CURRICULUM VITAE



Dr. Debasish Bandyopadhyay

Professor

Oxidative Stress and Free Radical Biology Laboratory
Department of Physiology
University of Calcutta
92, APC Road, Kolkata: 700009

Email Id: debasish63@gmail.com

Contact Number: +91-9433072066/9836035535

Name: Dr. Debasish Bandyopadhyay

Current Position: Professor

Oxidative Stress and Free Radical Biology Laboratory

Department of Physiology University of Calcutta

92, APC Road, Kolkata: 700009

Specialization: Biochemistry

Date of Birth: 05.05.1963

Sex: Male

Nationality: Indian

Marital Status: Married

Educational Background:

B.Sc.(Hons.) Physiology University of Calcutta 1984

M.Sc. Physiology University of Calcutta 1986

(Specialization in Biochemistry)

Ph.D Physiology University of Calcutta (Indian 1996

Institute of Chemical Biology, CSIR, Govt. of India, Kolkata)

Post-Doctoral Research:

Research Associate CSIR, Govt. of India, Indian Institute of

Chemical Biology, Kolkata, India

Post-Doctoral Associate Department of Neurology and, Sealy Centre

for Molecular Sciences, University of Texas Medical Branch at Galveston, Texas, USA

Senior Research Associate Indian Institute of Chemical Biology, CSIR

(Scientist Pool Scheme) Govt. of India, India

Academic Positions held/currently holding:

Reader and Founder Head Department of Biotechnology,

Assam (Central) University, Silchar,

Assam, India

Reader and Head Centre for Biotechnology,

School of Life Sciences,

Visva-Bharati (A Central University),

Shantiniketan, Bolpur ,India

Served as Reader and Head, and, also served as Professor and Head and, presently serving as a Professor

Department of Physiology

University of Calcutta,

University College of Science and Technology,

92, APC Road, Kolkata 700 009

Professional Recognition & Memberships:

- ❖ Member and former Convenor, Ph. D. Committee of Physiology, University of Calcutta, Kolkata, India
- Chairman, Board of Undergraduate Studies of Physiology, University of Calcutta, Kolkata, India
- ❖ Member, Board of Undergraduate Studies of Physiology, Vidyasagar University, Midnapur, West Bengal, India
- ❖ Member, Board of Post-Graduate Studies of Physiology, University of Calcutta, Kolkata
- ❖ Former Member, SAP Advisory Board, Nominated by UGC, Govt. of India
- ❖ Member of the Advisory and Editorial Board, Journal of Pharmacy Research
- Former Member of the Editorial Board, Journal of Herbal Medicine (Publisher: Elsevier).
- ❖ Member of the Editorial Board, Cardiovascular Regenerative Medicine (Publisher: American Heart Association).
- Editor, Melatonin Research, Published from USA
- ❖ Joint Editor, Indian Journal of Physiology and Allied Sciences
- ❖ Member, human ethics committee, Department of Physiology, University of Calcutta
- ❖ Ex-Visiting Faculty, Department of Biotechnology, West Bengal University of Technology, Salt Lake City, Kolkata, India
- ❖ Former member, Ph. D. Committee of Life Science and Biotechnology, Jadavpur University, Kolkata, India

Membership of Learned Societies:

- 1. Life Member of the Physiological Society of India (PSI).
- 2. Life Member of the Indian Science Congress Association (ISCA).
- 3. Life Member of the Federation of Indian Physiological Societies (FIPS).
- 4. Life Member of the South Asian Association of Physiologists (SAAP).
- 5. Life Member of the International Union of Physiological Sciences (IUPS).
- 6. Life Member of the Society of Biological Chemists [India] (SBC)
- 7. Life Member of the Cytometry Society of India (CSI)

Valued Reviewer of papers in:

- Melatonin Research (Publisher : OJS PKP)
- Indian Heart Journal (Publisher : Elsevier)
- Biochemical Journal (Publisher : Elsevier; Impact Factor-4.396)
- Bioscience Reports (Publisher: Portland Press; Impact Factor-2.899)
- Journal of Membrane Biology (Publisher : Springer; Impact Factor-1.63)
- BMC Gastroenterology (Publisher : Springer; Impact Factor-2.47)
- Journal of Pineal Research (Publisher: Wiley & Sons; Impact Factor-9.314)
- Microbial Pathogenesis (Publisher: Elsevier; Impact Factor 1.88)
- Toxicology (Publisher: Elsevier; Impact Factor 3.817)

- Human and Experimental Toxicology (Publisher : SAGE Journals; Impact Factor-1.453)
- Food and Chemical Toxicology (Publisher: Elsevier; Impact Factor-3.213)
- Indian Journal of Experimental Biology (Publisher : NISCAIR; Impact Factor-1.195)
- Chemico-Biological Interactions (Publisher:Elsevier: Impact Factor: 2.577)
- Biotechnic & Histochemistry (Publisher: Taylor and Francis: Impact factor: 1.444)
- Journal of Diabetes Research (Publisher: Hindawi: Impact Factor- 2.164)
- Life Sciences (Publisher:Elsevier: Impact Factor: 3.647)
- Archives of Physiology and Biochemistry (Publisher: Taylor & Francis: Impact Factor: 2.577)

Research interests & Area of expertise:

- Enzymology
- Oxidative stress and free radical biology
- Metal enzyme interactions
- Properties of herbal extracts
- > Myocardial ischemia
- Role of Melatonin as an antioxidant
- > Stress and drug induced gastric ulcerations
- New drug development

Research guidance:

Number of researchers awarded M.Phil/ Ph.D: Ph.D. – 16 M.Phil-01

Number of researchers pursuing M.Phil/ Ph.D: Ph.D. – 08 M.Phil- 00

(Registration procedure completed)

Projects:

Completed projects:

Sl. No.	Title	Funding	Period	Grant / Amount
		agency		Mobilized
	Exploring the antioxidant potential of aqueous extract of the bark of <i>Terminalia</i> arjuna	UGC (Minor Research Project)	March 2008-March 2010	Rs. 65,000/-
		[F.PSW-037/ 07-08 (ERO) dated 21. 02.2008 Co-Investigator		

2.	Role of Staphylococcus aureus coagulase and TSST in the pathogenesis of staphylococcal infection and studies on the involvement of oxidative stress post-infection and possible remediation through antioxidant, antibiotic co-therapeutic approach	CSIR Co-Investigator	12/10/2009- 11/10/2012	Rs. 11,51,000/-
3.	Studies on protective effects of aqueous extracts of the leaves of <i>Murraya</i> koenigii and <i>Ocimum</i> sanctum against cadmium- induced oxidative stress in rat liver and heart	University Grants Commission (UGC), New Delhi, Govt. of India Major Research Project: Principal Investigator Reference No. — 37- 396/2009(SR)(HRP)	01/02/2010 - 31/01/2013	Rs. 7,85,580/-
4.	Role of aqueous bark extract of <i>Terminalia arjuna</i> in the maintenance of cytoskeletal architecture of goat red blood cell membrane.	UGC (Minor Research Project) PHW-105/11-12 (ERO) dated 2.8.2011 Co-Investigator	22/11/2011 — 21/05/2013	Rs. 1,86,000/-
5.	Studies on the protective effect of 'Trigonelline	University-Industry Collaborative projects		

	(99%) 'against Cu- Ascorbate induced oxidative stress in mitochondria <i>in</i> vitro	awarded by Indusbiotech Pvt. Ltd., Principal Investigator Reference No. – IND/IV/01/2014	January 2014- August 2014	Rs. 1,45,000/-
6.	Studies on the protective effect of '4-hydroxy isoleucine (99%)' against Cu-Ascorbate induced oxidative stress in mitochondria <i>in vitro</i>	University-Industry Collaborative projects awarded by Indusbiotech Pvt. Ltd., Principal Investigator Reference No. – IND/IV/02/2014	January 2014- August 2014	Rs. 1,49,000/-
	Exploring the protective effect of "INDUS810" against copper-ascorbate induced oxidative stress in mitochondria in vitro: a mechanism based study	University-Industry Collaborative projects awarded by Indusbiotech Pvt. Ltd., Principal Investigator Reference No. – IND/IV/03/2014	December 2014 – May 2015	Rs. 1,81,125/-
	Effects of Sugaheal® on isolated mitochondria from rat skin against copperascorbate induced oxidative stress in vitro	University-Industry Collaborative projects awarded by Indusbiotech Pvt. Ltd., Principal Investigator Reference No. – IND/IV/01/2015	January 2015-June 2015	Rs.47,438/-
	Studies on the protective effect of <i>Terminalia arjuna</i>	Department of Science and	06/2013- 05/2016	Rs.18.4Lakhs

against copper- ascorbate induced oxidative stress in human placental mitochondria.	Technology, WOS.A, Govt. of India Project: Principal Investigator		
 Exploring the neural, metabolic, hemodyanamic and cognitive functions following myocardial ischemia in human and experimental animal: Protection by melatonin.	A project under centre with potential for excellence in a particular area (CPEPA) scheme of UGC, Govt. of India, awarded to University of Calcutta Project: One of the 9 Principal Investigator(s) assigned for this project	2011-2018	6.15 Crore
 Exploring the role of melatonin against adrenaline-induced oxidative stress mediated injury in the stomach, duodenum and colon of male Wister rat: a novel therapeutic approach	Dr. D. S. Kothari Post-Doctoral Fellowship was awarded to Dr. Palash Kumar Pal. Prof. Bandyopadhyay is acting as his Mentor.	2017-2019	Rs.24 Lakhs

Ongoing projects:

Sl. No.	Title	Funding	Period	Grant / Amount
		agency		Mobilized (INR)
1.	Investigating the role of 'INDUS810' against hydrogen peroxide-induced oxidative stress in goat mitochondria in vitro.	University-Industry Collaborative projects awarded by Indusbiotech Pvt. Ltd.,	2016-2018	Rs.4.17lakhs
2.	Exploring the role of INDUS1530 against hydrogen peroxide-induced oxidative stress mediated mitochondrial dysfunction in rat skin mitochondria in vitro: a mechanism based approach.	University-Industry Collaborative projects awarded by Indusbiotech Pvt. Ltd.,	2016-2018	Rs.4.02lakhs
3.	Exploring the cardio- protective efficacy of some novel derivatives of organic compounds: an in vitro and in vivo approach.	A project under University with Potential for Excellence (UPE-II) scheme of UGC, Govt. of India, awarded to University of Calcutta Project: One of the 7 Principal Investigator(s) assigned for this project.		

11. List of publications:

a) Journals:

- 1. Balaji TMM, Varadarajan S, Bandyopadhyay D, Jagannathan R, Patil S, Raj T. A potential protection of melatonin on pathogenesis of oral sub-mucous fibrosis (OSMF): a current update. **Melatonin Research**, **2021**, **4(1)**: **84-98**. **[OJS & PKP; New Journal]**.
- 2. Pal PK, Chattopadhyay A, Bandyopadhyay D. Functional interplay of melatonin in the bile duct and gastrointestinal tract to mitigate disease development: An overview. **Melatonin Research**, **2021**, **4(1)**: **118-140**. **[OJS & PKP; New Journal]**.
- 3. Sarkar S, Chattopadhyay A, Bandyopadhyay D. Multiple strategies of melatonin protecting against cardiovascular injury related to inflammation: A comprehensive overview. **Melatonin Research**, **2021**, **4(1)**: **1-29**. **[OJS & PKP; New Journal]**.
- 4. Banerjee A, Dey T, Ghosh AK, Mishra S, Bandyopadhyay D, Chattopadhyay A. Insights into the ameliorative effect of oleic acid in rejuvenating phenylhydrazine induced oxidative stress mediated morpho-functionally dismantled erythrocytes. **Toxicology Reports**, **2020**, **9**(7): **1551-1563**. [ELSEVIER; Impact Factor 2.63]
- 5. Naaz S, Mishra S, Pal PK, Chattopadhyay A, Das AR, Bandyopadhyay D. Activation of SIRT1/PGC 1α/SIRT3 pathway by melatonin provides protection against mitochondrial dysfunction in isoproterenol induced myocardial injury. **Heliyon, 2020, 6(10).**
- 6. Sarkar S, Chattopadhyay A, Bandyopadhyay D. Melatonin, the advance-guard in oxidative myocardial assault instigated by exercise stress: a physiological and biochemical insight. **Melatonin Research**, **2020**, **3(4)**: **451-475**. **[OJS & PKP; New Journal]**.
- 7. Pal PK, Sarkar S, Mishra S, Chattopadhyay S, Chattopadhyay A, Bandyopadhyay D. Amelioration of adrenaline induced oxidative gastrointestinal damages in rat by melatonin through SIRT1-NFκB and PGC1α-AMPKα cascades. **Melatonin Research**, 2020, 3(4): 482-502. [OJS & PKP; New Journal].
- 8. Pal PK, Chattopadhyay A, Bandyopadhyay D. Melatonin as a potential therapeutic molecule against COVID-19 associated gastrointestinal

- complications: An unrevealed link. **Melatonin Research**, **2020**, **3(3)**: **417-435**. **[OJS & PKP; New Journal]**.
- 9. Dey T, Ghosh A, Mishra S, Pal PK, Chattopadhyay A, Pattari SK, Bandyopadhyay D. Attenuation of arsenic induced high fat diet exacerbated oxidative stress mediated hepatic and cardiac injuries in male Wistar rats by piperine involved antioxidative mechanisms. Food and Chemical Toxicology, 2020, 142: 111477. [ELSEVIER; Impact Factor 4.679]
- 10. Banerjee A, Chattopadhyay A, Bandyopadhyay D. Biorhythmic and receptor mediated interplay between melatonin and insulin: its consequences on diabetic erythrocytes. **Melatonin Research**, 2020, 3(2): 243-263. [OJS & PKP; New Journal].
- 11. Ghosh AK, Bhattacharjee B, Mishra S, Roy S, Chattopadhyay A, Banerjee A, Bandyopadhyay D. Beta-estradiol protects against copper-ascorbate induced oxidative damage in goat liver mitochondria in vitro by binding with ascorbic acid. Life Sciences, 2020: 250:117596. [ELSEVIER; Impact Factor 3.448]
- 12. Banerjee A, Chattopadhyay A, Pal PK, Bandyopadhyay D. Melatonin is a potential therapeutic molecule for oxidative stress induced red blood cell (RBC) injury: A review. **Melatonin Research**, **2020**, **3(1)**: **1-31**. **[OJS & PKP**; **New Journal]**.
- 13. Bhattacharjee B, Pal PK, Chattopadhyay A, Bandyopadhyay D. Oleic acid protects against cadmium induced cardiac and hepatic tissue injury in male Wistar rats: A mechanistic study. Life Sciences, 2020: 244:117324. [ELSEVIER; Impact Factor 3.448]
- 14. Pal PK, Sarkar S, Chattopadhyay A, Bandyopadhyay D. Enterochromaffin cells as the source of melatonin: key findings and functional relevance in mammals. Melatonin Research, 2019, 2(4): 61-82 [OJS & PKP; New Journal].
- 15. Bose G, Ghosh A, Chattopadhyay A, Pal PK, **Bandyopadhyay D**. Melatonin as a potential therapeutic molecule against myocardial damage caused by high fat diet (HFD). **Melatonin Research**, **2019**, **2(3)**: **37-56** [**OJS & PKP**; **New Journal**].
- 16. Majumder R, Datta M, Pal PK, Bhattacharjee B, Chattopadhyay A, Bandyopadhyay D. Protective mechanisms of melatonin on caprine spleen injury induced by cadmium (Cd): an in vitro study. Melatonin Research, 2019, 212(3): 57-75 [OJS & PKP; New Journal].
- 17. Kundu T, Bhattacharjee B, Hazra S, Ghosh AK, **Bandyopadhyay D**, Pramanik A. Synthesis and biological assessment of pyrrolobenzoxazine scaffold as a

- potent antioxidant. J. Med. Chem, 2019, 62: 6315-6329 [ACS Publications; Impact Factor 6.259].
- 18. Mitra E, Bhattacharjee B, Pal PK, Ghosh AK, Mishra S, Chattopadhyay A, Bandyopadhyay D. Melatonin protects against cadmium-induced oxidative damage in different tissues of rat: a mechanistic insight. Melatonin Research, 2019, 2 (2): 1-21 [OJS & PKP; New Journal].
- 19. Pal PK, Bhattacharjee B, Chattopadhyay A, Bandyopadhyay D. Melatonin as an armament against non-steroidal anti-inflammatory drug induced gastric injury: An overview. Melatonin Research, 2019, 2:115-137 [OJS & PKP; New Journal].
- **20.** Ghosh A, Bose G, Dey T, Pal PK, Mishra S, Ghosh AK, Chattopadhyay A, **Bandyopadhyay D**. Melatonin protects against cardiac damage induced by a combination of high fat diet and isoproterenol exacerbated oxidative stress in male Wistar rats. **Melatonin Research**, **2019**, **2:9-31** [OJS & PKP; New Journal].
- 21. Pal PK, Bhattacharjee B, Ghosh AK, Chattopadhyay A, Bandyopadhyay D. Adrenaline induced disruption of endogenous melatonergic system, antioxidant and inflammatory responses in the gastrointestinal tissues of male Wistar rat: an in vitro study. Melatonin Research, 2018, 1:109-131 [OJS & PKP; New Journal].
- 22. Paul S, Naaz S, Ghosh AK, Mishra S, Chattopadhyay A, **Bandyopadhyay D**. Melatonin chelates iron and binds directly with phenylhydrazine to provide protection against phenylhydrazine induced oxidative damage in red blood cells along with its antioxidant mechanisms: an in vitro study. **Melatonin Research**, 2018, 1: 1-20 [OJS & PKP; New Journal].
- 23. Bhattacharjee B, Pal PK, Ghosh AK, Mishra S, Chattopadhyay A, Bandyopadhyay D. Aqueous bark extract of *Terminalia arjuna* protects against cadmium-induced hepatic and cardiac injuries in male Wistar rats through antioxidative mechanisms. Food and Chemical Toxicology, 2018, 124, 249-264 [ELSEVIER; Impact Factor 4.679].
- 24. Mishra S, Chattopadhyay A, Naaz S, Ghosh AK, Das AR, **Bandyopadhyay D**. Oleic acid ameliorates adrenaline induced dysfunction of rat heart mitochondria by binding with adrenaline: An isothermal titration calorimetry study. **Life Sciences, 2019, 218: 96-111 [ELSEVIER; Impact Factor 3.448].**
- 25. Ghosh AK, Naaz S, Bhattacharjee B, Ghosal N, Chattopadhyay A, Roy S, Reiter RJ, Bandyopadhyay D. Mechanism of melatonin protection against copper-ascorbate-induced oxidative damage in vitro through isothermal titration calorimetry. Life Sciences, 2017, 180, 123-136. [ELSEVIER; Impact Factor 3.448]
- **26.** Bose G, Ghosh A, Mishra S, Dey T, **Bandyopadhyay D**. High Fat Diet Induced Myocardial Injury: A Time Response Study. **Journal of Pharmacy Research**, 2017, **11** (6), 629-628 [JPR Solution Publication; Impact Factor 2.89].
- 27. Sen A, Mishra S, Ghosh A, Bhattacharjee B, Datta (De) S, Ghosh AK, Chattopadhyay

- A, Bandyopadhyay D. Aqueous leaf extract of Tulsi (*Ocimum sanctum*) protects against high fat diet-induced injury to rat liver through antioxidant mechanism: a dose and time dependent study. Journal of Pharmacy Research, 2017, 11 (4), 334 351 [JPR Solution Publication; Impact Factor 2.89].
- 28. Ghosh D, Mishra S, Hussain SZ, Chattopadhyay A, Firdaus SB, Singha PS, Bandyopadhyay D. Aqueous Curry leaves extract protects against lead induced oxidative stress in rat spleen: a new insight. Journal of Pharmacy Research 2017, 11(2), 313-323. [JPR Solution Publication; Impact Factor 2.89]
- 29. Das N, Mandala A, Naaz S, Giri S, Jain M, Bandyopadhyay D, Reiter RJ, Roy SS. Melatonin protects against lipid-induced mitochondrial dysfunction in hepatocytes and inhibits stellate cell activation during hepatic fibrosis in mice. Journal of Pineal Research 2017, 62 (4), [Wiley Publication; Impact Factor 15.221]
- 30. Das N, Mandala A, Bhattacharjee S, Mukherjee D, Bandyopadhyay D, Roy SS. Dietary fat proportionately enhances oxidative stress and glucose intolerance followed by impaired expression of genes associated with mitochondrial biogenesis. Food & Function 2017, DOI No. 10.1039/C6FO01326K. [Impact Factor 2.686]
- 31. Bhattacharjee B, Ghosh AK, Mishra S, Das J, Chattopadhyay A, and Bandyopadhyay D. Terminalia arjuna aqueous bark extract protects against cadmium acetate-induced injury to rat liver and heart through antioxidant mechanisms: a dose response study. Journal of Pharmacy Research 2016, 10(11), 771-792. [JPR Solution Publication; Impact Factor 2.89].
- **32.** Ghosh AK, Bhattacharjee B, Mishra S, Das N, Ghosal N, Naaz S, Pal A, Roy SS, Chattopadhyay A, and Bandyopadhyay D. Estra-1, 3, 5(10) triene-3, 17 β-diol protects mitochondria against Cu-ascorbate induced oxidative damage in in vitro system: A novel therapeutic approach. **Journal of Pharmacy Research** 2016, 10(9), 594-608. **[JPR Solution Publication; Impact Factor 2.89].**
- **33.** Mishra S, Ghosal N, Bhattacharjee B, Ghosh A, Ghosh AK, Bezbaruah R, Chattapadhyay A, Bandyopadhyay D. Oleic acid, one of the major component of ethyl acetate partition fraction of Terminalia arjuna, protects against adrenaline induced myocardial injury in male albino rats. **Journal of Pharmacy Research** 2016, 10(8), 543-565. **[JPR Solution Publication; Impact Factor 2.89].**
- **34.** Mishra S, Naaz S, Ghosh AK, Paul S, Ghosal N, Dutta M, **Bandyopadhyay D**, Chattopadhyay A. Orally administered aqueous bark extract of Terminalia arjuna protects against adrenaline- induced myocardial injury in rat heart through antioxidant mechanisms: an in vivo and an in vitro study. **Journal of Pharmacy Research** 2016, 10(6), 454-478. **[JPR Solution Publication; Impact Factor 2.89].**
- 35. Ghosh D, Paul S, Naaz S, Bhowmik D, Dutta M, Ghosh AK, Firdaus SB, Chattopadhyay A, Reiter RJ and **BandyopadhyayD**. Melatonin protects against lead acetate induced oxidative stress-mediated changes in morphology and metabolic status in the rat red blood cells: a flow cytometric and biochemical analysis. **Journal of Pharmacy Research**2016,10(6),381-402.[**JPR Solution Publication; Impact Factor 2.89**].

- 36. Ghosal N, Firdaus SB, Naaz S, Paul S, Ghosh AK, Chattopadhyay A, Mohan V, Thakurdesai P, Bhaskaran S, Pattari S and Bandyopadhyay D. Gastroprotective effect of Fenugreek 4- hydroxyisoleucine and trigonellineenrichedfraction (TF4H (28%)) Sugaheal® against indomethacin induced ulcer in male wistar rats. Journal of Pharmacy Research2016,10(6),351- 364.[JPR Solution Publication; Impact Factor 2.89].
- 37. Ghosal N, Firdaus SB, Paul S, Naaz S, Chattopadhyay A,Shukla P, Jain G, Pattari S, Rangari VD and **Bandyopadhyay D**. Amelioration of gastrotoxic effect of indomethacin bypiperine in male Wistar rats: a novel therapeutic approach. **Journal of Pharmacy Research** 2016,10(5),240- 254.[**JPR Solution Publication; Impact Factor 2.89**].
- **38.** Paul S, Ghosh D, Ghosh A, BhowmickD,**Bandyopadhyay D**, Chattopadhyay A. Aqueous bark extract of *terminaliaarjuna* protects against phenylhydrazine induced oxidative damage in goat red blood cell membrane bound and metabolic enzymes. **International Journal of Pharmacy and Pharmaceutical Sciences**.2016, 8(5),62-70.[Innovare Academic Sciences; Impact Factor: **0.55**].
- 39. Saha P,Chakraborty P, Mukhopadhyay P, Bandyopadhyay D, GhoshS.Computer Based Attention Training for treating a Child with Attention Deficit/Hyperactivity Disorder: An Adjunct to Pharmacotherapy- A case report. Journal of Pharmacy Research, 2015,9(11),612-617. [JPR Solution Publication; Impact Factor 2.89].
- **40.** Mishra S, Ghosh D, Dutta M, Chattopadhyay A and **Bandyopadhyay D**. Tannic Acid Protects against Cadmium-Induced Renal Damages of Male Albino Rats.**International Journal of Pharmaceutical Science**, Reviews and Research, 2015, 32(2): 273-281. **[Impact Factor 2.544].**
- **41.** Ghosh A, Dutta M, Ghosh AK, Chattopadhyay A, Bhowmick Dand**Bandyopadyay D.** Melatonin affords protection against myocardial ischemia-induced cerebral mitochondrial dysfunction: an *in vivo* study. **Journal of Pharmacy Research**, 2015, 9(2): 105-118. **[JPR Solution Publication; Impact Factor 2.89].**
- **42.** Mukherjee D, Ghosh AK, Dutta M, Mitra E, Mallick S, Saha B, Reiter RJ and **Bandyopadhyay D**. Mechanisms of isoproterenol-induced cardiac mitochondrial damage: protective actions of melatonin. **Journal of Pineal Research**, 2015, 58: 275–290.[Wiley Publication; Impact Factor 15.221].
- **43.** Dutta M, Chattopadhyay A, Ghosh AK, Roy Chowdhury U, Bhowmick D, Guha B, Das T and **Bandyopadhyay D**. Benzoic acid, one of the major components of aqueous bark extract of *Terminalia arjuna*protects against Copper-Ascorbate induced oxidative stress in human placental mitochondria through antioxidant mechanism(s): an *in vitro* study. **Journal of Pharmacy Research**, 2015,9(1): 64-88. **[JPR Solution Publication; Impact Factor 2.89].**
- **44.** Bishayi B, Bandyopadhyay D, Majhi A and Adhikary R. Effect of exogenous MCP-1 on TLR-2 neutralized murine macrophages and possible mechanisms of CCR-2/TLR-

- 2 and MCP-1 signalling during *Staphylococcus aureus* infection. **Immunobiology.** 2015, 220, 350-362. [**Impact Factor 3.04**].
- **45.** FirdausSB,Ghosh D, Chattyopadhyay A, Jana K and Bandyopadhyay D. A combination of aqueous curry (*Murraya koenigii*) leaf extract and melatonin protects against piroxicam induced gastric ulcer in male albino rats: Involvement of antioxidant mechanism(s). **Journal of Pharmacy Research.**2014, 8(3), 428-436.[**JPR Solution Publication; Impact Factor 2.89**].
- **46.** Dutta M, Ghosh AK, Mishra P, Jain G, Rangari V, Chattopadhyay A, Das T, Bhowmick D and **Bandyopadhyay D**. Protective effects of piperine against copperascorbate induced toxic injury to goat cardiac mitochondria in vitro.**Food and Function**, 2014, 5: 2252–2267. **[Royal Society of Chemistry; Impact Factor 2.791].**
- **47.** Dutta M, Ghosh AK, Rangari V, Jain G, Khobragade SM, Chattopadhyay A, Bhowmick D, Das T and**Bandyopadhyay D**. Silymarin protects against copperascorbate induced injury to goat cardiac mitochondria *in vitro*: involvement of antioxidant mechanism(s). **International Journal of Pharmacy and Pharmaceutical Sciences**,2014, 6(8): 422-429. **[Academic Sciences Publication; Impact Factor: 0.55].**
- **48.** Dutta M, Ghosh AK, Jain G, Rangari V, Chattopadhyay A, Das T, Bhowmick D and **BandyopadhyayD**. Andrographolide, one of the major components of *Andrographispaniculata*protects against copper-ascorbate induced oxidative damages to goat cardiac mitochondria *in vitro*. **International Journal of Pharmaceutical Sciences Reviews and Research**, 2014, 28(1): 237-247. [Impact Factor 2.544].
- **49. Bandyopadhyay D,** Ghosh D, Chattopadhyay A, Firdaus SB, Ghosh AK, Paul S, Bhowmik D, Mishra S, Dalui K. Lead induced oxidative stress: a health issue of global concern. **Journal of Pharmacy Research**, 2014, 8(9): 1198-1207. **[JPR Solution Publication; Impact Factor 2.89].**
- **50.** Mishra S, Dutta M, Mondal SK, Dey M, Paul S, Chattopadhyay A and **Bandyopadhyay D**. Aqueous bark extract of *Terminalia arjuna*protects against adrenaline-induced hepatic damage in male albino rats through antioxidant mechanism(s): a dose response study. **Journal of Pharmacy Research**, 2014, 8(9): 1198-1207. [**JPR Solution Publication**; **Impact Factor 2.89**].
- **51.** Dutta M, Chattopadhyay A, Bose G, Ghosh A, Banerjee A, Ghosh AK, Mishra S,Pattari SK, Das Tand**Bandyopadhyay D.** Aqueous bark extract of *Terminalia arjuna*protects against high fat diet aggravated arsenic-induced oxidative stress in rat heart and liver: involvement of antioxidant mechanisms.**Journal of Pharmacy Research**, 2014, 8(9): 1285-1302. **[JPR Solution Publication; Impact Factor 2.89].**
- **52.** Dutta M, Ghosh AK, Mohan V, Thakurdesai P, Chattopadhyay A, Das T, Bhowmick D and **Bandyopadhyay D**. Trigonelline [99%] protects against copper-ascorbate induced oxidative damage to mitochondria: an *in vitro* study. **Journal of Pharmacy Research**, 2014, 8(11): 1694- 1718. **[JPR Solution Publication; Impact Factor 2.89].**

- 53. Dutta M, Ghosh D, Ghosh AK, Rudra S, Bose G, Dey M, Bandyopadhyay A, Pattari SK, Mallick S, ChattopadhyayAandBandyopadhyay D. High fat diet aggravates arsenic induced oxidative stress in rat heart and liver.Food and Chemical Toxicology, 2014, 66:262–277. [Elsevier Publications; Impact Factor 2.895].
- 54. Paul S, Ghosh AK, Ghosh D, Dutta M, Mitra E, Dey M, Bhowmick D, Das T, Firdaus SB, Mishra S, BandyopadhyayDandChattopadhyay A. Aqueous bark extract of *Terminalia arjuna*protects against phenylhydrazine induced oxidative damage in goat red blood cell membrane protein, phospholipid asymmetry and structural morphology: a flow cytometric and biochemical analysis. Journal of Pharmacy Research, 2014, 8(12):1790-1804.(JPR Solution Publication; Impact Factor 2.89).
- 55. Ghosh D, Dey M, Ghosh AK, Chattopadhyay A and Bandyopadhyay D. Melatonin protects against lead acetate-induced changes in bloodcorpuscles and lipid profile of male Wistarrats. Journal of Pharmacy Research, 2014, 8(3): 336-342. [JPR Solution Publication; Impact Factor 2.89].
- **56.** Ghosh D, Firdaus SB, Ghosh AK, Paul S, **Bandyopadhyay D**. Protection against lead-induced oxidative stress in liver and kidneys of male Wistar rats using melatonin and aqueous extracts of the leaves of *Murrayakoenigii* A novel combinatorial therapeutic approach. **Journal of Pharmacy Research**, 2014, 8(3): 385-399. **[JPR Solution Publication; Impact Factor 2.89].**
- **57.** Mallik S, Dey M, Dutta M, Ghosh AK and **Bandyopadhyay D**. Flavin mononucleotide phosphatase from goat liver: a possible target for divalent heavy metal cations. **International Journal of Pharmacy and Pharmaceutical Sciences**, 2014, 6(2): 708-714. **[Academic Sciences; Impact Factor 0.55].**
- **58.** Mitra E, Ghosh D, Ghosh AK, Basu A, Chattopadhyay A, PattariSK, Datta S and Bandyopadhya D. Aqueous tulsi leaf (*Ocimum sanctum*) extract possesses antioxidant properties and protects against cadmium-induced oxidative stress in rat heart. International Journal of Pharmacy and Pharmaceutical Sciences, 2014, 6(1): 500-513. [Academic Sciences; Impact Factor 0.55].
- **59.** Rudra S, Mukherjee D, Dutta M, Ghosh AK, Dey M, Basu A, Pattari SK, ChattopadhyayAand **Bandyopadhyay D**. Orally administered melatonin protects against adrenaline-induced oxidative stress in rat liver and heart: Involvement of antioxidant mechanism(s). **Journal of Pharmacy Research**, 2014, 8(3): 303-320. **[JPR Solution Publication: Impact Factor 2.89].**
- **60.** Dutta M, Ghosh AK, Rudra S, **Bandyopadhyay D**, Guha B and Chattopadhyay A. Human placental mitochondria is a better model for Studies on oxidative stress *in vitro*: a comparison with Goat heart mitochondria. **Journal of Cell and Tissue Research**, 2014, 14(1): 3997-4007.[**CTR Publications; Impact Factor 3.565**].
- **61.** Dutta M, Ghosh AK, Mohan V, Mishra P, Rangari V, ChattopadhyayA,Das T, Bhowmick D and **Bandyopadhyay D**. Antioxidant mechanism(s) of protective effects of Fenugreek 4- hydroxyisoleucine and trigonelline enriched fraction (TF4H (28%)) Sugaheal® against copper- ascorbate induced injury to goat cardiac mitochondria *in vitro*. **Journal of Pharmacy Research**, 2014, 8(6): 798-811. **[JPR Solution Publication; Impact Factor 2.89].**

- **62.** Firdaus SB, Ghosh D, Chattyopadhyay A, Dutta M, Paul S, Jana J, Basu A, Bose G, Lahiri H, Banerjee B, Pattari S, Chatterjee S, JanaKand**Bandyopadhyay D.** Protective effect of antioxidant rich aqueous curry leaf (*Murrayakoenigii*) extract against gastro-toxic effects of piroxicam in male Wistar rats. **Toxicology Reports**, 2014, 1: 987–1003. **[Elsevier Publications].**
- **63.** Bishayi B, **Bandyopadhyay D**, Majhi A, Adhikary R. Possible role of toll like receptor-2 (tlr-2) in the intracellular survival of staphylococcus aureus in murine peritoneal macrophages: involvement of cytokines and anti-oxidant enzymes.**Scandebian Journal of Immunology**. 2014 May 21. Epub 2014 May 21. **[John Wiley & Sons Ltd Publications; Impact Factor 1.739].**
- **64.** GhoshD,FirdausSB,Mitra E, Dey M, Chattopadhyay A, Pattari SK, Dutta S, Jana K and **BandyopadhyayD**.Hepatoprotective activity of aqueous leaf extract of *Murrayakoenigii* against lead-induced hepatotoxicity in male wistar rat. **International Journal of Pharmacy and Pharmaceutical Sciences**,2013, 5(1): 285-295. [**Academic Sciences**; **Impact Factor 0.55**].
- **65.** GhoshD,FirdausSB,Mitra E, Dey M, Chattopadhyay A, Pattari SK, Dutta S^{*} Jana K and **BandyopadhyayD**.Aqueous leaf extract of *Murrayakoenigii*protects against lead-induced cardio toxicity in male wistar rats. **Internatinal Journal of Phytopharmacology**, 4(2): 2013, 119-132.[**Impact Factor 0.71**].
- **66.** Ghosh D, Mitra E, Dey M, Firdaus SB, Ghosh AK, Mukherjee D, Chattopadhyay A, Pattari SK, Dutta S and **BandyopadhyayD**.Melatonin protects against lead-induced oxidative stress in rat liver and kidney. **Asian Journal of Pharmaceutical and Clinical Research**, 2013, 6(2): 137-145. [Academic Sciences; Impact Factor 0.7].
- 67. Ghosh D, Mitra E, Firdaus SB, Ghosh AK, ChattopadhyayA,Pattari SK and BandyopadhyayD.Melatonin protects against lead-induced cardio toxicity: involvement of antioxidant mechanism. International Journal of Pharmacy and Pharmaceutical Sciences,2013, 5(3): 806-813. [Academic Sciences; Impact Factor 0.55]
- **68.** GhoshD,FirdausSB,Mitra E, Chattopadhyay A, Pattari SK, Jana K and BandyopadhyayD.Ameliorative effect of curry leaf aqueous extract against lead acetate-induced oxidative stress in rat kidneys.International Journal of Pharmacy and Pharmaceutical Sciences, 2013, 5(4):546-556.[Academic Sciences; Impact Factor 0.55].
- 69. Paul S, Ghosh D, Ghosh AK, Dey M, Chattopadhya A and Bandyopadhyay D. Lead induces oxidative stress in rat heart and liver tissue homogenates: an in vitro study. Journal of Cell and Tissue Research, 2013, 13(3): 3829-3837. [CTR Publications; Impact Factor 3.565].
- **70.** Mishra S, Ghosh D, Dutta M, Chattopadhyay A and **BandyopadhyayD**.Melatonin protects against lead-induced oxidative stress in stomach,duodenum and spleen of male wistarrats.**Journal of Pharmacy Research**, 2013, 1(11): 997-1004. **[JPR Solution Publication; Impact Factor 2.89].**
- **71.** Mitra E, Ghosh AK, Ghosh D, FirdausSB, Mukherjee D, Chattopadhyay A, Pattari SK, Dutta S and **BandyopadhyayD**. Amelioerative effect of aqueous curry leaf

- (*Murrayakoenigii*) extract against cadmium induced oxidative stress in rat liver: involvement of antioxidant mechanisms. **International Journal of Pharmacy and Pharmaceutical Sciences**, 2013, 5(2): 570-583. [**Academic Sciences**; **Impact Factor 0.55**].
- 72. Mitra E, Basu A, Ghosh D, Ghosh AK, Chattopadhyay A, Pattari SK, Datta S and Bandyopadhyay D. Ameliorative effect of aqueous tulsi leaf (ocimum sanctum) extract against cadmium-induced oxidative stress in rat liver. International Journal of Pharmacy and Pharmaceutical Sciences, 2013, 5(4):557-568.[Academic Sciences; Impact Factor 0.55].
- 73. Dey M, Mukherjee D, Dutta M, Mallik S, Ghosh D, Ghosh AK, Chattopadhyay A and BandyopadhyayD.Flavin mono nucleotide phosphatase from goat heart: a forgotten enzyme of an important metabolic pathway. Journal of Cell and Tissue Research, 2013, 13(3): 3851-3858. [CTR Publications; Impact Factor 3.565].
- 74. Dey M, Mukherjee D, Dutta M, Mallik S, Ghosh D, Ghosh AK, Chattopadhyay A and BandyopadhyayD.Flavin mono nucleotide phosphatase from goat heart: a forgotten enzyme of an important metabolic pathway. Journal of Cell and Tissue Research, 2013, 13(3): 3851-3858. [CTR Publications; Impact Factor 3.565].
- 75. Basu A, Mitra E, Mukherjee D, Ghosh AK, Firdaus SB, Ghosh D, Chattopadhyay A, Pattari SK, Dutta S, Jana K and Bandyopadhyay D. Aqueous tulsi leaf (*Ocimum sanctum L.*) extract protects against piroxicam-induced gastric ulceration in rats: involvement of antioxidant mechanisms. International Journal of Pharmacy and Pharmaceutical Sciences, 2013, 5(1): 438-447. [Academic Sciences; Impact Factor 0.55].
- **76.** Basu A, Mukherjee D, Ghosh AK, Mitra E, FirdausSB,Ghosh D, JanaK,Bandyopadhyay A, Chattopadhyay A and **Bandyopadhyay D**. Melatonin augments the protective effects of aqueous leaf homogenate of tulsi (*Ocimum sanctum l.*) against piroxicam-induced gastric ulceration in rats.**Asian Journal of Pharmaceutical and Clinical Research**, 2013, 6(2): 123-132. [**Academic Sciences; Impact Factor 0.7**].
- 77. Basu A, Ghosh AK, Mitra E, Basu M, Mukherjee D, Dutta M, Pattari SK, Roy SS, Chattopadhyay A and **Bandyopadhyay D**. Melatonin and ranitidine in combination protects against piroxicam-induced gastric ulceration in rats through antioxidant mechanism(s). **Journal of Cell and Tissue Research**, 2013, 13(3): 3779-3798.[CTR Publications; Impact Factor 3.565].
- **78.** Dutta M, Ghosh AK, Basu A, **Bandyopadhyay D** and Chattopadhyay A. Protective effect of aqueous bark extract of *Terminalia arjuna*against copper-ascorbate induced oxidative stress *in vitro*in goat heart mitochondria.**International Journal of Pharmacy and Pharmaceutical Sciences**, 2013,5(2): 439-447. [**Academic Sciences**; **Impact Factor 0.55**].
- **79.** Mukherjee D, Ghosh AK, Basu a, Datta S, Pattari SK, Bandyopadhyay A and **Bandyopadhyay D**. Beneficial role of melatonin in the complete recovery from isoproterenol-induced cardiac injury in rats.**International Journal of Pharmacy**

- and Pharmaceutical Sciences, 2013, 5(2):561-569. [Academic Sciences; Impact Factor 0.55].
- **80.** Ghosh AK, Mitra E, Das N, Dutta M, Bhattacharjee S, Chattopadhyay a, Roy SS andBandyopadhyay D. Protective effect of aqueous bark extract of *Terminalia arjuna*against copper-ascorbate induced oxidative stress *in vitro* in goat liver. **Journal of Cell and Tissue Research**,2013, 13(2): 3729-3737. [CTR Publications; Impact Factor 3.565].
- 81. Dutta S, Mukherjee D, Mitra E, Ghosh AK, Dutta M, Basu A, Biswas AD, Bandyopadhyay A and Bandyopadhyay D. Involvement Of Oxidative Stress In Ischemic Heart Disease (IHD) In Patients Admitted In A Tertiary Care Hospital, West Bengal, India. Asian Journal of Pharmaceutical and Clinical Research, 2013, 6(3):161-166. [Academic Sciences; Impact Factor- 0.7].
- 82. Ghosh AK, Mitra E, Dutta M, Mukherjee D, Basu A, Firdaus SB, Bandyopadhyay D and Chattopadhyay A. Protective effect of aqueous bark extract of *Terminalia arjuna*on Cu²⁺-ascorbate induced oxidative stress in vitro: involvement of antioxidant mechanism(s). Asian Journal of Pharmaceutical and Clinical Research, 2013, 6(1):196-200. [Asian Academic Sciences; Impact Factor 0.7].
- **83.** Kilikdar D, Mukherjee D, Dutta M, Ghosh AK, Rudra S, ChandraAMandBandyopadhyay D. Protective effect of aqueous garlic extract against lead-induced cardiac injury in rats. Journal of Cell and Tissue Research, 2013,13(3): 3817-3828. [CTR Publications; Impact Factor 3.565].
- **84.** Mal P, Dutta K, **Bandyopadhyay D**, Basu A, Khan R and Bishayi B. Azithromycin in Combination with Riboflavin Decreases the Severity of *Staphylococcus aureus* Infection Induced Septic Arthritis by Modulating the Production of Free Radicals and Endogenous cytokines. **Inflammation Research**, 2013, 62: 259-273 [Springer Publications; Impact Factor 2.35].
- 85. Mukherjee D, Ghosh AK, Bandyopadhyay A, Basu A, Datta S, Pattari SK, Reiter RJ and Bandyopadhyay D. Melatonin protects against isoproterenol-induced alterations in cardiac mitochondrial energy-metabolizing enzymes, apoptotic proteins, and assists in complete recovery from myocardial injury in rats. Journal of Pineal Research. 2012, 53:166–179. [John Wiley & Sons Ltd Publications; Impact Factor 15.221].
- **86.** Mitra E, Ghosh AK, Ghosh D, Mukherjee D, Chattopadhyay A, Dutta S, Pattari SK and **Bandyopadhyay D.** Protective effect of aqueous Curry leaf (*Murraya koenigii*) extract against cadmium-induced oxidative stress in rat heart. **Food and Chemical Toxicology**, 2012, 50:1340–1353. [Elsevier Publications; Impact Factor 2.895].
- **87.** Ghosh D, Firdaus SB, Mitra E, Dey M and**BandyopadhyayD**.Protective effect of aqueous leaf extract of *murrayakoenigi*against lead induced oxidative stress in rat liver, heart and kidney: a dose response study. **Asian Journal of Pharmaceutical and Clinical Research**, 2012, 6(1):54-58. [**Asian Academic Sciences**; **Impact Factor 0.7**].
- **88.** Bandyopadhyay D, Mitra E, Ghosh D, Firdaus SB, Chattopadhyay A, Dey M, Ghosh AK. Use of Curry Leaves in Protection Against Stress-Induced Disorders.

- **Indian Journal of Physiology and Allied Sciences**, 2012, 66: 104-121.
- 89. Das AR, Pal G, Bhattacharyya P, Ghosh AK, Mukherjee D and Bandyopadhyay D. Design and synthesis of coumarinyl 1, 4-benzodioxanes as potential anti-oxidant. Tetrahedron Letters. 2012; 53: 7060–7066. [Elsevier Publications; Impact Factor 2.38].
- **90.** Mal P, Ghosh D, **Bandyopadhyay D**, Dutta K and **Bishayi B**. Ampicillin alone and in combination with riboflavin modulates *Staphylococcus aureus* infection induced septic arthritis in mice. **Indian Journal of Experimental Biology**. 2012, 50: 677-689 [NISCAIR Publications; Impact Factor 0.84].
- 91. Mal P, Dutta S, **Bandyopadhyay D**, Dutta K, Basu A and **Bishayi B.** Gentamicin in Combination with Ascorbic Acid Regulates the severity of *Staphylococcus aureus*Infection—Induced Septic Arthritis in Mice. **Scandebian Journal of Immunology**. 2012, 76: 528-540 [John Wiley & Sons Ltd Publications; Impact Factor 1.739].
- 92. Ghosh D, Mitra E, Firdaus SB, Dey M, Ghosh AK, Chattopadhyay A and **Bandyopadhyay D**. In vitro studies on the antioxidant potential of the aqueous extract of Curry leaves (Murrayakoenigii L.) collected fromdImpactFactorferent parts of the state of West Bengal. **Indian Journal of Physiology and Allied Sciences.** 2012, 66(3), 77-95.
- 93. Kilikdar D, Mukherjee D, Mitra E, Ghosh AK, Basu A, Chandra AM, Bandyoapdhyay D. Protective effect of aqueous garlic extract against lead-induced hepatic injury in rats. Indian Journal of Experimental Biology. 2011; 49: 498-510 [NISCAIR Publications; Impact Factor—0.84].
- 94. Mukherjee D, Roy SG, Bandyopadhyay A, Chattopadhyay A, Basu A, Mitra E, Ghosh AK, Reiter RJ and **Bandyopadhyay D**. Melatonin protects against isoproterenol-induced myocardial injury in the rat: anti-oxidative mechanisms. **Journal of Pineal Research**. 2010, 48:251–262.[John Wiley & Sons Ltd Publications; Impact Factor 15.221].
- 95. Roy SG, De P, Mukherjee D, Chander V, Konar, **Bandyopadhyay D**, and Bandyopadhyay A. Excess of glucocorticoid induces cardiac dysfunction via activating angiotensin II pathway. **Cellular Physiology and Biochemistry.** 2009, 24(1-2), 1-10. [**Impact Factor- 2.875**].
- 96. Kundu R, Dasgupta S, Biswas A, Bhattacharya A, Pal BC, **Bandyopadhyay D**, Bhattacharya S, Bhattacharya S. Cajanuscajanlinn.(leguminosae) prevents alcohol induced rat liver damage and augments cyto protective functions. **Journal of Ethnopharmacology.** 2008, 118(3), 440-447. [**Impact Factor- 3.261**].
- 97. Ghosh G, De K, Maity S, **Bandyopadhyay D**, Bhattacharya S, Reiter RJ and Bandyopadhyay A. Melatonin protects against oxidative damage and restores expression of GLUT4 gene in the hyperthyroid rat heart. **Journal of Pineal Research.** 2007, 42(1), 71-82.[**John Wiley & Sons Ltd Publications; Impact Factor 15.221].**
- 98. Chattopadhyay A and **Bandyopadhyay D**. Vitamin E in the prevention of ischemic heart disease. **Pharmacological Reports.** 2006, 58(2), 179-187. [**Polish Academy of**

- Sciences, Impact Factor- 2.206.]
- 99. **Bandyopadhyay D** and Chattopadhyay A. Reactive oxygen species-induced Gastric ulceration: Protection by Melatonin. **Current Medicinal Chemistry.** 2006, 13(10), 1187-1202. **Impact Factor-4.115.**
- 100. **Bandyopadhyay D**, Ghosh G, Bandyopadhyay A and Reiter RJ. Melatonin protects against piroxicam-induced gastric ulceration. **Journal of Pineal Research**. 2004, 36(3), 195-203. [John Wiley & Sons Ltd Publications; Impact Factor –15.221].
- 101. **Bandyopadhyay D**, Chattopadhyay A, Ghosh G and Datta AG. Oxidative Stress-Induced Ischemic Heart Disease: Protection By Antioxidants. **Current Medicinal Chemistry**. 2004, 11(3), 369-387. **Impact Factor-4.115.**
- 102. De K, Ghosh G, Datta M, Konar A, Bandyopadhyay J, **Bandyopadhyay D**, Bhattacharya S, Bandyopadhyay A. Analysis of differentially expressed genes in hyperthyroid-induced hypertrophied heart by cDNA microarray. **Journal of Endocrinology**. 2004, 182(2), 303-314. **Impact Factor- 3.896**.
- 103. Reiter RJ, Tan DX, Mayo JC, Sainz RM, Leon J, **Bandyopadhyay D.** Neurally-mediated and neurally-independent beneficial actions of melatonin in the gastrointestinal tract. **Indian Journal of Physiology and Pharmacology**. 2003, 54(4), 113-125.
- 104. Chattopadhyay A, Biswas S,**Bandyopadhyay D**, Sarkar C and Datta AG. Effect of isoproterenol on lipid peroxidation and antioxidant enzymes of myocardial tissue of mice and protection by quinidine. **Molecular and Cellular Biochemistry.** 2003, 245 (1-2), 43-49. **Impact Factor-2.393**.
- 105. Bandyopadhyay U, Biswas K, Chatterjee R and **Bandyopadhyay D,** Chattopadhyay I, Ganguly C, Chackraborty T, Bhattacharya K, Banerjee R. Gastroprotective effect of Neem (Azadirachtaindica) bark extract: Possible involvement of H(+)-K(+)-ATPase inhibition and scavenging of hydroxyl radical. **Life Sciences**. 2002, 71 (24), 2845-2865. **Impact Factor- 2.67.**
- 106. MazumadarA,**Bandyopadhyay D**, Bandyopadhyay U and Banerjee RK. Probing the role of active site histidine residues in the catalytic activity of lacrimal gland peroxidase. **Molecular and Cellular Biochemistry.** 2002, 237(1-2), 21-30. **Impact Factor- 2.393.**
- 107. **Bandyopadhyay D**, Bandyopadhyay A, Das PK, Reiter RJ. Melatonin protects against gastric ulceration and increases the efficacy of ranitidine and omeprazole in reducing gastric damage. **Journal of Pineal Research.** 2002, 33(1), 1 to 7. **[John Wiley & Sons Ltd Publications; Impact Factor 9.6].**
- 108. Bandyopadhyay D, Biswas K, Bhattacharyya M, Reiter RJ and Banerjee RK. Involvement of reactive oxygen species in gastric ulceration: Protection by melatonin. Indian Journal of Experimental Biology. 2002, 40(6), 693-705. Impact Factor- 0.835.
- 109. Bandyopadhyay D, Biswas K, Bhattacharyya M, Reiter RJ and Banerjee RK. Gastric toxicity and mucosal ulceration induced by oxygen-derived reactive species: Protection by Melatonin. Current Molecular Medicine. 2001, 1:501-513. Impact

Factor- 3.62.

- 110. **Bandyopadhyay D**, Biswas K, Bandyopadhyay U, Reiter RJ and RK Banerjee. Melatonin protects stress-induced gastric lesions by scavenging the hydroxyl radical. **Journal of Pineal Research**. 2000, 29(3), 143-151. **[John Wiley & Sons Ltd Publications; Impact Factor 15.221].**
- 111. Chattopadhyay A, Chowdhury TD, **BandyopadhyayD** and Datta AG. Protective effect of erythropoietin on the oxidative damage of erythrocyte membrane by hydroxyl radical. **Biochemical Pharmacology**. 2000, 59(4), 419-425. **Impact Factor-4.689**.
- 112. Bandyopadhyay U, Biswas K, **Bandyopadhyay D** and Banerjee RK. Dexamethasone makes the gastric mucosa susceptible to ulceration by inhibiting prostaglandin synthetase and peroxidase- two important gastroprotective enzymes. **Molecular and Cellular Biochemistry.** 1999, 202(1-2), 31-36. **Impact Factor-2.393.**
- 113. Bandyopadhyay U, Das D, **Bandyopadhyay D**, BhattacharjeeM and Banerjee RK. Role of reactive oxygen species in mercaptomethylimidazole-induced gastric acid secretion and stress- induced gastric ulceration. **Current Science**. 1999, 76(1), 55-62.
- 114. Adak S, Bandyopadhyay U, **Bandyopadhyay D** and Banerjee RK. Mechanism of horseradish peroxidase catalyzed epinephrine oxidation-obligatory role of O2- and H2O2. **Biochemistry**. 1998, 37(48), 16922-16933. **Impact Factor- 3.015.**
- 115. Das D, **Bandyopadhyay D** and Banerjee RK. Oxidative inactivation of gastric peroxidase by site-specific generation of hydroxyl radical and its role in stress-induced gastric ulceration. **Free Radical Biology and Medicine.** 1998, 24(3), 460-469. **Impact Factor- 5.855.**
- 116. Das D, **Bandyopadhyay D**, Bhattarcharjee M and Banerjee RK. Hydroxyl radical is the major causative factor in stress-induced gastric ulceration. **Free Radical Biology and Medicine.** 1997, 23(1), 8-18. **Impact Factor- 5.855.**
- 117. **Bandyopadhyay D**, Chatterjee AK and Datta AG. Effect of cadmium on purified hepatic flavokinase: Involvement of reactive-SH group(s) in the inactivation of flavokinase by cadmium. **Life Sciences.** 1997, 60(2), 1891-1903. **Impact Factor-2.67.**
- 118. **Bandyopadhyay D**, Chatterjee AK and Datta AG. Effect of cadmium, mercury and copper on partially purified hepatic flavokinase of rat. **Molecular and Cellular Biochemistry.** 1997, 167, 73-80. **Impact Factor- 2.613.**
- 119. Saha B, **Bandyopadhyay D** and Roy S. Immunobiological studies on Experimental Visceral Leishmaniasis IV. Kinetics of Evolution of Disease-Promoting versus Host-Protective Cells of Monocyte-Macrophage Lineage and their characterization. **Scandinavian Journal of Immunology.** 1995, 42, 540-546. **Impact Factor- 2.27.**
- 120. **Bandyopadhyay D**, Datta AG and Chatterjee AK. Hepatic Flavin Metabolism in Ageing Rats. **Indian Journal of Physiology and Allied Sciences.** 1995, 49(4), 192-202.

121. **Bandyopadhyay D**, Chatterjee AK and Datta AG. Effect of cadmium treatment on hepatic flavin metabolism. **Journal of Nutritional Biochemistry**. 1993, 4, 510-514. **Impact Factor- 4.668**.

b) Books/ book chapters: Nil

c) Conference/ seminar volumes:

- Debosree Ghosh, Debasish Bandyopadhyay. A combination therapy against lead induced myocardial injury. 23rd West Bengal State Science & Technology Congress 2016, held at Presidency University, Kolkata.15. Pg. 288-289.
- 2) Debosree Ghosh, **Debasish Bandyopadhyay**. Protection against lead induced myocardial injury: A combination Therapy. UGC Sponsored Two Day National Seminar. Trends of Physiological Researches from Laboratory to Community, organized by Dept. of Human Physiology with Community Health. Vidyasagar University, Midnapore.WB.India.30th and 31st March'2016.p 37.
- 3) Syed Benazir Firdaus, Debosree Ghosh, **Debasish Bandyopadhyay**. Gastro-protective action of curry leaf extract in drug induced gastric ulcer.UGC Sponsored Two Day National Seminar. Trends of Physiological Researches from Laboratory to Community, organized by Dept. of Human Physiology with Community Health. Vidyasagar University, Midnapore.WB.India.30th and 31st March'2016.p 38.
- **4)** Sudeshna Paul, **Debasish Bandyopadhyay**, Aindrila Chattopadhyay.Aqueous bark extract of Terminalia arjuna protects against phenylhydrazine induced oxidative damage in goat erythrocyte membrane bound enzymes and metabolic enzymes. 103rd Indian Science Congress, section XI:Medical sciences (including Physiology), held at University of Mysore, Mysuru, from January 3 to 7, 2016. Pg. 134.
- 5) Mousumi Dutta, Arnab Kumar Ghosh, Aindrila Chattopadhyay, Vishwaraman Mohan, Prasad Thakurdesai, Debajit Bhowmick, Tridib Das and **Debasish Bandyopadhay**. Trigonelline [99%] protect against copper-ascorbate induced oxidative damage to aortic mitochondria *in vitro*: involvement of antioxidant mechanism(s).

- 103rdIndian Science Congress, section XI:Medical sciences (including Physiology), held at University of Mysore, Mysuru, from January 3 to 7, 2016. Pg. 153.
- 6) A combinatorial therapeutic approach against lead-induced cardiotoxicity in male Wistar rats. Debosree Ghosh, **Debasish Bandyopadhyay.** 103rd Indian Science Congress, section XI:Medical sciences (including Physiology), held at University of Mysore, Mysuru, from January 3 to 7, 2016. Pg. 159.
- 7) Auroma Ghosh, Mousumi Dutta, Arnab Kumar Ghosh, Aindrila Chattopadhyay, Debajit Bhowmick, Sanjib K. Pattari and **Debasish Bandyopadhyay**. Cerebral mitochondrial dysfunction caused by isoproterenol induced myocardial ischemia *in vivo*: protection by melatonin. 103rd Indian Science Congress, section XI: Medical sciences (including Physiology), held at University of Mysore, Mysuru, from January 3 to 7, 2016. Pg. 167.
- 8) Gargi Bose, Mousumi Dutta, Aindrial Chattopadhyay, Auroma Ghosh, Adrita Banerjee, Arnab Kumar Ghosh, Sanatan Mishra, Sanjib K. Pattari, Tridib Das and **Debasish Bandyopadhyay**. Arsenic induced oxidative stress in rat heart aggravated by high fat diet can be protected by aqueous bark extract of Terminalia arjuna. 103rd Indian Science Congress, section XI: Medical sciences (including Physiology), held at University of Mysore, Mysuru, from January 3 to 7, 2016. Pg. 172.
- 9) Auroma Ghosh, Mousumi Dutta, Arnab Kumar Ghosh, Aindrila Chattopadhyay, Debajit Bhowmick, Sanjib K. Pattari and **Debasish Bandyopadhyay**. Exploration of the protective role melatonin in myocardial ischemia inducedcerebral mitochondrial dysfunction in male Wistar rats. ICMSP 100, Closing Ceremony, Centenary celebration of the Department of Physiology, University of Calcutta, 28th August, 2015.
- 10) Mousumi Dutta, Arnab Kumar Ghosh, Vishwaraman Mohan, Prachi Mishra, Vinod Rangari, Aindrila Chattopadhyay and Debasish Bandyopadhyay. Protective effects of Fenugreek 4-hydroxyisoleucine and trigonelline enrichedfraction (TF4H (28%)) Sugaheal® against copper-ascorbate induced injury to goat cardiac mitochondria in vitro. ICMSP 100, Closing Ceremony, Centenary celebration of the Department of Physiology, University of Calcutta, 28th August, 2015.

- 11) Sanatan Mishra ,Mousumi Dutta , **Debasish Bandyopadhyay** , Aindrila Chattopadhyay.Protective effect of aqueous bark extract of Terminalia arjuna against adrenalinebitartarate induced myocardial ischemia in male albino rats. ICMSP 100, Closing Ceremony, Centenary celebration of the Department of Physiology, University of Calcutta, 28th August, 2015.
- **12**) Sudeshna Paul, **Debasish Bandyopadhyay**, Aindrila Chattopadhyay. Aqueous bark extract of *Terminalia arjuna* protects against phenylhydrazine induced oxidative damage in goat red blood cellmembrane protein, phospholipids and structural morphology. ICMSP 100, Closing Ceremony, Centenary celebration of the Department of Physiology, University of Calcutta, 28th August, 2015.
- 13) Arnab K. Ghosh, Mousumi Dutta1, V Mohan, Prasad Thakurdesai, Aindrila Chattopadhyay, **Debasish Bandyopadhyay**. Amelioration of oxidative stress in mitochondria by trigonelline [99%]: Anovel approach. ICMSP 100, Closing Ceremony, Centenary celebration of the Department of Physiology, University of Calcutta, 28th August, 2015.
- **14**) Debosree Ghosh, Syed Benazir Firdaus and **Debasish Bandyopadhyay**. Aqueous leaf extract of *Murraya koenigii* protects againstlead acetate-induced oxidative stress in rat kidneys. 101st Indian Science Congress, section XI:Medical sciences (including Physiology), held at Jammu University, Jammu from February 3 to 7, 2014.Pg.No.64.
- **15**) Sudeshna Paul, Debosree Ghosh, Arnab Kumar Ghosh, Monalisa Dey, Aindrila Chattopadhyay, **Debasish Bandyopadhyay**. An in vitro study on lead induced oxidative stress in cardiac and hepatic tissue of rat. 101st Indian Science Congress, section XI:Medical sciences (including Physiology), held at Jammu University, Jammu from February 3 to 7, 2014.Pg.No.65.
- **16**) Debosree Ghosh and **Debasish Bandyopadhyay**. A Novel Combinatorial Therapeutic Approach against Lead-induced Hepatotoxicity in Male Wistar Rats Using Melatonin and the Aqueous Extracts of the Leaves of *Murraya koenigii*. National Conference on Environmental Issues and Food Security in India: Let's voice together towards a sustainable future, held on 10th August'2014 at Kolkata, organized by Foundation for

- Science and Environment, Kolkata in association with Scientific & Environmental Research Institute, Kolkata. PC 18, Page 142.
- 17) Debosree Ghosh, Syed Benazir Firdaus, Sudeshna Paul and **Debasish Bandyopadhyay**. A Novel Combinatorial cardio-therapeutic approach against lead induced oxidative stress in rat heart. 4th Biennial Conference of South Asian Association of Physiologists (SAAP) & 3rd National Convention of Bangladesh Society of Physiologists (BSP) from 6th-7th December 2014, Dhaka, Bangladesh.
- 18) Debosree Ghosh, **Debasish Bandyopadhyay**. A combinatorial therapeutic approach against lead-induced changes in blood parameters and hepatotoxicity. Physicon 2014, Department of Physiology & Department of Zoology, Berhampore Girls' College, Berhampore, Murshidabad, West Begal. XXVI Annual National Conference of Physiological Society of India; 19th-21st December' 2014, OP-43, Page 110.
- **19**) Sanatan Mishra ,Mousumi Dutta , **Debasish Bandyopadhyay** , Aindrila Chattopadhyay. Adrenaline induced myocardial injury in rats: Protection by aqueous Terminalia arjuna bark extract.Physicon 2014,Department of Physiology & Department of Zoology, Berhampore Girls' College, Berhampore, Murshidabad, West Begal.XXVI Annual National Conference of Physiological Society of India; 19th-21st December'2014.
- **20**) Sudeshna Paul, **Debasish Bandyopadhyay** and Aindrila Chattopadhyay. Protective role of aqueous bark extract of Terminalia arjuna on phenylhydrazine induced oxidative injury in goat red blood cells. Physicon 2014, Department of Physiology & Department of Zoology, Berhampore Girls' College, Berhampore, Murshidabad, West Begal. XXVI Annual National Conference of Physiological Society of India; 19th-21st December' 2014.
- **21**) Debosree Ghosh, Syed Benazir Firdaus, Elina Mitra, Monalisa Dey, Sanjib K.Pattari, Santanu Dutta, and **Debasish Bandyopadhyay**. Evaluation of hepatoprotective activity of aqeous leaf extract of *Murraya koenigii* in sub chronic lead-Induced liver Injury in rats. 100th Indian Science Congress, section XI:Medical sciences (including Physiology), held at University of Calcutta, Kolkata, from January 3 to 7, 2013. 50. Pg. 193.

- **22**) Syed Benazir Firdaus, Debosree Ghosh, Anjali Basu, Arnab K. Ghosh, Elina Mitra, **Debasish Bandyopadhyay**. Polyphenol rich aqueous Curry leaf extract protects against piroxicam induced gastrotoxicity.100th Indian Science Congress, section XI:Medical sciences (including Physiology), held at University of Calcutta, Kolkata, from January 3 to 7, 2013.279. Pg. 404.
- **23**) Monalisa Dey, Swagata Basak, Debosree Ghosh and **Debasish Bandyopadhyay**,"A Purified FMN phosphatase from Goat Heart. 100th Indian Science Congress, section XI:Medical sciences (including Physiology),held at University of Calcutta, Kolkata, from January 3 to 7, 2013.54.Pg.No.197.
- **24**) Elina Mitra, Anjali Basu, Debosree Ghosh, , Santanu Datta, Sanjiv K.Pattari, **Debasish Bandyopadhyay**, "Protective effects of an aqueous Tulsi leaf (*Ocimum sanctum*) extract gainst cadmium induced oxidative stress in rat liver. 100th Indian Science Congress, section XI:Medical sciences (including Physiology), held at University of Calcutta, Kolkata, from January 3 to 7, 2013.287.Pg.No.411.
- **25**) Swagata Mullick, Monalisa Dey and **Debasish Bndyopadhyay**. A Purified Flavin Phosphatase from Goat Liver. 100th Indian Science Congress, section XI:Medical sciences (including Physiology), held at University of Calcutta, Kolkata, from January 3 to 7, 2013.Pg No.192.
- **26**) Sudeshna Paul, Arnab K Ghosh, Mousumi Dutta, Monalisa Dey, Sanatan Mishra, **Debasish Bandyopadhyay**, Aindrila Chattopadhyay. Effect of aqueous bark extract of Terminalia arjuna on Phenylhydrazine induced oxidative stress in RBC membrane. 100th Indian Science Congress, section XI:Medical sciences (including Physiology), held at University of Calcutta, Kolkata, from January 3 to 7, 2013. Pg No. 409.
- **27**) Aindrila Chattopadhyay, Mousumi Dutta, Arnab Kumar Ghosh, Sudeshna Paul, Sanatan Mishra, Anjali Basu and **Debasish Bandyopadhyay**. Remediation of mitochondrial oxidative stress: *An in vitro* study. 100th Indian Science Congress, section XI: Medical sciences (including Physiology), held at University of Calcutta, Kolkata, from January 3 to 7, 2013. Pg No. 103

- **28**) Debasri Mukherjee, ArnabKGhosh, AnjaliBasu, Arun Bandyopadhyay and **Debasish Bandyopadhyay**.Melatonin ameliorates isoproterenol induced mitochondria dysfunction in rat heart. 100th Indian Science Congress, section XI:Medical sciences (including Physiology), held at University of Calcutta, Kolkata, from January 3 to 7, 2013.Pg No.198.
- 29) Santanu dutta, Debasri Mukherjee, Arnab K Ghosh, Elina Mitra, Anjali Basu, Arun Bandyopadhyay and **Debasish Bandyopadhyay**. Involvement of oxidative stress in set of Indian patients suffering from Ischemic Heart Disease. 100th Indian Science Congress, section XI: Medical sciences (including Physiology), held at University of Calcutta, Kolkata, from January 3 to 7, 2013. Pg. No. 212.
- **30**) Dutta M, Ghosh D, **Bandyopadhyay D**, Chattopadhyay A, Aggravation of arsenic-induced oxidative stress in the heart and liver tissues of rats co-treated with high fat diet, UGC sponsored seminar on "Progress of Science vis-à-vis Environment", at Sarojini Naidu College for women in collaboration with Dum Dum Motijheel College, 11th and 14th January, 2013.
- **31**) Debosree Ghosh, Elina Mitra, Syed Benazir Firdaus, Monalisa Dey, Arnab Kr. Ghosh, Aindrila Chattopadhyay, **Debasish Bandyopadhyay**. Melatonin protects against leadinduced oxidative stress in rat heart. International Symposium on Molecular Signaling, organized by Visva-Bharati (A Central University), Santiniketan, India.February 18-21, 2013, P 79.
- **32**) Syed Benazir Firdaus, Debosree Ghosh, Anjali Basu, Arnab K. Ghosh, Elina Mitra, Kuladip Jana, **Debasish Bandyopadhyay**. Aqueous Curry leaf extract protects against piroxicam induced gastrotoxicity in experimental rats. International Symposium on Molecular Signaling, organized by Visva-Bharati (A Central University), Santiniketan, India.February 18-21, 2013, P 114.
- **33**) Elina Mitra, Debosree Ghosh, Arnab Kr. Ghosh, Santanu Datta, Sanjiv K.Pattari, **Debasish Bandyopadhyay**, "Protective effects of an aqueous leaf extract of *Murraya koenigii* L. against cadmium induced oxidative stress in rat heart: possible involvement of antioxidant mechanism (s)," 99th Indian Science Congress, section XI:Medical sciences

- (including Physiology),held at KIIT University,Bhubaneshwar, from January 3 to 7,2012.6.Pg.No.142.
- **34**) Debosree Ghosh, Elina Mitra, Syed Benazir Firdaus, Arnab Kr. Ghosh, **Debasish Bandyopadhyay**,"Aqueous curry leaves (*Murraya koenigii* L.) extract scavenges reactive oxygen species in vitro," 99th Indian Science Congress, section XI:Medical sciences (including Physiology), held at KIIT University, Bhubaneshwar, from January 3 to 7,2012.132.Pg.No.264.
- **35**) Monalisa Dey, Swagata Basak, Debosree Ghosh, Subhasish Pal and **Debasish Bandyopadhyay**,"A Purified FMN phosphatase from goat heart: a forgotten enzyme of flavin metabolising pathway99th Indian Science Congress, section XI:Medical sciences (including Physiology), held at KIIT University, Bhubaneshwar, from January 3 to 7,2012.128.Pg.No.260.
- **36**) Syed Benazir Firdaus, Debosree Ghosh, Elina Mitra, Arnab Kumar Ghosh, Monalisa Dey, Anjali Basu, and **Debasish Bandyopadhyay**,"Quantitative estimation of antioxidant phytoconstituents in crude and lyophilized aqueous curry leaves (*Murraya koenigii* L.) extract," 99th Indian Science Congress, section XI:Medical sciences (including Physiology), held at KIIT University, Bhubaneshwar, from January 3 to 7,2012. 128. Pg.No.260.
- 37) D.Ghosh, S.B. Firdaus, E.Mitra, M. Dey, D. Bandyopadhyay, "Curry Leaves (*Murraya koenigii*) Protects Against Lead-Induced Oxidative Stress In Rat Liver". 3rd Binnial Conference of South Asian Association of Physiologists and the 25th Anniversary Celebrations of the Physiological Society of Sri Lanka, 7th-9th November 2012, Colombo, Srilanka. OP 45.Pg.No.87.
- **38**) Syed Benazir Firdaus, Debosree Ghosh, Arnab K. Ghosh, Anjali Basu, **Debasish Bandyopadhyay**. Aqueous Curry Leaves Extract Protects Gainst Piroxicam-Induced Ulceration by Scavenging Hydroxyl Radical *in vivo*. OP 8. Pg.No.68. 3rd Binnial Conference of South Asian Association of Physiologists and the 25th Anniversary Celebrations of the Physiological Society of Sri Lanka, 7th-9th November 2012, Colombo, Srilanka.

- **39**) Debosree Ghosh, Syed Benazir Firdaus, Elina Mitra, Monalisa Dey, Sanjib K.Pattari, Santanu Dutta, and **Debasish Bandyopadhyay**. Murraya koenigii protects against leadinduced hepatotoxicity in rats. P-6. Pg. 33-34. One day national seminar in "Emerging Trends in Cell & Molecular Biology", organized by Department of Life Science and Biotechnology, Jadavpur University, December 14th, 2012.
- 40) Syed Benazir Firdaus, Debosree Ghosh, Anjali Basu, Arnab K. Ghosh, Elina Mitra, Kuladip Jana and Debasish Bandyopadhyay. Aqueous Curry Leaves Extract Protects Gainst Piroxicam-Induced Gastric Ulceration by Scavenging Hydroxyl Radical *in vivo*.P-5. Pg. 32-33. One day national seminar in "Emerging Trends in Cell & Molecular Biology", organized by Department of Life Science and Biotechnology, Jadavpur University, December 14th, 2012.
- **41**) Sudeshna Paul, Arnab Kumar Ghosh, Mousumi Dutta, Monalisa Dey,Sanatan Mishra, **Debasish Bandyopadhyay**, Aindrila Chattopadhyay.Protective effect of aqueous bark extract of Terminalia arjuna on Phenylhydrazine induced oxidative stress in RBC memebrane.P-15.Pg. 40. One day national seminar in "Emerging Trends in Cell & Molecular Biology", organized by Department of Life Science and Biotechnology, Jadavpur University, December 14th, 2012.
- **42)** Mousumi Dutta, Arnab K. Ghosh, **Debasish Bandyopadhyay** and Aindrila Chattopadhyay. Aqueous bark extract of Terminalia arjuna ameliorates copper-ascorbate induced oxidative stress in placental mitochondria. P-8. Pg. 34-35. One day national seminar in "Emerging Trends in Cell & Molecular Biology", organized by Department of Life Science and Biotechnology, Jadavpur University, December 14th, 2012.
- **43**) Debosree Ghosh, Monalisa Dey, Elina Mitra, **Debasish Bandyopadhyay**: "Curry leaf (*Murraya koenigii*) extract protects against lead induced oxidative stress in rats." 98th Indian Science Congress, section XI: Medical sciences (including Physiology), held at SRM University, Chennai, from January 3 to 7, 2011.50.Pg.No.225.
- **44**) Elina Mitra, Arnab K.Ghosh, Debosree Ghosh **Debasish Bandyopadhyay**: "Tulsi Leaf Extract Protects Against Cadmium –Induced Hepatic Injury in Rats". 98th Indian Science

- Congress, section XI: Medical sciences (including Physiology), held at SRM University, Chennai, from January 3 to 7, 2011.51.Pg.No.226.
- **45**) Monalisa Dey, Swagata Basak, Debosree Ghosh, **Debasish Bandyopadhyay**: "FMN Phosphatase from Goat Heart". 98th Indian Science Congress, section XI: Medical sciences (including Physiology), held at SRM University, Chennai, from January 3 to 7, 2011. Pg. No. 290.
- **46**) Debosree Ghosh, Elina Mitra, Syed Benazir Firdaus, Arnab Kumar Ghosh, Monalisa Dey, **Debasish Bandyopadhyay**: "Use of alternative medicine in occupational health hazards: concepts and ideas", International Conference on Molecules to systems Physiology:100 Years Journey, Centenary celebration of the Department of Physiology, University of Calcutta. 21st 23rd September. 2011.PP- 44, Pg No.152.
- **47**) Elina Mitra, Debosree Ghosh and **Debasish Bandyopadhyay**: "Cadmium induced oxidative stress: underlying mechanisms", International Conference on Molecules to systems Physiology:100 Years Journey, Centenary celebration of the Department of Physiology, University of Calcutta. 21st 23rd September. 2011, PP- 45, Pg No.153.
- **48**) Monalisa Dey, Swagata Basak, Debosree Ghosh and **Debasish Bandyopadhyay**, "Flavin metabolism: a forgotten pathway", International Conference on Molecules to systems Physiology:100 Years Journey, Centenary celebration of the Department of Physiology, University of Calcutta. 21st 23rd September. 2011, PP- 49, Pg No.157.
- **49**) Syed Benazir Firdaus, Anjali Basu, Arnab Kumar Ghosh, Debosree Ghosh and **Debasish Bandyopadhyay**, "Remediation of gastric ulceration through alternative medicine", International Conference on Molecules to systems Physiology:100 Years Journey, Centenary celebration of the Department of Physiology, University of Calcutta. 21st 23rd September. 2011,PP- 5, Pg No.113.
- 50) Debosree Ghosh, Elina Mitra, Syed Benazir Firdaus, Debasish Bandyopadhyay, "Evaluation of Antioxidant potential of an aqueous extract of the leaves of *Murraya koenigii*.L. in vitro", Physicon 2011, Department of Physiology, NRI Medical College & General Hospital, Guntur, XXIII Annual National Conference of Physiological Society of India; 21st 23rd December 2011.PP- WB 100, Pg No.85-86.

51) Elina Mitra, D.Ghosh, A.K. Ghosh, S.Datta,S.K.Pattari & **Debasish Bandyopadhyay**, "Protective effects of an aqueous extract of the leaves of *Murraya koenigii* against cadmium induced oxidative stress in rat liver, "Physicon 2011, Department of Physiology,NRI Medical College & General Hospital, Guntur,XXIII Annual National Conference of Physiological Society of India;21st – 23rd December'2011.PP- WB 99, Pg No.85.

d) Other publications: Nil

13. Patents: Nil

14. Invited lectures delivered:

- 1) Delivered a **PLENARY LECTURE** on "Melatonin protects against isoproterenol, and Cu-ascorbate induced alterations in the activities of enzymes related to energy metabolism and enzymatic antioxidants: *in vivo* and *in vitro* studies" at **National seminar** on Advancement of Biology in The 21st Century, organised by Department of Zoology, Visva-Bharati University, Visva-Bharati University, 28th-29th February, 2020.
- 2) Delivered a PRESTIGIOUS INVITED LECTURE on "Mechanism of protection by melatonin against reactive oxygen species mediated oxidative damage" at International Conference on Chemistry for Human Development, organised by Professor Asima chatterjee Foundation jointly with University of Calcutta and Heritage Institute of Technology, HIT, 9th-11th February, 2020.
- 3) Delivered an **INVITED LECTURE** on "Cardioprotection by Melatonin: A Therapeutic Hope for the Millions" at **UGC Sponsored Two Day National Seminar** on Trends of Physiological Reseraches from Laboratory to Community, organised by Department of Physiologyy, **Vidyasagar University**, Medinipur, 30th -31st April 2016.

- 4) Delivered an **INVITED LECTURE** on "Cardioprotection by Melatonin: A Therapeutic Hope for the Future" at **National Science Meet** organised by Hiralal Mazumdar Memorial College for Women, Dakshineswar, Kokata, 3rd March,2016.
- 5) **Debasish Bandyopadhyay**, **INVITED LECTURE** delivered at **FIPSPHYSICON**, XXVIIth Annual Conference of the Physiological Society of India (PSI) & VIth Congress of the Federation of Indian Physiological Societies (FIPS), on Translational Physiology for health Promotion, December 18-20' 2015, held at The University College of Science and Technology, University of Calcutta, Rajabazar, Kolkata, India, organized by the PSI.
- 6) **Debasish Bandyopadhyay**, **INVITED LECTURE** delivered at Current Trends of Research in Human Physiology and Community Health, 27th March, 2015, organised by the Dept. of Human Physiology with Community Health, Vidyasagar University, Midnapore 721102, West Bengal.
- 7) Delivered an **INVITED LECTURE on "Isoproterenol induced myocardial ischemia** in rat model: our experiences with melatonin" at 102^{nd} session of the Indian Science Congress, held at University of Mumbai, Mumbai, January 3-7, 2015.
- 8) **Debasish Bandyopadhyay**, Targeting mitochondria for the allevation of oxidative stress: a new experience with black pepper alkaloid. (SIL 09). **SPECIAL INVITED LECTURE** delivered atPHYSICON 2014, Department of Physiology & Department of Zoology, Berhampore Girls' College, Berhampore, Murshidabad, West Begal.XXVI Annual National Conference of Physiological Society of India; 19th-21st December'2014. Pg no. 10.
- 9) Delivered an **INVITED LECTURE** on "Melatonin protects against lead acetate-induced oxidative stress in rat liver, heart and kidneys" at 101st session of the Indian Science Congress, held at Jammu University, Jammu, February 3-7, 2014.
- 10) Delivered an **INVITED LECTURE on "Melatonin in Cardiprotection" at** 100thsession of the Indian Science Congress, held at University of Calcutta, Kolkata, January 3-7, 2013.

- 11) **Debasish Bandyopadhyay,** Cardioprotection by Melatonin: A Novel Approach.**INVITED LECTURE** delivered at XXIV Annual Conference of Physiological Society of India held at Dept. Of Physiology, Andhra Medical college, Vishakhapattanam. 12-14th Dec'2012.
- 12) Delivered an **INVITED LECTURE** at the Annual Conference of Society of Biological Chemists of India held at Kolkata, November, 2012.
- 13) **Debasish Bandyopadhyay**, Cadmium-induced oxidative stress in rat heart: protection by Curry leaf aqueous extract A new approach. **INVITED LECTURE** delivered at 99th Indian Science Congress, section XI:Medical sciences (including Physiology) held at KIIT, Bhubaneshwar. 3-7th Jan' 2012.
- 14) **Debasish Bandyopadhyay,** Melatonin as an antioxidant. **SYMPOSIUM LECTURE** delivered at the 98th session of the Indian Science Congress, held at SRM University, Chennai, January 3-7, 2011.

13. Awards:

1. Received the prestigious **Prof. Parimal Biskash Sen Memorial Oration Award** at **Annual Conference of Physiological Society of India (PSI)** "PHYSIOCON-2016" organised by Department of Physiology, Midnapur College, Medinipur, on 22nd-24th November 2016.

14. Other notable activities:

- 1) Served as judge for presentations and posters at a regional conference organised by West Bengal State DST.
- 2) Served as a Resource Person at the Refresher Course in Life Science at the Department of Botany, University of Calcutta, December, 2015.