



UNIVERSITY OF CALCUTTA

Department of Physiology

FACULTY ACADEMIC PROFILE/ CV



1. **Full name of the faculty member:** Dr. Amar Kumar Chandra
2. **Designation:** Professor
3. **Specialisation :** Endocrinology & Reproductive Physiology.
4. **Passport size photograph :** .
5. **Contact information :**

Please provide contact address, email, phone number (optional), etc.

Department of Physiology, University of Calcutta, 92 Acharyya Prafulla Chandra Road, Kolkata 700 009; email : amarkchandra@rediffmail.com email; hysiology.ac@gmail.com; Cell Phone 9433161840

6. **Academic qualifications:** M.Sc. Ph.D.

Please mention here the degrees (graduation onward):

| College/ university from which the degree was obtained | Abbreviation of the degree |
|--|----------------------------|
| University of Calcutta | B.Sc (Hons), M.Sc., Ph.D. |

7. **Positions held/ holding:** Professor in Physiology **since 2003**

| Designation / Title | Organization | Dates [From-To] |
|---------------------|-----------------------------|---------------------------|
| Professor | University of Calcutta | March 2003 - present |
| Reader | University of Calcutta | Dec 1997 - Feb 2003 |
| Reader | Tripura University | March 1995 -November 1997 |
| Asst. Professor | MBB College, Govt. of India | July 1983 - February 1995 |

8. **Research interests:**

- Thyroid physiology in relation to iodine nutrition and dietary goitrogen / environmental anti- thyroid agents in experimental animal models.
- Epidemiology (Iodine Nutrition of Human Population in Eastern, North eastern and Gangetic Plains in India)
- Reproductive endocrinology in relation to environmental pollutants especially heavy metals / environmental goitrogens , excess iodine with possible preventions in experimental animal models.

9. **Research guidance :**

Number of researchers awarded Ph.D degrees : 19

Number of researchers pursuing Ph.D : 5

10. Projects :

Current projects :

| Title of the Project | Duration | Funding Agency |
|--|------------------------|--|
| 1. Studies on Anti-thyroidal Biomolecules in Bamboo-shoots of North –East and Evaluation of their Molecular and Physiological Actions in Thyroid Disruption | 2014-2017 (Ongoing) | DBT (NERBPMC), Govt. of India |
| 2. Iodine nutritional status of pregnant women with special reference to dietary goitrogens (thiocyanate, nitrate) in hospital based study at Kolkata, West Bengal.” | (Approved) | ICMR, New Delhi |
| 3. Effect of excessive dietary iodine on immune function of rats | 2014-2019 (Ongoing) | Rajib Gandhi National Fellowship Programme, UGC, New Delhi |
| 4. Effect of excessive iodine on female reproductive system in rats | 2013-2017 (Ongoing) | CSIR-UGC NET |
| 5. Studies on iodine nutrition status of lactating mothers and its possible impact on thyroid function of their breast-fed infants in certain areas of West Bengal | 2013-2016 (Ongoing) | DST, Govt. of West Bengal |

Completed projects:

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|---|-----------|--|
| 6. Studies on the effect of excessive iodine in reproduction with reference to thyroid gland in rats | 2012-2015 | UGC Major Research Project, New Delhi |
| 7. Studies on goitrogenic/anti-thyroidal activity of certain Indian plant foods in animal model | 2010-2015 | Rajib Gandhi National Fellowship Programme, UGC, New Delhi |
| 8. Studies on the Morphological and Functional Status of Male gonads under the Influence of Calcium & Magnesium | 2008-2010 | UPE Project, University of Calcutta, Kolkata |

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| <p>9. Studies on the Morphological and Functional Status of Thyroid under the Influence of Calcium and Magnesium</p> | 2007-2009 | UPE Project, University of Calcutta, Kolkata |
| <p>10. Studies on the mechanism of Chromium and Vanadium Induced Alteration in Male Gonadal and Adrenal Activities with the Possible Prevention</p> | 2007-2010 | University Grants Commission (UGC) Major Research Project, New Delhi |
| <p>11. Consumption pattern of carbonated soft drinks of Indian population at different times of the year</p> | 2007-2008 | ICMR Task Force Study, New Delhi |
| <p>12. Effect of green and black tea extracts on endocrine system (thyroid-gonadal) with possible mode of action</p> | 2007-2009 | National Tea Research Foundation (NTRF), Kolkata |
| <p>13. An Epidemiological Study to Evaluate the Thyroid Functional Status in Iodine Supplemented Goitrogen Enriched Regions of West Bengal</p> | 2003- 2005 | Department of Science & Technology & NES (Govt. of West Bengal), Kolkata |
| <p>14. Thyroid Functions under the Influence of Dietary Goitrogen in Relation to Iodine Nutrition</p> | 2000- 2003 | Department of Science & Technology (Govt of India), New Delhi |
| <p>15. Are there Special Factors that Influence the Iodine Deficiency Disorders(IDD) and its Severity in Tripura</p> | 1994- 1997 | Department of Science & Technology (Govt of India), New Delhi |
| <p>16. Evaluation of the Prevalence of Common Endocrine Disorders Among the People of Tripura</p> | 1992- 1994 | The State Council for Science & Technology (Govt. of Tripura), Agartala |
| <p>17. Effect of Experimental Hypothyroidism and Hyperthyroidism on Pancreatic Islets of Rats.</p> | 1986 - 1988 | UGC Minor Research Project |

11. Select list of publications:

a) *Journals:*

1. **Chandra AK**, Debnath A, Tripathy S, Goswami H, Mondal C, Chakraborty A, Pearce EN (2016). Environmental Factors other than Iodine Deficiency in the Pathogenesis of Endemic Goitre in the Basin of River Ganga and Bay of Bengal, India. **BLDE University Journal of Health Sciences**, 1(1): 33-38.
2. Mondal C, Sinha S, Chakraborty A and **Chandra AK (2016):** Studies on goitrogenic/ antithyroidal potentiality of thiocyanate, catechin and after concomitant exposure of thiocyanate-catechin. **International Journal of Pharmaceutical and Clinical Research**, 8(1): 108-116.
3. Chakraborty A, Mandal J, Mondal C, Sinha S and **Chandra AK (2015):** Effect of excess iodine ion oxidative stress markers, steroidogenic enzyme activities, testicular morphology and functions in adult male rats. **Biological Trace Element Research**. DOI: 10.1007/s12011-015-0581-3.
4. **Chandra AK (2015):** Iodine, Thiocyanate and Thyroid. **Biochemistry and Pharmacology: Open Access**, 4(3): 1-6
5. **Chandra AK**, Mondal C, Sinha S, Chakraborty A and Pearce E N (2015): Synergic actions of polyphenols and cyanogens of peanut seed coat (*Arachis hypogaea*) on cytological, biochemical and functional changes in thyroid.. **Indian Journal of Experimental Biology**, 53: 143-151. (Impact factor 0.75).
6. Singh LH, Haobam I, Arke L, **Chandra AK (2015):** Prevalence of Endemic Goiter in School Children during Post Salt Iodization Period in Churachanpur District, Manipur, India, **International Journal of Medical and Health Sciences**, 4(1): 20-23.
7. **Chandra AK** and De N (2014): Goitrogenic and Antithyroid Potential OG Green Tea of Indian Origin. **J Bangladesh Soc Physiol.**, 9(2): 105-116. (Review Article)
8. Chakraborty A, Mondal C, Sinha S, Mandal J and **Chandra A K (2014):** Amiodarone induced oxidative stress in stress-vulnerable organs of adult male rats. **Asian Journal of Pharmaceutical and Clinical Research**, Vol 7, Issue 4, 2014,177-183. (Impact factor 0.52).
9. **Chandra AK**, Goswami H and Sengupta P (2014): Magnesium on cytomorphology and enzyme activities in thyroid of rats. **Indian Journal of Experimental Biology** 52: 787-792. (Impact factor 0.75).
10. Pal, N, Samanta SK, Chakraborty A, Mondal C, Mahapatra D, Saha A, Mandal J, Sarkar D, **Chandra AK (2014):** Iodine nutritional status of absolutely breast fed infants with special reference to their mother's dietary goitrogens in certain rural areas of 24-Parganas districts of West Bengal. **Indian Journal of Physiology and Allied Sciences**, 68(4): 76-85.

11. Chakraborty A, **Chandra AK (2014)**: Excess iodine induced morphological as well as histological changes in male accessory sex organs of adult rats. **Indian Journal of Physiology and Allied Sciences**, 68(3): 76-85.
12. Tripathy S and **Chandra AK (2014)**: Studies on the susceptibility of autoimmune thyroid disorders in goiter endemic school children of iodine sufficient Sundarban Delta, West Bengal India. **Indian Journal of Physiology and Allied Sciences**, 68(1): 19-26.
13. Udayan Bhattacharya and **Chandra AK (2013)**. Iodine nutritional status of the school children in selected population of Kolkata Metropolitan city, West Bengal. **Indian Journal of Physiology & Allied Sciences**, 67 (3): 116-125.
14. Indrajit Ray and **Chandra AK (2013)**. An anthropometric study on the children of Tripura: Nutritional and health coverage and redefining WHO percentile cut-off points. **International Journal of Scientific and Research Publications**, 3 (5): 3-8.
15. **Chandra AK** and De N (**2013**): Catechin induced modulation in the activities of thyroid hormone synthesizing enzymes leading to hypothyroidism. **Molecular and Cellular Biochemistry**, 374:37–48 (**Impact factor 2.168**).
16. **Chandra AK**, Sengupta P, Goswami H and Sarkar M (**2013**): Effects of dietary magnesium on testicular histology, steroidogenesis, spermatogenesis and oxidative stress markers in adult rats. *Indian Journal of Experimental Biology*, vol. 51(1): 37-47 (**Impact factor 1.295**).
17. **Chandra AK**, Singh LH, Ghosh S and Pearce EN (**Jan- Feb, 2013**): Role of Bamboo-shoots in the Pathogenesis of Endemic Goiter in Manipur, North East India. *Endocrine Practice (American Association of Clinical Endocrinologists)*, 19 (1) 30-45. (**Impact factor 2.486**).
18. **Chandra AK** and Singh LH (**2012**): Studies on the Possible Occurrence of Autoimmune Thyroid Disorders in Goitrous Children of Manipur in North-East India. *Ind J Physiol Allied Sci*, 66 (2): 51 – 57.
19. Singh LH and **Chandra AK (2012)**: Studies on the Effectiveness of Salt Iodization Programme in Valley districts of Manipur, North East India. *Indian J Nutr & Dietet*, 49: 477 – 484.
20. **Chandra AK**, Goswami H, Sengupta P (**2012**): Dietary calcium induced cytological and biochemical changes in thyroid. *Environ. Toxicol. Pharmacol.*, 34:451-465. (Impact factor 1.4).
21. **Chandra AK**, Sengupta P, Goswami H and Sarkar M (**2012**): Excessive dietary calcium in the disruption of structural and functional status of adult male reproductive

- system in rat with possible mechanism. *Cellular and Molecular Biochemistry* 364 (1-2) 181-191(Impact factor 2.168).
22. A Bhattacharjee, **A.K.Chandra**, Tabarak Malik (2012): Goitrogenic Content of Common Vegetables In Sub-Himalayan Tarai Region of Eastern Uttar Pradesh. *International Journal of Medical and Health Sciences* 1 (4) 32- 38.
 23. Singh H and **A.K.Chandra** (2012): Prevalence of Endemic Goiter in School Children of Thoubal District, Manipur. *Journal of North East Foods* 1 (2) 1- 5.
 24. **Chandra AK**, Roy Choudhury S, De N, Sarkar M (2011): Effect of green tea (Camellia sinensis) extract of Indian origin on morphological and functional changes in adult male gonads of albino rats. *Indian Journal of Experimental Biology* 49 (9) 689-697 (Impact factor 1.295).
 25. **Chandra AK**, De N and Roy Choudhury S (2011): Effect of Different doses of Un-Fractionated Green & Black Tea Extracts on Thyroid Physiology. *Human & Experimental Toxicology* 30 (8) 884-896 (Impact factor 1.370) (Citation: 1).
 26. **Chandra AK** (2011): Environment and Thyroid *Al Ameen J Med Sci* 4 (3) 213-214
 27. **Chandra AK**, N De (2010): Goitrogenic/antithyroidal potential of green tea extract in relation to catechin in rats, *Food Chem Toxicol* 48: 2304-2311 (Impact factor 2.114) (Citation: 5).
 28. **Chandra AK**, Ghosh R, Chatterjee A, Sarkar M, (2010): Protection against vanadium-induced testicular toxicity by testosterone propionate in rats, *Toxicol Mech Method* 20(6):306-15. (Impact factor 0.557).
 29. **Chandra A K**, Sinha S and Roy Choudhury S (2010): Thyroxine induced stress and its possible prevention by catechin. *Indian J Exp. Biol* 48: 559-565. (Impact factor 1.295) (Citation: 1).
 30. **Chandra AK**, Chatterjee A, Ghosh R, Sarkar M, (2010): Vitamin E-supplementation protect chromium (VI)-induced spermatogenic and steroidogenic disorders in testicular tissues of rats, *Food Chem Toxicol* 48: 972–979 (Impact factor 2.114) (Citation: 3).
 31. **Chandra AK**, Bhattacharjee A, Malik T, Ghosh S (2009): Etiological Factors for the Persistence of endemic Goiter in selected areas of Siddharthanagar District in eastern Uttar Pradesh, *J of Pediatric Endocrinology & Metabolism*, 22(4): 317 – 325. (Impact factor 0.738) (Citation: 2).
 32. **Chandra A K**, Ghosh D, and Tripathy S (2009): Effect of maize (*Zea mays*) on thyroid status under conditions of varying iodine intake in rats. *J Endocrinol Reprod* 13 (1, 2): 17- 26.
 33. **Chandra AK**, Bhattacharjee A, Malik T, Ghosh S (2008) Goiter prevalence and iodine nutritional status of school children in Sub-Himalayan tarai (flat land) region

of eastern Uttar Pradesh, *Indian Pediatrics*, 45(6):469 – 475 (Impact factor 1.048) (Citation: 8).

34. **Chandra AK**, Singh, HL, Debnath A, Tripathy S, Khanan, J (2008): Dietary supplies of iodine and thiocyanate in the etiology of endemic goitre in Imphal East of Manipur, North East India, *Indian J Med Res*, 128(5):601-605 (Impact factor 1.837), (Citation 4 times).
35. **Chandra A K**, Debnath A, Tripathy S (2008). Iodine nutritional status among school children in selected areas of Howrah district in West Bengal, India. *Journal of Tropical Pediatrics*, 54(1):54-57 (Impact factor 1.224), (Citation 3)
36. **Chandra A K**, Tripathy S, Debnath A, Ghosh D (2007). Bioavailability of iodine and hardness (magnesium and calcium salt) in drinking water in the etiology of endemic goiter in Sunderban delta of West Bengal, *J Environmental Science Engineering*, 49 (2), 139-142
37. **Chandra AK**, Ghosh R, Chatterjee A, Sarkar M, (2007) Effects of Vanadate on Male Rat Reproductive Tract Histology, Oxidative Stress Markers and Androgenic Enzyme Activities. *J Inorg Biochem*, 101(6), 944-956 (Impact factor 3.252), (Citation 11).
38. **Chandra AK**, Ghosh R, Chatterjee A, Sarkar M, (2007) Vanadium -Induced Testicular Toxicity and its Prevention by Oral Supplementation of Zinc sulphate. *Toxicol Mech Method*, 17(4) 175-187 (Impact factor 0.557), (Citation 3)
39. **Chandra AK**, Chatterjee A, Ghosh R, Sarkar M, (2007) Effect of Curcumin on Chromium Induced Oxidative Damage in Male Reproductive System, *Environ Toxicol Phar*, 24 160–166 (Impact factor 1.293), (Citation 2).
40. **Chandra AK**, Ghosh R, Chatterjee A, Sarkar M, (2007). Amelioration of vanadium induced testicular toxicity and adrenocortical hyperactivity by vitamin E acetate in rats. *Mol Cell Biochem*, 306 (1-2), 189-200 (Impact factor 2.16), (Citation 6).
41. **Chandra AK**, Chatterjee A, Ghosh R, Sarkar M, Chaube SK (2007). Chromium Induced Testicular Impairment in Relation to Adrenocortical Activities in Adult Albino Rats. *Reproductive Toxicology*, 24(3-4):388-96 (Impact factor 3.367), (Citation 3).
42. Das AK, Podder G, Nandi A, Chattopadhyay S, Giri M, Pal, AK, Jadav S, Baur M, Mukherjee KL, **Chandra AK** (2006). Studies on certain selective clinical, hematological and biochemical parameters in chronic arsenic exposed population in rural areas of West Bengal. *Ind J Physiol Allied Sci*, 60 (4), 87-107
43. **Chandra AK**, Ghosh D, Mukhopadhyay S and Tripathy S (2006): Effect of cassava (*Manihot esculenta Crantz*) on thyroid status under conditions of varying iodine intake in rats. *African J Traditional Complementary and Alternative Medicines*.3 (3): 87-99.

44. **Chandra AK**, Tripathy S, Ghosh D, Debnath A and Mukhopadhyay S (2006): Goitre Prevalance and the state of iodine nutrition in Sundarban delta of North 24- Parganas in West Bengal, *Asia Pac J Clin Nutr* 15 (3): 357-361.(Impact factor 1.18), (Citation 6).
45. **Chandra AK**, Singh L H, Tripathy S, Debnath A and Khanam J (2006): Iodine nutritional status of school children in selected areas of Imphal West district, Manipur, North East India. *Indian J Pediatrics* .73:795-798 (Impact factor 0.521), (Citation 8).
46. **Chandra AK**, Mukhopadhyay S, Ghosh D and Tripathy S (2006): Effect of radish (*Raphanus sativus* Linn.) on thyroid status under conditions of varying iodine intake in rats. *Indian J Exp. Biol.* 44: 653-661. (Impact factor 1.295), (Citation 8).
47. Mukhopadhyay S, Ghosh D, Chatterjee A, Tripathy S, and **Chandra AK** (2005): Effect of certain selective environmental pollutants on morphological and functional status of thyroid gland. *Indian J Physiol & Allied Sci.*59 (4):87-96.
48. **Chandra A K**, Tripathy S, Ghosh D, Debnath A and Mukhopadhyay S (2005): Iodine nutritional status & Prevalence of goitre in Sundarban delta of South 24-Parganas, West Bengal, *Indian J Med Res.*122 (5): 419-424. (1.837), (Citation 14).
49. **Chandra A K**, Lahari D and Mukhopadhyay S (2005): Goitrogen content of cyanogenic plant foods of Indian origin. *J Food Sc. & Tech* 42 (1): 212-218. (0.318), (Citation 2).
50. Mukhopadhyay S, Ghosh D, Chatterjee A, Tripathy S, Sinha S and **Chandra AK** (2005) Evaluation of possible goitrogenic and anti-thyroidal effect of nitrate, a potential environmental pollutant. *Indian J Physiol & Pharmacol* 49 (3): 1-5. (Citation 2).
51. **Chandra AK** and Ray I (2004): Alteration of iodine requirement in relation to thiocyanate consumption for elimination of iodine deficiency disorders. *IDD News IQ⁺ Jagriti*, II (2), 8-10.
52. **Chandra A K**, Tripathy S, Lahari D and Mukhopadhyay S (2004): Iodine content of drinking water in Gangetic West Bengal. *Indian J Nutr & Dietet* 41:269-272.
53. Mukhopadhyay S, Lahari D, Tripathy S, Jana S and **Chandra A K** (2004): Evaluation of possible goitrogenic and anti thyroid activity of soyabean (*Glycine max*) of Indian origin. *Indian J Physiol & Allied Sciences* 58(1): 1-12.
54. **Chandra A K**, Tripathy S, Lahari D and Mukhopadhyay S (2004): Iodine nutritional status of the school children in a rural area of Howrah District in the Gangetic West Bengal. *Indian J Physiol & Pharmacol* 48 (2): 219-224. (Citation 8).
55. **Chandra A K**, Mukhopadhyay S, Lahari D and Tripathy S (2004): Goitrogenic content of cyanogenic plant foods of Indian origin and their anti-thyroidal activity in vitro. *Indian J Med Res* 119:180-185. (Impact factor 1.837), (Citation 18).

56. **Chandra A K**, Ghosh D, Mukhopadhyay S and Tripathy S (2004): Effect of bamboo shoot, *Bambusa arundinacea* (Retz.) Willd. on thyroid status under conditions of varying iodine intake in rats. *Indian J Exp Biol* 42: 781-86. (Impact factor 1.295), (Citation 9).
57. **Chandra A K**, Tripathy S, Mukhopadhyay S and Lahari D (2003): Studies on endemic goitre and associated iodine deficiency disorders (IDD) in a rural area of the Gangetic West Bengal. *Indian J. Nutr. & Dietet.* 40: 53-58.
58. **Chandra A K**, Ray I and Das TK (2002): Thyroid hormones and TSH profiles of goitrous school children in Tripura, North East India. *Indian J Nutr & Dietet* 39: 362-66.
59. **Chandra A K** and Ray I (2002): Evaluation of the effectiveness of salt iodization status in Tripura, north east India. *Indian J Med Res* 115: 22-27. (Impact factor 1.837), (Citation 12).
60. **Chandra A K** and Ray I (2001): Author's reply to "Indicators for assessment of IDD". *Indian J Pediat* 68: 1168-69. (Impact factor 0.521)
61. **Chandra A K** and Ray I (2001): Influences of age, sex, and caste on goiter prevalence of the people in Tripura, North East India. *J of Human Ecology* 12: 313-17.
62. **Chandra A K** and Ray I (2001): Dietary supplies of iodine and thiocyanate on the etiology of endemic goiter in Tripura. *Indian J Pediat* 68: 399-404. (Impact factor 0.521), (Citation 8).
63. **Chandra A K**, Ray I and Ray P (1999): Iodine intake, iodine excretion and goiter prevalence in North Tripura, North East India. *Indian J Nutr & Dietet* 36: 339-45.
64. **Chandra A K**, Ray I and Ray P (1999): Iodine content in water of Tripura, North East India. *J Food Sc. & Tech*, 36: 558-60. (Impact factor 0.318), (Citation 2 times).
65. **Chandra A K**, Ray I and Ray P (1997): Iodine nutritional status of the school-age children in South Tripura, North East India. *Indian J Physiol & Pharmacol* 41 (3): 263-68. (Citation 5 times).
66. **Chandra A K**, Ray I and Ray P (1997): Studies on the current state of iodine nutrition of the school- age children in West Tripura, North East India. *Indian J Physiol & Allied Sciences* 51(2): 91-101.
67. **Chandra A K** (1994): Epidemiological studies on endemic goiter and associated iodine deficiency disorders in West Tripura. *Indian J Nutr & Dietet*, 31, 110-20.
68. **Chandra A K** and Ghosh M (1993): Epidemiological studies on endemic goiter in Agartala, Tripura. *Indian J Physiol & Allied Sciences* 47(4), 184-90.

- 69. Chandra A K (1993):** Iodine deficiency and community health. *Bulletin of Tripura Chemical Society* 1, 41-42.
- 70. Chandra A K and Ghosh M (1992):** Study on prevalence of goiter and associated iodine deficiency disorders in school children in Agartala. *Indian J Physiol & Allied Sciences* 46(4), 41.
- 71. Chandra A K and Mukherjee A K (1985):** Glucose metabolism in insulin administered euthyroid, hypothyroid and hyperthyroid rats. *Endocrinol Japan* 32(4), 447-53.
- 72. Chandra A K and Mukherjee A K (1985):** Metabolism of glucose fructose and galactose in euthyroid, hypothyroid and hyperthyroid glands. *Indian J Physiol & Allied Sciences* 39(4), 137-47.
- 73. Chandra A K and Mukherjee A K (1981):** Metabolism of glucose fructose and galactose in partially pancreatectomised rats. *The Medicine and Surgery* 21(1), 1-5.

Book Published

1. **Life Science in Modern Perspective** published by UGC Academic Staff College, University of Calcutta, Kolkata; Author Prof. P. Chatterjee & **Dr. Amar K Chandra (2004)**
2. **Sastha-O-Iodine** published by Academic Publishers, Kolkata; Author **Prof Amar K Chandra (2005)**
3. **Chapter Contribution**
 - **Amar K. Chandra (2009): Evaluating the Efficiency of Iodisation Programmes: Impact of iodine prophylaxis on different aspects of human life and society** In: Victor R Preedy, Gerard N. Burrow and Ronald Ross Watson, editor, *Comprehensive Handbook on Iodine*: Oxford: Academic Press, pp 771-778
 - **Amar K. Chandra (2010): Goitrogen in Foods: Cyanogenic and Flavonoid Containing Plant Foods in the Development of Goiter** In: Ronald Ross Watson and Victor R Preedy editor, *Bioactive Foods in Promoting Health: Fruits and Vegetables*: Oxford: Academic Press, pp 691-716
12. **Membership of Learned Societies:**
 - Member, Physiological Society, London
 - International Council for Control of Iodine Deficiency Disorders (ICCIDD), Adelaide, Australia.
 - Association of Physiologists and Pharmacologists in India, New Delhi.
 - Physiological Society of India, Kolkata.
 - Indian Society for the study of Reproduction and Fertility Control, Mumbai.

- Indian Science Congress Association, Kolkata.
- Indian Association of Micro Nutritionists (IAM), New Delhi
- Endocrine Society of India
- Society for Reproductive Biology and Comparative Endocrinology, Chennai.
- Council Member, Federation of the Physiological Society of India (2007 – till date)
- Honorary General Secretary, Physiological Society of India (2010 – 2013)
- President , South Asian Association of Physiologists (2010 – 2013)
- Member, Core Committee for Advancement of Physiological Sciences in India
- Member, ICMR Task Force on Iodine Deficiency Disorders (2012-)
- President, Physiological Society of India (2013-2016)

13. **Patents : NIL**

14. **Invited lectures delivered:**

- **Prof. A K Mukherjee Memorial Oration Lecture** (2004) of Physiological Society of India on ‘Factors other than iodine deficiency in endemic goitre’ at 92nd Indian Science Congress, NIRMA University, Ahmedabad, 2005.
- **Prof. B. B. Sarkar Memorial Oration Lecture (2009) of Physiological Society of India** on ‘*Thyroid Physiology and Indian Plant Foods*’, at “International Conference on Integrative Physiology: Modern Perspective and Platinum Jubilee Celebration of Physiological Society of India, 2009”.
- **Invited Lecture in the meeting of International College of Nutrition**, Calcutta Chapter, Kolkata (A NGO to promote the cause of nutrition among all sections of the mass), on the topic ‘*Is Iodine Supplementation the only way to Control IDD in India*’, December, 19, 2009.
- **UGC Sponsored Expert** in Berhampur Girls’ College, Murshidabad under Kalyani University, delivered lecture on ‘Career Advancement Programme of Physiologic Students’ 11th December, 2010.
- **Sectional President**, Medical Sciences (including Physiology), Indian Science Congress Association, 2010-2011; Presidential Address Delivered on the Topic ‘Thyroid Functions in Iodine Deficiency and Region Specific Environmental Goitrogens – there impact in life and society’, 98th ISCA Abstracts P 4 – 39 pp 316.
- **Guest Lecture** delivered in Balaji Medical College, Chennai, on the topic ‘Iodine Nutrition’ in the Joint Venture of Balaji Medical College and Association of Physiologists of Tamil Nadu, 8th January 2011.

- **UGC Sponsored National Level Seminar on ‘Nutrition & Public Health’** organized by Department of Food & Nutrition and Geography, Women’s College, Kolkata in Collaboration with Vidyasagar University, 1st & 2nd September, 2011.
- **Invited Lecture in the National Conference on Interface of Science and Environment: Emerging Public Health Challenges** entitled ‘**Interaction of environment and thyroid: their impact in public health**’ Scienviron 2011, School of Tropical medicine, All India Institute of Hygiene & Public Health and IISWBM, Kolkata, 24 – 26th November, 2011.
- Invited Lecture in the Seminar on New Frontiers in Reproductive Physiology entitled ‘**Endocrinology in testicular toxicity**’ APPICON 2011, **All India Institute of Medical Sciences, New Delhi, 15th December, 2011.**
- **Invited Lecture in the UGC Sponsored State Level Seminar on ‘Advancement of Biological Sciences Towards Sustainable Development’ in Berhampore Girls’ College in collaboration with WB Bio-Diversity Board, Kolkata,** on the topic ‘*Sustainable Approach in the Prevention of Iodine Deficiency*’, March 29-30, 2012
- **Invited Speaker,** Medical Sciences (including Physiology), 100th Indian Science Congress Association, 2012-2013; on the Topic ‘**Thyroid Autoimmunity in the Current Iodine Environment**’, 100th ISCA Abstracts P 4 – 39 pp 316.
- **Invited Speaker & Chairperson / Mentor in the ICMR sponsored ‘Mentor-Mentee’ National Workshop on the advancement of Physiological Sciences in India’** during 3rd - 5th June, 2013 at Agartala Govt. Medical College, Agartala, Tripura on the topic ‘**Iodine Deficiency Disorders (IDD) particularly in Tripura and Manipur of North East**’
- **Plenary Lecture in the XXVth Annual Conference of the Physiological Society of India at Kamineni Institute of Medical Sciences, Narketpally, Nalgonda, Andhra Pradesh** during 9th – 11th December, 2013 on the topic ‘**Iodine deficiency disorders (IDD) in India in Post-salt Iodization Scenario**’.
- **Plenary Lecture in the 5th Federation of the Indian Physiological Societies (FIPS) at SV University, Tirupati, Andhra Pradesh** during 17th – 19th December, 2013 on the topic ‘**Environmental influences on Thyroid and its impact in Life**’.
- **Invited Lecture in the UGC Sponsored State Level Seminar on ‘Advancement of Biological Sciences Towards Sustainable Development’ in Mahisadal Girls’ College in collaboration with WB Bio-Diversity Board, Kolkata,** on the topic ‘**Is fortification of salt with iodine is rational to prevent iodine deficiency?**’, January 29-30, 2012
- **Invited Speaker,** Medical Sciences (including Physiology), 101th Indian Science Congress Association, 2013-2014; on the Topic ‘**Etiopathogenesis of iodine deficiency disorders (IDD) in India**, 101th ISCA Abstracts P 4 – 39 pp 316.
- **Invited Speaker,** Medical Sciences (including Physiology), and 102nd Indian Science Congress Association, 2014-2015; on the Topic ‘**Excess Iodine on Thyroid and Reproduction**, 102th ISCA Abstracts P 4 – 39 pp 316.

- **Planery Lecture** in the **XXVIth Annual Conference of the Physiological Society of India at Berhampore Girls College, Berhampore, Murshidabad, West Bengal** during 19th – 21st December, 2014 on the topic '**Bamboo shoot – a potent thyroid disruptor in North East India**'.
- **AV Tilak Pravathy Devi Prize** of Association of Physiologists and Pharmacologists of India (APPI) for the year 2014 for the best published article in Endocrinology.
- **Invited Lecture**, 4th SAAP Conference of Physiological Societies & Bangladesh Society of Physiologists (BSP), BSMMU, Dhaka during 5th – 7th December, 2014; on the Topic '**Indiscriminate use of Iodized Salt and its Possible Impact in Health and Disease**'.
- **Invited Lecture**, UGC Sponsored Seminar on 'Knowledge, Attitude and Practice (KAP) on Food Hygiene in Rural Community of West Bengal', Department of Physiology, Nutrition, Botany & Chemistry, Debra Thana Mahavidhyalaya in collaboration with Department of Physiology, Raja NL Khan Women's College, Midnapore during 18-19th September, 2015 on the topic '**Iodine nutrition and public health**'.

15. **Awards :**

AV Tilak Pravathy Devi Prize of APPI for the year 2014 for best paper in Endocrinology.

Prof. AK Mukherjee Memorial Oration Lecture for the year 2004 of **PSI** for outstanding work in Endocrinology.

Prof. B. B. Sarkar Memorial Oration Lecture of **PSI** for the year 2009 for outstanding work in Physiology.

16. **Other notable activities:**

President, The Physiological Society of India, Kolkata (HQ)

General Secretary, Federation of Indian Physiological Societies, New Delhi (HQ)

Secretary General, South Asian Association of Physiologists, Sri Lanka (HQ)



Signature of the faculty member

Date: 25th May, 2016