MANASMITA DAS

Sandeswartala, Roysberh, Chinsurah, Hooghly, WB-712101

Phone: +91-7044756070 (M); Email: dmanasmi@gmail.com; manasmita.ihs@presiuniv.ac.in

https://www.manasmitascientisician.com/; https://presiuniv.ac.in/web/staff.php?staffid=449

Personal

- **Date of Birth**: 15.07.1981
- **Sex**: Female
- **Nationality**: Indian

Education/Training

INSTITUTION AND LOCATION	DEGREE	COMPLETION DATE	FIELD OF STUDY	CLASS/ MARKS OBTAINED (%)
Indian Institute of Technology, Kharagpur India	PhD	14/02/2011	Chemistry	NA
IIT Kharagpur, India	MS.	30/06/2005	Chemistry	1st / 80.9
Hooghly Mohsin College, Burdwan University, India	BS.	16/07/2003	Chemistry (Hons.)	1st / 61.5
Higher Secondary, WBCHSE	10+2	07/2000	Science	1st / 82.4
School Final, WBBSE	10th	06/1998	-	1st/ 87.88

Certifications and Professional Development

- Completed four weeks online **Faculty Induction Programme** organized by the **Malaviya Mission Teacher's Training Center (MMTTC), University of Hyderabad** from 18th June to 15th July 2024 and obtained '**A+**'.
- Completed certification on **"The Social Emotional Educator – A Primer"**, *issued by* **UNESCO MGIEP** *(Mahatma Gandhi Institute of Education for Peace and Sustainable Development);* Score: 344/344 (100%)

Positions, Employment, Research Experience and Responsibilities

ASSISTANT PROFESSOR **June 2022 – Present**

Institute of Health Science (IHS), Presidency University

❖ **Teaching & Academic Responsibilities**

- **Undergraduate (B.Sc. Biotechnology):** Fundamentals of Organic, Inorganic & Physical Chemistry, Music & Mental Health (NEP-MDC course coordinated & designed by self)
- **Postgraduate (M.Sc. Biotechnology, Molecular Microbiology, Virology & Immunology)**: Organic Stereochemistry, Structure & Function of Biomolecules, Drug Design & Discovery, Biopharmaceutics & Drug Delivery, Nanotechnology & Nanomedicine, Basics of Biostatistics, Bioentrepreneurship & Principles of Product Development, Vaccine Development

❖ **Course Coordination**: Biochemistry & Cell Biology, Biostatistics & Bioethics, Intellectual Property Rights

❖ **Research & Supervision:** Supervising **Ph.D. scholars** and mentoring **M.Sc. dissertation projects**. Leading multidisciplinary research on novel nanomaterials and technologies for drug delivery, imaging-based diagnostics, vaccine formulation for allergen-specific immunotherapy, agricultural applications.

❖ **Leadership & Committee Roles: Convenor**: *Career Counselling Committee*; **Member**: *Departmental Academic Committee · Outreach Committee · Colloquium Committee · Central Cultural Committee*

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FREELANCE SCIENCE COMMUNICATOR & EDUCATIONAL ENTREPRENEUR **March 2020- June 2022**

- Professional freelancer on Kolabtree. https://www.kolabtree.com/find-an-expert/manasmita-das. Providing scientific consultancy and manuscript writing services to clients from all over the world.
- Founder of WINGS, an e-learning platform promoting STEM education for high school and college students. This online platform was developed to guide the meritorious yet financially challenged students during the COVID-19 pandemic to prepare for medical and engineering entrance and university examinations. For more details, please visit https://www.manasmitascientisician.com/wings

DIRECTOR, CONTRAST AGENT, AND MOLECULAR MRI **July 2015-December 2020**

Center for Animal MRI (CAMRI), UNC Chapel Hill

- Established the **Contrast Agent and Molecular MRI Core Facility** at CAMRI, UNC Chapel Hill. Developed various cost-effective nanoformulations for application in magnetic resonance angiography, cerebral blood volume fMRI, hyperpolarized gas MRI, simultaneous MR and optical imaging, cell labeling, and magnetomotive ultrasound imaging. This core extended contrast agent support and efficacy evaluation service for new probes to research groups within UNC as well as prominent investigators from **Stanford University** (US), **Emory University** (US), **NIEHS, NIH** (US), **UT San Antonio** (US), **Huck Institute Life Sc.** (US), **McGill University** (Canada), **University of Antwerp** (Belgium), **The University of Hong Kong** (China), **University of Queensland** (Australia), **China Medical University** (Taiwan), **Charles River Laboratories** (Finland), and **Istituto Italiano di Tecnologia**.

POST-DOCTORAL RESEARCH FELLOW **July 2013-August 2018**

Department of Neurology and BRIC, UNC Chapel Hill

- Developed novel **chemogenetics-based MR imaging tools** for non-invasive assessment of brain functions
- Mapping functional neurocircuits of the central noradrenergic system using ***chemogenetic fMRI*** and ***PET***
- Mapping functional neurocircuits of dopaminergic neurons using ***optogenetic fMRI***
- Interrogating the role of specific **astrocytic GPCR signaling pathways to BOLD** signal using chemogenetic fMRI.
- Teaching and supervising undergraduate students at UNC Chapel Hill for Chem 395, Biology 395, and BMME 395 courses focused on undergraduate research in Biomedical Engineering, Chemistry, and Biology

SUMMER TRAINEE – NIH MULTIMODAL NEUROIMAGING TRAINING PROGRAM **June-July 2014**

School of Medicine, University of Pittsburgh and *CNBC, Carnegie Melon University*

- Assessed outcomes of **Temozolomide therapy** in human glioma patients using **[18F] FLT-PET** and MRI
- Trained in **pharmacokinetic modeling of PET tracers**, PET physics, and PET instrumentation
- Learnt various neuroimaging imaging modalities including **fMRI, DTI, MEG, EEG, NIRF,** and **optical imaging**.

POST-DOCTORAL FELLOW – NANOSCIENCE AND NANOTECHNOLOGY **February 2012-July 2013**

National Institute of Pharmaceutical Education and Research – Mohali, India

- Developed novel steroids-anchored polymeric nanoparticles and dual drug macromolecular bio-conjugates for targeted cancer therapy.

RESEARCH SCIENTIST (GRADE I) **March 2011-February 2012**

National Institute of Pharmaceutical Education and Research – Mohali, India

- Developed novel ligand-anchored carbon nanotubes for tumor-specific drug targeting and therapy

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RESEARCH SCIENTIST (GRADE-II) **February 2010-March 2011**

National Institute of Pharmaceutical Education and Research – Mohali, India

- Developed novel nanocarriers for tumor-targeted drug delivery and oral bioavailability enhancement of poorly absorbed or pre-systemically metabolized drugs.

GRADUATE RESEARCH FELLOW AND TEACHING ASSISTANT **October 2005-January 2010**

Chemistry Department, Indian Institute of Technology – Kharagpur, India

- Worked on synthesis, characterization, and in vitro evaluation of novel magnetic nanoparticle-based targeted probes for cancer theranostics.
- Synthesized novel Trienediynes with enhanced reactivity and DNA cleavage efficacy.
- Tutored *Organic Chemistry* courses (CY14001) for 1st year B. Tech students. Co-instructed two Masters' level laboratory courses on *Principles of Organic Synthesis* (CY43015) and *Organic Synthesis Laboratory* (CY59001).

PROJECT TRAINEE **May 2004-June 2005**

Chemistry Department, Indian Institute of Technology – Kharagpur, India

- Developed a chemoenzymatic synthesis route to synthesize intermediates for nucleoside analogs.

Awards and Honors

- **2019**: Invitation to join Consultative Group of Primary Scientific Advisors, Govt. of India. Working on National Science Policy on various socio-economic issues.
- **2017**: *Summa Cum Laude Merit Award* from International Society for Magnetic Resonance in Medicine (ISMRM, the largest meeting in the world dedicated to MRI) for the work, "Chemogenetic fMRI and ^{18}F-FDG PET Reveal Functional Projections of Hoxb1-Derived Noradrenergic Neuron**s**".
- **2015, 2016, 2017**: *Educational Stipend Award* for 3 consecutive years for significant contribution to chemogenetic fMRI and new MRI contrast agent development.
- **2014-2017**: *Cross-disciplinary fellowship (CDF*) grant award from the international Human Frontier Science Program Organization (HFSPO) for dissecting the neuronal and astrocytic component of BOLD-fMRI signal using chemogenetic and optogenetic fMRI
- **2014**: *Training award* for participation in the highly competitive *NIH*-sponsored *Multimodal Neuroimaging Training Program* at the University of Pittsburgh and Carnegie Melon University
- **2012**: *International travel grant award*, Indian Council of Medical Research (ICMR), Department of
- Biotechnology (DBT) and Department of Science and Technology (DST), Government of India (GOI)
- **2012**: *DST Postdoctoral Fellowship in Nanoscience and Nanotechnology*, DST, GOI
- **2011**: *International travel grant award* ICMR and Council of Scientific and Industrial Research (CSIR, GOI)
- **2008**: *Travel stipend* for participation in Science Conclave: A congregation of Nobel Laureates, DST-GOI
- **2005**: *Junior Research Fellowship* (JRF) and *Senior Research Fellowship* in Chemical Science by CSIR, GOI •
- **2005**: Scored 98.35 percentile in *Graduate Aptitude Test to Engineering* (GATE); All India Rank 57, Chemical Sc.
- **2003**: *National Scholarship*, GOI for securing 1st class in B.Sc. Final Examination
- **2000**: *Binoy Krishna Modok Trust Fund Scholarship (*Mathematics Topper in High School), Hooghly Mohsin • College, India
- **1998**: *National Prize* for securing 55th rank in Secondary (school leaving) Examination among 600000 candidates

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Core Skills and Competencies

❖ **Technical & Research Expertise:**

- ***Synthetic Chemistry:*** Organic synthesis · Bioconjugation · Nanomaterial synthesis & functionalization · Novel Drug Delivery System (NDDS) based on polymeric, lipid, protein NPs, liposomes, CNTs, magnetic/gold probes.
- ***Physicochemical characterization:*** UV, FTIR, NMR, XRD, TEM, SEM, AFM, XPS, DLS, HPLC, GC, MS) ·
- ***Biomedical Imaging:*** MRI, PET, fMRI, MEMRI, EEG, MEG, optical & two-photon imaging · Preclinical MRI (BOLD, ASL, MEMRI, relaxometry, connectivity mapping) · Image analysis (MATLAB, FSL, AFNI, ANTs, AMIRA, PMOD) ·
- ***In vivo techniques*****:** Rodent handling · Stereotactic brain surgeries · Neuromodulation with Chemogenetics and Optogenetics-based techniques; MRI-based pharmacokinetics, Knowledge of PK/PD and toxicity studies.
- ***Tissue culture*** **and histology techniques:** Hands-on experience in brain histology and confocal microscopy. Knowledgeable in a variety of cancer cell culture and immunohistochemical techniques.

❖ **Teaching & Pedagogical Innovation:**

- Teach Chemistry, Biochemistry, Drug Design, Biomedical Imaging, Nanotechnology, Bioentrepreneurship, and Music & Mental Health at UG, PG & Ph.D. levels ·
- Innovating arts-integrated STEM pedagogy combining music, neuroscience & visual arts.
- Designed & coordinate Music & Mental Health (NEP-MDC) course.
- Passionate mentor with focus on student psychology & career guidance ·
- Organized **IDEATHON & SCINEMA** for the students at Presidency university with an aim to promote **entrepreneurial thinking, science communication, visual storytelling, and digital outreach skills** through experiential learning.

❖ **Science Communication & Outreach:**

- **Freelance Science Communicator**: Authored **SEO-friendly articles** on emerging technologies for scientific news publishers and industries across Europe & the US.
- **Outreach & Engagement**: Conduct **mental wellness workshops** and **arts-integrated learning programs**; strong communicator, storyteller, and experienced leader in **cross-disciplinary educational initiatives**.

❖ **Creative & Cultural Expertise:**

- Indian Classical Music (Dhrupad & Khayal) practitioner & educator**.**
- Integrate ragas, rhythm & sound neuroscience into teaching & therapy.
- Promote traditional arts & culture while bridging STEM + Performing Arts collaborations.

Research Projects, Funding, Collaborations, and Industrial Interactions

- SERB Govt of India (CRG scheme) (Das, Co-PI) 2024-2027

Epitope-guided design of hypoallergenic nano-vaccine for the immunotherapeutic management of dust mite allergy.

This project aims to develop a novel nano-vaccine for the immunotherapeutic management of dust mite allergy.

- Myer Research Inc. , USA (Das, Collaborator) 2024-2025
- *Developing novel iron-oxide based nanoformulations for cancer theranostics*

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- R01 MH111429 (NIH BRAIN Initiative grant) (Shih, PI; Das, Co-Investigator) July 2016-2021

Chemogenetic dissection of neuronal and astrocytic components of BOLD signal

The overall objective of this project is to determine the fractional contribution of neurons and astrocytic GPCRs to Blood Oxygenation Level Dependent (BOLD) fMRI and develop a more complete model of the BOLD signal.

- Human Frontier Science Program (HFSP) (Das, PI) May 2014-May 2017

Dissecting neuronal and glial contribution to BOLD signal using chemogenetic and optogenetic fMRI

The goal of this project was to determine how neurons and astrocytes orchestrate BOLD-fMRI signal in vivo using novel genetic approaches based on (i) *D*esigner *R*eceptors *E*xclusively *A*ctivated by *D*esigner *D*rugs (DREADD, a chemogenetic tool) and (ii) light-activated photosensitive proteins (optogenetic tools).

- Industrial Consultancy Project with See Cure LLC, Taiwan (Das, Collaborator) December 2013-April 2015

Evaluating the MRI efficacy of new blood pool agents based on Gd-chitosan complexes

The goal of this project is to evaluate the efficacy of new Gd-based blood pool agents for blood flow imaging

- DST-PDF NST (3rd series) Award (Das, PI) February 2012-July 2013

Development of steroids-anchored polymeric nanoparticles for targeted cancer therapy

The goal of this project is to develop and exploit steroid-anchored polymeric nanoparticles for estrogen/androgen receptor-targeted cancer therapy.

Professional Activities and Community Outreach

- **2010 -Present**: Served as *ad-hoc reviewer* of more than 20 international journals including *Small, Biomaterials, ACS Applied Materials and Interfaces, Advanced Functional Materials, Crystal Growth and Design, Plos One, Nanomedicine (London), International Journal of Pharmaceutics, Carbohydrate Polymer, International Journal of Nanomedicine, Applied Surface Science, Colloids and Surfaces B-Bio interfaces, Chemical Engineering, Frontiers in Neurology, Micro and Nano Letters, Recent Patents on Nanotechnology, Materials Letters, Materials Research Express, Recent Patents on Drug Delivery and Formulations, Therapeutic Delivery, Future Medicinal Chemistry and Journal of Drug Delivery*.

- **2012-Present**: Serving as a mentor for the International Student-Alumni Mentorship Program, IIT Kharagpur.

- **2011-Present**: Member of various professional bodies including the International Society of Magnetic Resonance in Medicine (ISMRM), American Heart Association (AHA), American Association of Pharmaceutical Scientists (AAPS), American Chemical Society (ACS), Royal Chemical Society (RSC), Controlled Release Society (CRS). Life member of the Chemical Research Society of India (CRSI).

- **2017–2018:** Volunteered for DooR to DooR**, a** healing arts program **at** UNC Hospital, using Indian Classical Vocal Music to support patients with cancer, neurological, geriatric, and psychiatric conditions**.**

- **2018–Present:** Engaged in cultural heritage preservation through the documentation, analysis, and reinterpretation **of ~**250 Dhrupad compositions from the Bishnupur Gharana

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▪ International Peer-reviewed Journal Publications

Total Citations: 3198; h index =26 as of 01.09.2025. **(Citation/article, Impact Factor** provided in parenthesis)
Source of citation: https://scholar.google.com/citations?user=dH0ql6cAAAAJ&hl=en *Corresponding authors

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1. Oyarzabal, E. A$.; Hsu, L.M$; **Das, M**$; Chao, H; Zhou, J; Song, S; Zhang, W; Smith, K.G.; Siolino, N.R.; Evsyukova, I.Y.; Yuan, H; Lee, S.H.; Cui, G.; Jensen, P.; Shih, Y.Y.I. Chemogenetic activation of Locus Coeruleus Noradrenergic Neurons Modulates the Default Mode Network Accepted in *Science Advance* **2022**, $ Authors contributed equally and are co-first authors (**67**, **13.6)**
2. **Das, M.* $;** Oyarzabal, E. A$., Chen, L; Lee, S.H.; Shah, N; Gerlach, G; Zhang, W; Chao TH, Van Den Berg, N; Liu, C; Donley, C; Montgomery, S.; Shih, Y.Y*. One-Pot Synthesis of carboxymethyl-dextran coated iron-oxide nanoparticles (CION) for preclinical fMRI and MRA applications Accepted in *Neuroimage*, **2021**, 238, 118213 $ Authors contributed equally (**23**, **4.5**)
3. Singha, H.; Sreedharan, S.; Oyarzabal, E.A.; Mahapatra, T.S.; Green, N; Shih, Y.Y.I.; **Das, M***, Thomas, J.A.; * Das, A; *, and Pramanik, S.K. Mitochondriotropic Lanthanide Nanorods: Implications for Multimodal Imaging *Chem. Commun.*, **2020,** 56 (57), 7945-7948 * Corresponding authors (**17**, **4.2**)
4. Chen, Y.W., **Das, M**, Oyarzabal, E.A, Cheng, Q; Plummer, N.W.; Smith, K.G.; Jones, G.K.; Malawsky, D; Yakel, J.L.; Shih Y.Y.I, Jensen, P et. al. Genetic identification of a population of noradrenergic neurons implicated in stress resilience *Molecular Psychiatry (Nature Publishing Group)* **2019,** 24(5), 710-725 (**33**, **10.1**)
5. Chen, Y.W., **Das, M**, Oyarzabal, E.A, Cheng, Q; Plummer, N.W.; Smith, K.G.; Jones, G.K.; Malawsky, D; Yakel, J.L.; Shih Y.Y.I, Jensen, P et. al. A subset of noradrenergic (NE) neurons defined by developmental expression of Hoxb1 have a distinct role in attenuating the behavioral response to acute stress Published as ***Image*** in *Molecular Psychiatry* through Editorial Invitation **2019,** 24(5), 625 (**10.1**)
6. Decot, H.K; Namboodiri, V.M.K; Gao, W.; McHenry, J; Jennings, J.; Lee, SH.; Kantak, P.; Kao, Y.C.; **Das, M**.; Witten, I.; Deisseroth, K.; Shih, Y.Y.I; Stuber, G Coordination of brain-wide activity dynamics by dopaminergic neurons *Neuropsychopharmacology* **2017**, 42 (3), 615-627 (**86**, **7.1**)
7. **Das, M#;** Jain, R#; Agrawal, A.K. et al. Macromolecular bipill of gemcitabine and methotrexate facilitates tumor-specific dual drug therapy with higher benefit-to-risk ratio *Bioconjugate Chem.* **2014,** *25*, 501-9 **# Authors contributed equally** (**40, 3.9**)
8. Jain, S; Jain, R; **Das M** et al; Combinatorial Bio-Conjugation of Gemcitabine and Curcumin Enables Dual Drug Delivery with Synergistic Anticancer Efficacy and Reduced Toxicity RSC Advance **2014**, 4, 29193-29201 (**45**, **4.6**)
9. **Das, M** Does the targeted delivery of theranostic carbon nanotubes have potential as a valid anticancer strategy? *Therapeutic Delivery* **2014,** *05*, 01 (Invited Editorial) (**3, 2.2**)
10. Hatial I; Jana, S; Bisai S; **Das M** et al. Trienediynes on a 1, 3, 5-trisubstituted benzene template: A New Approach for Enhancement of Reactivity *RSC Advance* **2014,** *4*, 28041-28045 (**4**, **4.6**)
11. **Das, M;** Singh, R.P; Datir S et al. Intranuclear Drug Delivery and Effective *in vivo* Cancer Therapy via Estradiol PEG-Appended Multiwalled Carbon Nanotubes. Mol. Pharm. **2013**, 10, 3404-3416 (**78**, **4.5**)
12. **Das, M#;** Singh, R.P#; Datir, S et al. Surface Chemistry Dependent "Switch" Regulates the Trafficking and Therapeutic Performance of Drug-Loaded Carbon Nanotubes *Bioconjugate Chem.* **2013,** *23*, 2201-13 **# Authors contributed equally** (**54**, **3.9**)
13. **Das, M;** Datir, S; Singh, R.P et al. Augmented Anticancer Activity of a Targeted, Intracellularly Activatable, Theranostic Nanomedicine based on Fluorescent and Radiolabelled, Methotrexate-Folic acid-Multiwalled

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Carbon Nanotube Conjugate *Mol. Pharm.* **2013**, *10*, 2543-2557 (**145**, **4.5**)

14. Kumar, S; **Das, M;** Singh, R.P; Datir, S et al. Mathematical models for the oxidative functionalization of multiwalled carbon nanotubes, *Colloids and Surfaces A: Physicochem. Eng. Aspects,* **2013**, 419: 156-165 (**11**, **5.4**)
15. **Das, M***; Bandyopadhyay, D; R Singh, R.P; Harde, H; Kumar, S; Jain, S Orthogonal biofunctionalization of magnetic nanoparticles via "clickable" poly (ethylene glycol) silanes: a "universal ligand" strategy to design stealth and target-specific nanocarriers *J. Mat. Chem* **2012,** *22,* 24652-24667 (**29**, **6.626**)
16. Datir, S.; **Das, M.;** Singh R.P. et al. Hyaluronate tethered "smart" multiwalled carbon nanotubes for tumor targeted delivery of doxorubicin. *Bioconjugate Chem.* **2012**, *21*,2201-13 (**169**, **3.9**)
17. Singh R.P.; **Das, M.;** Thakare, V et al. Functionalization density dependent toxicity of oxidized multiwalled carbon nanotubes in a murine macrophage cell line *Chem. Res. Toxicol.*, **2012**, 25, 212737 (**58**, **3.8**)
18. Jain, S.; Rathi V, V.; Jain A.K.; **Das, M**. et al. Folate decorated PLGA nanoparticles as a rationally designed vehicle for oral delivery of insulin *Nanomedicine* **2012,** *7*, 1311-37 (**194**, **3.9**)
19. Agrawal, A.K.; **Das, M.;** Jain, S *In situ* gel systems as `smart' carriers for sustained ocular drug delivery *Expert Opinion on Drug Delivery* **2012,** *9***,** 383-402 (**218**, **5.4)**
20. Harde, H.; **Das, M.;** Jain, S et al. Solid Lipid Nanoparticles: An Oral Bio-availability Enhancer Vehicle. *Expert Opinion on Drug Delivery* **2011,** *8,* 1407-1424 **(354, 5.4)**
21. Jain, S; **Das, M** Conference Scene: Nanomedicine kindles the development of "elixir of life." *Nanomedicine* **2011**, 6(4), 599–60 (**6**, **3.9**)
22. Jain, S.; Mathur, R.; **Das, M**. et al. Synthesis, Pharmacoscintigraphic Evaluation and Antitumor Efficacy of Methotrexate-Loaded, Folate Conjugated, Stealth Albumin Nanoparticles *Nanomedicine* **2011,** *6*, 1733-1734 (**45**, **3.9**)
23. Swarnakar, N.K.; Jain, A. K.; Singh, R. P.; Godugu, C.; **Das, M**.; Jain, S. Oral bioavailability, therapeutic efficacy and reactive oxygen species scavenging properties of coenzyme Q-10 loaded polymeric nanoparticles **2011**, 32, 6860-6874 (**173**, **12.9**)
24. Jain, A.K.; Swarnakar, N.K.; **Das, M.** et al. Augmented Anticancer Efficacy of Doxorubicin Loaded Polymeric Nanoparticles after Oral Administration in Breast Cancer Induced Animal Model *Mol. Pharm.* **2011,** *8***,** 11401151 (**102**, **4.5**)
25. Jain, S.; Thakre, V.S.; **Das, M.** et al. Toxicity of multiwalled carbon nanotubes with end-defects critically depends on their functionalization density *Chem. Res.Toxicol.* **2011,** *24*, 2028-2029 (**208, 3.8**)
26. Bhattacharya, D.; **Das, M;** Mishra, D et al. Folate receptor targeted, carboxymethyl chitosan functionalized iron oxide nanoparticles: a novel ultradispersed nanoconjugate for bimodal imaging *Nanoscale* **2011,** *3***,** 16531662 (**144**, **6.7**)
27. Bhattacharya, D; Sahu, S.K; Banerjee, I.; **Das, M** et al. Synthesis, characterization, and *in vitro* biological evaluation of highly stable diversely functionalized superparamagnetic iron oxide nanoparticles *Journal of Nanoparticle Research* **2011,** *13***,** 4173-4188 (**46**, **2.6**)
28. Dhak, P.; Dhak, D.; **Das, M** et al. A Novel Synthesis of FeNbO4 Nano-rod by Hydrothermal Process *Journal of Nanoparticle Research* **2011,** *13***,** 4153-4159 (**14, 2.253**)
29. Dhak P; Dhak D; **Das, M**. et al. Dielectric and Impedance Spectroscopy Study of Ba0.8 Bi2.133 Nb1.6 Ta0 .4 O9 Ferroelectric Ceramics, Prepared by Chemical Route, *Journal of Materials Science: Materials in Electronics* **2011,** *12***,** 1750-1760 (**38, 2.8**)
30. Jain, A. K.; **Das, M**.; Swarnakar, N.K et al. Engineered PLGA Nanoparticles: An Emerging Delivery Tool in Cancer Therapeutics *Crit Rev Ther Drug Carrier* Syst. **2011**, 28, 1-43 (**154, 2.5**)

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31. Thakre, V.S.; **D as, M.;** Jain, A.K. et al. Carbon Nanotubes in Cancer theragnosis *Nanomedicine* **2010,** *5*, 1277301(**146, 3.9**)
32. Dhak, P.; Dhak, D.; **Das, M**. et al. Impedance Spectroscopy study of LaMnO3 modified BaTiO3 ceramics *Materials Science and Engineering: B* **2009,** *164*, 165-171 (**123, 4.6**)
33. **Das, M.*;** Mishra, D.; Dhak, P; et al. Biofunctionalized, phosphonate-grafted, ultrasmall iron oxide nanoparticles for combined targeted cancer therapy and multimodal imaging. 2009, 5, 2883-2893 (**200, 12.1**)
34. **Das, M.;** Mishra, D.; Maiti, T. K. et al. Bio-functionalization of magnetite nanoparticles using an aminophosphonic acid coupling agent: new, ultradispersed, iron-oxide folate nanoconjugates for cancer-specific targeting *Nanotechnology* **2008**, *19*, 415101 **(168, 2.8)** ----

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Book Chapter/Book

1. **Das, M.;** Pramanik P *Magnetic Nanoparticles in the Diagnosis and Imaging of Cancer* Nanotechnology: Diagnosis and Treatment of Cancers **(Chapter 4)**, R. Banerjee (Ed.), Narosa International Publishers, **2012**, **ISBN:** 978-81-8487-159-3 R. Banerjee (Ed.).
2. Das, M., Basak, A. and Pramanik, P. **Biofunctionalized Magnetic Nanoparticles for Cancer Theragnostics** S. Campbell (Ed.) **2012** LAP Lambert Academic Publishing House, Germany. ISBN: 9783848406319

Selected Peer-Reviewed Conference Abstracts

1. **Das, M.,** Oyarzabal, E. A., Chen, Y.W. et al. Chemogenetic fMRI and ^{18}F-FDG PET Reveal Functional Projections of Hoxb1-Derived Noradrenergic Neurons *Proc Intl Soc Mag Reson Med* (2017) **Oral Presentation (*Summa cum Laude Merit Award*)** at ISMRM 25th Annual Meeting and Exhibition, Honolulu, Hawaii, USA
2. Oyarzabal, E. A., Lee, S.H., **Das, M**., Song, S, Hong, J.S., and Shih, Y.Y. "How does chronic neuroinflammation affect resting-state functional connectivity?", Proc Intl Soc Mag Reson Med (2017) ISMRM 25th Annual Meeting and Exhibition, Honolulu, Hawaii, USA.
3. **Das, M.,** Oyarzabal, E. A., Decot, H. K. et al. Development of intravascular SPION with tunable pharmacokinetics and relaxivity for preclinical fMRI and micro-MRA *Proc Intl Soc Mag Reson Med* (2016) **ePoster presentation** ISMRM 24th Annual Meeting and Exhibition, Singapore.
4. Oyarzabal, E. A., **Das, M**., Lee, S.H et al. Deciphering the Functional Role of Locus Coeruleus-derived Norepinephrine using Chemogenetic fMRI and 18FDG-PET Proc Intl Soc Mag Reson Med (2016) **Oral Presentation. (*Summa cum Laude Merit Award*)** ISMRM 24th Annual Meeting and Exhibition, Singapore.
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MANASMITA DAS

Sandeswartala, Roysberh, Chinsurah, Hooghly, WB-712101

Phone: +91-7044756070 (M); Email: dmanasmi@gmail.com; manasmita.ihs@presiuniv.ac.in

https://www.manasmitascientisician.com/; https://presiuniv.ac.in/web/staff.php?staffid=449

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Patents

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