

Brief Bio-data of Dr. Analava Mitra

Name: Dr. Analava Mitra

Father's name: Late Sailendra Nath Mitra

Address: B-145 IIT Campus, IIT Kharagpur, Kharagpur-721 302

Designation: Associate Professor

Department/Institute/University: School of Medical Science & technology
IIT Kharagpur, 721302

Date of Birth: 02/04/1956

Sex (M/F): M

Education (Post-Graduation onwards & Professional Career)

Sl No.	Institution Place	Degree Awarded	Year	Field of Study
1	I.I.T Kharagpur	PhD	2003	Plant and Food based products in health
	Annamalai University	Diploma Industrial Hygiene	1995	Industrial Psychology/Accidents prevention/Industrial worker's diseases etc
3	Jadavpur University	Diploma- Cardiology	1987	Cardiology
4	NRSMCH/ Calcutta University	MBBS	1980	Medicine/Surgery/G&O/Eye/ENT Pharmacology/PSM/FSM/ Pathology Anatomy/Physiology etc.

Position and Employment

Sl. No.	Institution Place	Position	From (Date)	To (date)
1	IIT Kharagpur	Faculty, SMST (at present Associate Professor) Professor-in-Charge, BCRT Hospital	2007 2009	Till date
2	IIT Kharagpur	SMO and Head	1991	2007
3	Duncan Brothers	SMO	1986	1991
4	Dr. S. K. Bose's Laboratory	Clinical Pathologist	1982	1991
5	NRSMCH & BRSH Kolkata	Internee, House-staff, PGT and Clinical Pathologist	1981	1987

Sponsored Research

1. Medical Image Analysis and MEMS Based Flow Sensor Development (Texas Instruments (I) Pvt Limited, Bangalore, Rs. 92.00 Lakhs) PI: Dr J Chatterjee ; CO-PIs: Professor A. K. Ray, Dr A. Mitra, Dr S Das, Dr, M . Manjunath, Dr. C. Chakroborty. Completed
2. Development of novel nano-bio composite osteogenic matrices for cell based bone tissue engineering (DRDO, Rs. 21.60 Lakhs) PI: Dr. T.K. Maity ; CO-PIs: Dr. A. Mitra. Completed.
3. Comparative Evaluation of Anti-diabetic Potential of Two Indian Medicinal Plants in Vivo. PI: Dr. A. Mitra. Completed
4. Development of a MEMS based Assay for bio-medical diagnostics (ISRO, Rs. 13.20 Lakhs) PI: Dr. S. Das ; CO-PIs: Dr. A. Mitra. Completed..
5. Isolation and Characterization of the Active Constituents from leaves of three Indian medicinal plants and Evaluation of Sustain Delivery System of Anti-Diabetic Bioactive Molecules Based on Chitosan Loaded Nano/Micro Beads (WBDST, 20 lacks) PI: Dr. A. Mitra, Co-PI Dr. S. Dhara
6. Therapeutic Efficacy and Bioavailability of Various Polyphenolics Present in Tea as an Adjuvant in the Treatment of Alzheimer's Diseases. (NTRF, Rs 22 Lacks) PI Dr. A. Mitra, Co PI Prof B.C. Ghosh, Prof T. K. Ghosh (CU)
7. Demonstration of community participation model for economic development and nutrition health management through organic farming and education. Coal India, Rs 49.62 Lacks, PI Dr. A. Mitra, Co PI Prof B.C. Ghosh, Prof K. Pathak, Prof. D.K.swain
8. Pilot programme for nutritional intervention amongst primary school children at Kashijora, Rs 1 Lacks, IIT Kharagpur, PI Dr. A. Mitra, Co PI Prof D. Roy
9. Computer aided wound image analyser for chronic wound management. PI Prof. Chandan Chakroborty, Co-PI Dr. A. Mitra, Rs 1598426/-
10. ASSESSMENT OF PHYSICAL, MENTAL & SOCIAL ASPECTS OF INHABITANTS OF PAKYONG AND SEWAGE DRAINAGE OF PAKYONG AIRPORT, SIKKIM. PI: Analava Mitra (Consultancy Project), Rs 5037500/-.

Member Editorial Board: 8 international Journals

Honors/Awards

Best Paper Award from Journal of AFSTI
Rashtriya Gaurav Award

Book/Book chapter Publications (Numbers only)

Books and Book chapters: 04

Research Papers, Reports & General articles: 153 (national 62, international 64), Seminar presentations: 27

Patents: 04

Other Academic Activities

Organizer of Academic programmes in rural sectors

Health Education to Rural Village People in Medical Camps and organizer of village health camps by SMST society

Health Research Advisor to Govt. of Arunachal Pradesh

Evaluation of scientific proposals submitted in different Governmental bodies

Collaboration:

Jadavpur University, Kolkata,
CDAC, Kolkata,

RTIICS Kolkata
ESIC Hospital Kolkata
Narayan Hrudulaya, Bangalore
CSR-ECL, Coal India
Tea Board, India

Professional Activities (A Brief Write Up)

The candidate's work concentrates on applied, practical and optimized aspects (basic theme of engineering) of health management in rural Indian context. He is a physician and is doing active research in the field of Traditional (herbal drugs and naturopathy) and nutraceutical in diabetes and other diseases. He is the first to show delayed cooling in the process of parboiling of rice and that may revolutionize the nutraceutical based diabetes management programme in rural rice eating Indian community. He had also highlighted the dietary role and alternative managements in a rural Indian (Bengali) diabetic and proposed an optimized nutraceutical based model of diabetic control focused on his life style through long term experimentations. His opinion regarding the rigid ethical guidelines of ICMR while doing continuous experimental work with rural community may prompt ICMR to change the guidelines considering practicality. His work relates the role of blood sugar level with intelligence in the community. His work area also involves drug isolation, characterization and evaluation from medicinal plants. He and fellow workers actually predicted the bioactivity and toxicological properties of a compound based on electrophilicity and established MEMS based thernostic approaches. He proposed a holistic management style based on traditional practices that can produce rich dividends in diverse sectors even also in Industrial arena. His other area of work is hospital management. He is currently working in imaging and image processing in early diagnosis of dementia and tea as an adjuvant to treatment to dementia.

His passion with optimized healthcare delivery in rural sector prompted him to perform continuous voluntary medical camps at remote villages of Bengal. While doing clinical service to the IIT community he developed the idea of bridging the gaps in HSR with optimised resources and IIT seeing his activities has sponsored him a project of social development. Being a clinician, he tried to reduce the sufferings of a poor villager by alternative and traditionally based socio-culturally accepted indigenous technologies/knowledge yet to be proven scientifically. Explosion of the diabetic populace in rural Bengal with a proper geographic distribution was first reported by him. He made a long term search of proper nutraceutical formulation of use in rural Indian diabetics and evaluated the role of diet and lifestyle in diabetic causation and subsequently management in rural Bengal. He is actively perusing the process of finding a suitable vehicle for long term delivery of newer bioactive herbal components isolated, characterized and biologically evaluated in his laboratory in altered homeostasis of diabetes. His researches on parboiled rice had given the option of a cheaper nutritive yet anti-diabetic product to a villager. He is a Fellow College of Chest Physicians- Delhi; Life Member Indian Medical Association; Life Member IMA College of General practitioners; Member National Association of Psychologists; Member Centre of Applied Medicine Kathmandu, Member American Chemical Society.