	4th Int'l Conf. on Recent Advances in Information Technology	**DOI:** 10.1109/RAIT.2018.8388991	2018	1-6
4.	Z-domain modelling of a quadruple	Optical Instrument Science,	**DOI:** 10.1117/12.23	2018	1-6

	asymmetrical micro optical ring resonator and its performance as optical filter	Technology, and Applications, SPIE, Frankfurt, Germany	12527		
5.	Detection and classification of Faults in Distribution System using Signal Processing techniques	ICCECE-2020 Techno India, Salt Lake, West Bengal.		2020	1-6
6	Performance Analysis of Pentuple Micro-optical Asymmetric Ring Resonator	Intelligent Communication, Control and Devices	https://doi.org/10.1007/978-981-16-1510-8_21	2021	
7	Solution of Economic Load Dispatch Using Flower Pollination Algorithm	Intelligent Communication, Control and Devices	https://doi.org/10.1007/978-981-16-1510-8_24	2021	

10. Symposium/ Workshop/Seminar/ Attended

Sl. No.	Title of Symposium/ Workshop/Seminar/ Short – term Courses	Date	Organizing Institute
1.	Advancement and Application of Soft Computing in Electrical Systems	13-17 July,2018	N.I.T. Patna & B.I.T. Sindri.
2.	Faculty Development Programme on ANN and Deep Learning	11-15June, 2018	B.I.T. Sindri
3.	Workshop on Outcome Based Education and Accreditation	16-17 Mar., 2018	B.I.T. Sindri
4.	TEQIP-III Faculty Induction Programme	31-04 Feb,2018	IIT Madras
5.	Advanced COMSOL Multiphysics Online Training	Jan 30- Feb 3, 2017	COMSOL Multiphysics
6.	Programmable Logic Controller (PLC)	2014	IIT (ISM) Dhanbad

	programming, Applications and Troubleshooting		
7.	Matlab and Simulink for Engineering Applications	Sept. 2012.	IIT (ISM) Dhanbad

11. Project Experience:

Sl. No.	Organization	Position	Description
1	BIT Sindri and IIT (ISM) Dhanbad	Principal Investigator (PI)	**Title:** Design and modelling of microring resonator based biosensors. **Project Budget:** 14.96 Lakhs **Funding Agency**: AICTE under Collaborative Research Scheme (CRS) **Project Allocated**: 21/06/2019

12. Gate Rank: 2012 (**Gate Score: 540, AIR: 1880**) , 2013 (**Q**), 2014 (**Q**), 2016 (**Q**).

13. Personal Profile:

Father's Name	**:**	Mahanand Sahu
Mother's Name	**:**	Manju Devi
Date of birth	**:**	05/05/1988
Gender	**:**	Male
Category	**:**	General
Category for Jharkhand state	**:**	
Permanent State	**:**	Jharkhand
Nationality	**:**	Indian
Languages Known	**:**	English, Hindi
Permanent Address	**:**	Opposite Asha Jewellers, Gandhi Nagar, Dhanbad, Jharkhnad-826001
Present address	**:**	Opposite Asha Jewellers, Gandhi Nagar, Dhanbad, Jharkhnad-826001

Declaration:

I hereby declare that the above furnished particulars are true and the best of my knowledge and belief

Place: Dhanbad

Signature