Curriculum Vitae

Name : Dr Sanjoy Mandal

Address

Permanent : Village & P.O – Amlagora
Dist. – Midnapore (West)
721121, West Bengal, India

Present : Department of Electrical Engineering
Indian Institute of Technology(ISM), Dhanbad, India
826004

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Nationality : Indian

Father' name : Late Amarendra Mandal

Date of birth : 06.05.1968

Religion : Hindu

Branch of Engineering : Electrical Engineering

Specialization : Instrumentation, Control & Photonics

Marital Status : Married

Physical Standard : Ht.-175 cm Wt. - 70 Kgs.
Eyesight- Normal with glass (L:-2.75, R:-2.75)

Academic record :

Name of the University./Board	Examination passed	Year of passing	Division	% of marks
W.B.B.S.E	Secondary	1984	1	70 %
W.B.C.H.S.E	Higher Secondary	1986	1	65.3 %
Calcutta University	B.E (pt. 1 & pt. 2)	1988-1989	p	70 %
Calcutta university	B.E (pt. 3 & pt. 4)	1990-1991	1	75 %
Jadavpur University	M.E.E	1993	1	75 %
Jadavpur University	PhD(Engineering)	2007	-	-

Experience:

Sl. No	Organization's Name	Duration/ Position	Details of experience
1	R. B. Data Comms. (P) Ltd, Salt lake Industrial complex, Kolkata	One Year. Officer	Design and development of digital A.C drives with P.W.M technology and IC based power supply units.
2	ESAB INDIA LTD IISCO House, Kolkata	Three year. Executive	Design and development of welding rectifiers, welding inverters, welding transformers, MIG and TIG welding equipments, Submerged arc welding equipment etc.

3	Scientific Pollution Control and equipment (P) Ltd, N.S Road, Kolkata	Three year. Director	Design and development of industrial pollution control equipments like bag filters, cyclone separator etc.
4	College of Engineering and Management, Kolaghat	Eight year. Assistant Professor	Teaching of different Electrical Engineering subjects like Basic Electrical Engineering, Control System, Dynamics of Physical System, Opto electronics. Research Interest includes Modeling of Photonic Devices in S & Z domain.
5	Indian Institute of Technology(ISM), Dhanbad, India	Nine years. Associate Professor.	Teaching of different Electrical Engineering subjects like Electrical Technology, Control System, and Instrumentation. Digital signal Processing, Power Plant Instrumentation and Control, Advanced Control System, Industrial Automation and Control. Research Interest includes Modeling of Photonic Devices in S & Z domain.

Publication details:
Articles published in international journals:

Sl. No	Year	Paper Title, Author(s), Journal, Volume no., Page no, Year
1	2005	"Modeling and analysis of an extrinsic Fabry-Perot interferometer cavity" , By T.K.Gangopadhyay, S.Mandal, K.Dasgupta, S.K.Ghosh, T.K.Basak, Published in Applied Optics, New York, Vol 44, Issue 16, 3192-3196, June 2005
2	2006	"A Generalized Approach for Modeling and Analysis of Ring-Resonator Performance as Optical Filter", By S.Mandal, K.Dasgupta, S.K.Ghosh, T.K.Basak. Published in Optics Communications, Elsevier, 264 (2006) 97-104.
3	2011	"Wide free-spectral-range triple ring resonator as optical filter" by S Dey , **S Mandal** . Optical Engineering , SPIE. 50(8), 084601 (August 2011).
4	2012	"Modeling and analysis of quadruple optical ring resonator performance as optical filter using Vernier principle", by S Dey , **S Mandal** . Optics Communications, Elsevier, 285 (2012) 439–446.
5	2012	"Enhancement of free spectral range using pentuple microresonator" , by S Dey , **S Mandal,** N N Jana, Applied Optics, Vol. 51, Issue 29, pp. 6901-6912 (2012)
6	2013	"Quadruple optical ring resonator based filter on silicon-on-insulator", by S Dey , S Mandal, N N Jana, Optik- Elsevier,Vol. 124, Issue 17, pp. 2920-2927, 2013

7	2014	"Economic load dispatch using krill herd algorithm", by Barun Mandal, Provas Kumar Roy, Sanjoy Mandal, International Journal of Electrical Power & Energy Systems, Elsevier, Volume 57, May 2014, Pages 1–10
8	2014	"Modeling and performance analysis of vertically coupled triple microring resonator in the Z domain" S Lakra, S.Mandal, , Applied Optics, OSA, New York, Vol 53, Issue 36, 8381-8388, 2014.
9	2015	"Performance Of Optical Micro Ring Resonator As Multiplexer And All Optical Logic Shifter in Z-Domain", N Verma , **S Mandal** . Opt. Eng. 55(1) 016105,2015
10	2016	"Performance analysis of optical micro-ring resonator as all-optical reconfigurable logic and multiplexer in Z-domain", N Verma , **S Mandal,** Journal of Nonlinear Optical Physics & Materials Vol. 25, No. 1 (2016) 1650013.
11	2016	"Analytical modeling and performance analysis of multilayer coupled asymmetrical microring resonators in Z-domain", S Lakra, S Mandal, Optik,Volume 127, Issue 20, 2016, 9517–9531.
12	2016	"Quadruple micro optical multiple asymmetric ring resonator performance analysis as optical filter", S Ranjan, S Mandal, S Lakra, Optik, Volume 127, Issue 23, 2016, 11075–11085.
13	2017	"Development and Characterization of Carbonic Anhydrase Based CO2 Biosensor for Primary Diagnosis of Respiratory Health." By S Bagchi, S Mandal, S Sengupta , 17(5), 2017,IEEE sensor Journal.
14	2017	"Development and Characterization of a Wireless Mouse Based Spirometer", By S Bagchi, S Mandal, S Sengupta, 17(7), 2017, IEEE sensor Journal.
15	2017	"Design And Performance Analysis Of Optical Micro-Ring Resonator Based J-K Flip-Flop" , N Verma, S Mandal, Optical Engineering, SPIE(AIP),56(3),037103, 2017
16	2017	"Performance Analysis of Triple Asymmetrical Optical Micro Ring Resonator with 2×2 Input-Output Bus Waveguide", S Ranjan, S Mandal, Springer, Brazilian Journal of Physics, 48(1),74-84,2017
17	2018	"Modeling and Performance Analysis of Bragg Grating in Z-domain", B Ghosh, S Mandal, IEEE Photonics Technology Letters, 30(5),2018
18	2018	"Performance analysis of triple asymmetrical optical multiple ring resonator with a 1x3 input-output waveguide for application as an optical filter", S Ranjan, S Mandal, 57(9), 2018, OSA, Applied Optics.

19	2018	"Experimental investigation of pug cutter embedded TIG welding of Ti-6Al-4V titanium alloy", Deepak Kumar Gope, Uday Kumar, Somnath Chattopadhyaya , Sanjoy Mandal, 32(6), 2018, J of Mechanical Science and Technology.
20	2018	'Performance study of optical resonator based filter architectures", Subhankar Addya, Sabitabrata Dey, Sanjoy Mandal, IET Circuits, Devices & Syatems, Accepted for publication. DOI: 10.1049/iet-cds.2018.0087.

Articles published in national journals:

Sl. No	Year	Paper Title, Author(s), Journal, Volume no., Page no, Year
1	2001	Development of a fiber optic Non- contact rotation sensor for calibration of Energy meter – Dr S. K. Ghosh, Dr. A Rakshit, J C Dutta , S Mandal , S Chakraborty in IEI Engineers vol 82, pp 29-32 ,November 2001.

(Several articles published/presented in national /international conferences/proceedings)

Topic of PhD work : Study and use of ring resonator performance as optical filter .

Member of Professional body: Indian society of technical education.
Software skill: MATLAB, PSPICE

PhD thesis supervised: Four
List of detailed R&D Projects undertaken:

Sl no	Project Title	Investigators Status	funding agency	total cost (INR)	Status
1	Design and Development of An Waveguide Based Wide FSR Ultra-Fast Multiple Optical Ring Resonator	PI	UGC	8,80,000.00	Completed
2	Development of fiber optic vibration sensor for measurement of cardiac	PI	ISM	10,00,000.00	Completed
3	Online Condition Monitoring of Heavy Duty Electrical Drives	Co-PI	UGC	9,37,000.00	
4	Optimal Allocation of FACTS Devices for the Increased Loadabilty of Power Systems in Deregulated Electricity Market	Co-PI	UGC	3,71,000.00	Completed
5	Development of Static VAR Compensator (STATCOM) for Self-Excited Variable Speed Induction Generator	Co-PI	UGC	9,16,000.00	Completed

Other Information : 1) Worked as reviewer of following prestigious international journals.

i) Journal of Lightwave Technology, IEEE.
ii) Sensors Journal, IEEE.
iii)Optical Engineering Journal, SPIE.

2)Worked as supervisor of various undergraduate and post graduate level projects.

Current Employer : Indian Institute of Technology(ISM), Dhanbad, 826004, Under Ministry of Human Resource Development, Government of India

List of awards and honors:

Erasmus Mundus scholarship was awarded for one month research mobility program in City University, London from 11.06.2016 to 12.07.2016, funded by European Commission.