Raman Chandrasekar, Ph.D.,

Research Associate Dept. Biochem. & Molecular Biophysics 268, Burt Hall, Kansas State University, Manhattan 66506, KS, USA.

Tel: +785-532-6125;

Fax: 785-532-7278

Email: biochandrus@yahoo.com, chandbr@ksu.edu

1540 International Court Apt. I-12, Manhattan 66502, KS. USA.

Mobile: 859-608-7694

Education

Ph.D., (Biotechnology)	BharathidasanUniversity, India.	2007
B.Ed., (Biological Sci.)	Bharathidasan University, India.	2000
M.Sc., (Zoology)	Jamal Mohamed College, India.	1998
B.Sc., (Zoology)	Jamal Mohamed College, India.	1995

Country visited: Sri Lanka, Singapore, Malaysia, South Korea, Japan, Norway, USA

Research Interest: RNAi functional genomics, Molecular Biology, Electron microscopy,

Proteomics & Bioinformatics.

Professional Skills:

- Technical Support and quality data analysis and management.
- Co-guiding for graduate and post graduates students.
- Integrated pest management, development of safer new insecticide technologies and delaying development of target pest resistance to control tactics.
- Molecular Biology: PAGE, 2D gel, RNA & DNA isolation, Northern bolt, Western blot, Northwestern, Immunoprecipitation, PCR, RT-PCR, cDNA synthesis, DNA sequencing, analysis of gene/protein expression, gel shift assay for RNA binding protein, gene targeting and RNAi techniques etc.,
- Biochemical analysis: Eznyme activity, protein purification, immunoblot and immunoprecipitation, ELISA.
- Cell biology: Cell culture, cell transfection and assays, immunoassay, light and electron microscopy, immungold labeling, immunoflourescences as well as digital imging analysis and SEM, ESEM.
- Animal studies: *In vivo* transgenic and knockout mice model studies, animal maintaining and animal surgery and tissue histology, fetal cortical neuron stem cell culture and studies
- Computer Skills: extensive bioinformatics skills using software and web resource such as computer analysis of gene sequence, genome mapping and mining, computer protein structure (3D homology modeling) studies and phylogenic molecular evolution, RNAseq analysis, Photoshop and statistic analysis.

Professional Experience

2012 - Present	Research Associate, Dept. Biochemistry and Molecular Biophysics, Kansas State University, USA.
2010 - 2012	Post Doctoral Fellow, Kansas State University, USA.
2009 - 2010	Post Doctoral Fellow, University of Kentucky, USA.
2008	BK21 Fellow (Senior Researcher), Geyongsang National University, South Korea.
2007	Technical Committee Member, Department of Environmental Biotechnology, BARD, India.
2006	Senior Research Fellow, Department of Environmental Biotechnology, BARD, India.
2005	Camp Co-Oordinator, School of Language Education and International Program, GSNU, Korea.
2004 - 2005	Brain Korean 21st Century Fellow (BK21), Geyongsang National University, South Korea.
2002 - 2003	Junior Research Fellow, Department of Biotech. Bharathidasan University, India.
1998 - 2002	PG Assistance for Biology Teacher, Vinmathee Matriculation Hr.Sec.School, Manapparai, India.

Awards and Scholarships

2015	Served as a Judge for the K-State Graduate Student Council and Graduate School, April 2015
2014	Young Editor- Leadership Award, International Book Mission, Academic Publisher
2010	Served as a Judge on 26th Annual Kentucky American Water Science Fair, March 2010
2009	Young Asian Microscopic Award, Japanese Society of Microscopy 2009, Sendai, Japan.
2008	9th Asia Pacific Microscopy Congress (APMC9) Scholarship Award for Young Scientist, South
	Korea.
2008	Travel Grant Fellow of Asia-Pacific congress on Sericulture and Insect Biotechnology, Japan
2007	Visiting Fellow Award, Stavanger Medical University, Norway.
2007	Travel Grant Fellow of Indo-German Bilateral Seminar at INSA, New Delhi.
2006	Travel Grant Fellow of Indo-European Motivation of Youth in Science, DST, India.
2005 - 2006	Senior Research Fellow award (SRF), Department of Science & Technology, New Delhi, India
2004 - 2005	BK21 Fellow Award, Pre-Doctoral program, Geyongsang National University, South Korea.
2004	Cash Award from Tamilnadu Agri. Department, Ariyalur Dist. for Red Hairy Caterpillar Awareness
	and IPM control program.
2002 - 2004	Junior Research Fellow award (JRF), Department of Science & Technology, New Delhi, India.
1995	NCC "C" Certificate, Ministry of Defense, Government of India.
1990	Best Student Award for Science Exhibition, National Council for Science &
	Technology Communication DST, Tamilnadu State Council for Science & Technology, Madras.

News

http://www.hindu.com/2008/03/19/stories/2008031961880300.htm

http://www.scbk21.co.kr/home/bbs/board.php?bo_table=photo&wr_id=50&page=3

http://tech.gmw.cn/newspaper/2015-03/04/content_104868030.htm

http://www.jsw.com.cn/zjnews/2015-03/04/content_3285065.htm (chinanes language)

http://shengwu.just.edu.cn/view/17/414.html

http://hbd.just.edu.cn/news/times/news1000030531.html (Chinanes language)

KPA news

http://www.vet.k-state.edu/development/lifelines/1502.html

http://www.k-state.edu/today/announcement.php?id=18857&category=events&referredBy=todayRSSFeed

Editor-in-Chief/Associate Editor for upcoming book edition

Short Views on Insect Genomics and Proteomics, Vol. 1 & 2 (Springer, Publisher)

Eds. By R. Chandrasekar, M.Goldsmith and A. Tolulope

New dimensions in molecular approaches to insect proteins and enzymes

Eds. By R.Chandraseakr, M.Sugumaran, K. Murugan (Frontier in Integrative Physiology)

Alcohol and NMDA receptor modulators in Schinzophrenia

Ed. By R.Chandrasekar

(special issue section in NEUROSICENE & BIOMEDICAL ENGINEERING, Bentham Science)

Publications under progress

- ➤ Chandrasekaran, M., Chandrasekarc, R., Tongmin Sab, Sathiyabamaa, M. (2015) Isolation, characterization and molecular 3D structure of Keratinolytic protease (AsK) from phytopathogenic fungi, *Alternaria solani* (Ell. & Mart.) Sor. (MS submitted to PLOS one)
- Murugan, K.., Chandrasekar, R., Pannerselvam, C., Mahesh Kumar, Madhiyazhagan, P., Durga Devi, G., Subramanium, J., Jiang-Shiou, Hwang, Jiang Wei (2015) Nano-Insecticides for the control of human and crop pest. (MS submitted on Dec.2014, *Insect Genomic and Proteomic*, Springer publisher)
- ➤ Mattew Aksamit, Raman Chandrasekar, Feng Cui, Chang-Zhang Sheng, James Balthazor, Neal Dittmer, Gerald Reeck (2015) The Genes, Transcript, Predicted proteins and evolutionary origins of pea aphid Glutathione peroxidase. (MS under progress for Insect Science)
- > Raman Chandrasekar, Srinivasan, P. (2015) Molecular structure, evolution of glucosidase II alpha subunit from mouse. (MS under progress)
- **Raman Chandrasekar**, Srinivasan, P. (2015) Molecular structure, evolution of Annexin-II from mouse. (MS under progress)
- Raman Chandrasekar (2015) Chronic ethanol exposure of fetal cortical neurons increase expression of NR1 and NR2 subunit.
- **Raman Chandrasekar** (2015) New perspective of drug addiction. (Review article)
- ➤ Jeong Hee Lee, Yong Hun Jo, Bharat Bhusan Patnaik, Hamisi Tindwa, Gi Won Seo, Raman Chandrasekar, Yong Seok Lee, and Yeon Soo Han (2015) Cloning, expression analysis, and RNA interference study of a HORMA domain containing autophagy-related gene 13 (ATG13) from the coleopteran beetle, *Tenebrio molitor*. (MS submitted to *Frontiers in Physiology* Ref.No. 2014-0028730-0-PF).
- Nataraj, T., Arockia Lenin, E., Murugan, K., Janathanan, S., Madhiyazhagan, P., Nareshkumar, A., Chandrasekar, R. (2015) DNA barcoding of various developmental stages of Hemimetabolas insect (Dysdercus koenigii) and their mortality against Neem limonoids. (MS submitted to Insect Science, INS-2015-03-098).

Peer Reviewed Journals

2015

- Wei Wang, Huaien Dai, Yi Zhang, Raman Chandrasekar, Lan Luo, Yasuaki Hiromasa, Changzhong Sheng, Gongxin Peng, Shaoliang Chen, John Tomich, John Reese, Owain Edwards, Le Kang, Gerald Reeck and Feng Cui (2015) Armet is an effector protein mediating aphid-plant interactions. FASEB Journal /2014/266023. DOI: 10.1096/fj.14-266023
- 2. Anji, A., Miller, H., Chandrasekar, R., Phillips,M., Ciment, G., and Kumari, M. (2015) Expression of α-subunit of α glucosidase II in adult mouse brain regions and selective organs. *J. Neurosci. Res.* 93(1):82-93. DOI: 10.1002/jnr.23470
- 3. Nataraj, T., Murugan, K., Madhiyazhagan, P., Nareshkumar, A., Subramaniam, J., Mahesh kumar, P., Jiang-Shiou Hwang, **Chandrasekar**, **R**., Sakthivel P., and Sharma, O.P. (2015) Synergistic Effect of NPV, Azadirachtin and Titanium Dioxide (Nanoparticale) on the Larvicidal and Pupicidal Effect of *Helicoverpa armigera*. In: Perspectives in Animal Ecology and Reproduction, Chapter 5, Vol. (10): 73-82, Daya Publishing House® A Division of Astral International Pvt. Ltd. New Delhi 110 002, India. ISBN no. 9789351306627 (International Edition).
- 4. Subramaniam, J., Murugan, K., Kovendan, K., Mahesh Kumar, P., Amerasan, D., Panner Selvam, C., Nataraj, T., Dinesh, D., Chandramohan, B., **Chandrasekar, R.**, Jiang-Shiou Hwang (2015) Evaluation of sustainable and eco-friendly approaches of Indian seaweeds against coastal malarial vector, *Anopheles sundaicus* (Diptera: Culicidae). In: Utilisation and Management of Medicinal Plants Vol. 3, Chapter 18, page 261 286.
- 5. Radha, R., Murugan, K., Madhiyazhagan, P., Nataraj, T., Nareshkumar, A., Jiang-Shiou Hwang, Wei Hui and **Chandrasekar R**. (2015) Insecticidal activity of essential oils and entomopathogenic fungi against cowpea Bruchid, *Callosobruchus maculatus* (f.) (Insecta: Coleoptera:Bruchidae), In: Utilisation and Management of Medicinal Plants Vol. 3, Chapter 19, page 287-302.
- 6. Amerasan, D., Murugan, K., Pannerselvam, C., Kovendan, K., Mahesh Kumar, P., Subramaniam, J., Nataraj, T., Dinesh, D., Chandramohan, B., and **Chandrasekar, R**. (2015) Larvicidal activity of indigenous plant extracts against diamondback moth *Plutella xylostella* (Lepidoptera: Plutellidae). In: Utilisation and Management of Medicinal Plants Vol.3, Chapter 20, page 303-314.

2014

- 7. **Raman Chandrasekar**, Brintha, P.G., Enoch Y.Park, Paolo Pelsoi, Fei Liu, Erjun Ling, Marian Goldsmith, Anthony Ejiofor, Pittendrigh, B.R, Han, Y.S., Fernando G. Noriega, Manickam Sugumaran, Tyagi, B.K., Zhong Zheng Gui, Fang Zhu, B.B.Patnaik, P. Michailova (2014) Introduction to Insect Molecular Biology. *International Book Mission*, First Edition, Chapter 1, Vol.(1): 3-56. Manhattan, KS, USA.
- 8. Short Views on Insect Biochemistry and Molecular Biology, (2014) Edited by Raman Chandrasekar, B.K.Tyagi, Z.Z.Gui and G.Reeck, International Book Mission, First Edition, Vol.(1 & 2), 2014, printed in K-State Union, KSU, Manhattan, USA.

- 9. Patnaik, B.B., **Chandraskear, R.**, Yeon Soo Han. (2014) Molecular expression and structure-function relationship of apolipophorin III in insects with special references to innate immunity. *Short Views on Insect Biochemistry and Molecular Biology*, (Eds.) R.Chandrasekar, B.K.Tyagi, Z.Z.Gui, and G.R.Reeck, International Book Mission, Academic Publisher, Chapter 29, Vol. (2): 663- 684. ISBN No. 978-1-63315-205-2, printed in K-State Union, KSU, Manhattan, USA.
- 10. Poopathi, S., Mani, C.,and **Chandrasekar, R.** (2014) Mosquito control using biological larvicides: Current Scenario. *Short Views on Insect Biochemistry and Molecular Biology*, (Eds.) R. Chandrasekar, B.K.Tyagi, Z.Z.Gui, and G.Reeck, International Book Mission, Academic Publisher, Chapter 26, Vol. (2): 575- 594. ISBN No. 978-1-63315-205-2, printed in K-State Union, KSU, Manhattan, USA.
- 11. Atanu Bhattacharyya, **Chandrasekar, R.**, Asit Kumar Chandra, Timothy T. Epidi and Reddy Shetty Prakasham. (2014) Application of Nanoparticles in sustainable Agriculture: Its Current Status. *Short Views on Insect Biochemistry and Molecular Biology*, (Eds.) R.Chandrasekar, B.K.Tyagi, Z.Z.Gui, and G.Reeck, International Book Mission, Academic Publisher, Chapter 19, Vol. (2): 429- 448. ISBN No. 978-1-63315-205-2, printed in K-State Union, KSU, Manhattan, USA.
- 12. Murugan, K., Chandrasekar, R., Panneerselvam, C., Naresh Kumar, A., Madhiyazhagan, P., Mahesh Kumar, P., Jiang-Shiou Hwang, Jiang Wei. (2014) Green protocol for synthesis of metal nanoparticles to control insect pests. *Short Views on Insect Biochemistry and Molecular Biology*, (Eds.) R.Chandrasekar, B.K.Tyagi, Z.Z.Gui, and G.Reeck, International Book Mission, Academic Publisher, Chapter 21, Vol. (2): 473-496. ISBN No. 978-1-63315-205-2, printed in K-State Union, KSU, Manhattan, USA.
- 13. Maria Luísa Simões and **Chandrasekar**, **R.** (2014) Immune Pathways in *Anopheles gambiae*. *Short Views on Insect Biochemistry and Molecular Biology*, (Eds.) R.Chandrasekar, B.K.Tyagi, Z.Z.Gui, and G.Reeck, International Book Mission, Academic Publisher, Chapter 10, Vol. (1): 253- 270. ISBN No. 978-1-63315-205-2, printed in K-State Union, KSU, Manhattan, USA.
- 14. Habeeb, S.K.M. and **Raman Chandrasekar** (2014) Enotmo-informatics: A prelude to the concepts in Bioinformatics. Short Views on Insect Biochemistry and Molecular Biology, (Eds.) R.Chandrasekar, B.K.Tyagi, Z.Z.Gui, and GR.Reeck, International Book Mission, Academic Publisher, Chapter 28, Vol. (2): 621- 662. ISBN No. 978-1-63315-205-2, printed in K-State Union, KSU, Manhattan, USA.
- 15. Yan-Yuan Bao, **Chandrasekar**, **R**., Chuan-Xi Zhang. (2014) The innate immune network in a hemimetabolous insect, the brown planthopper, *Nilaparvata lugens. Short Views on Insect Biochemistry and Molecular Biology*, (Eds.) R.Chandrasekar, B.K.Tyagi, Z.Z.Gui, and G.Reeck, International Book Mission, Academic Publisher, Chapter 9, Vol. (1): 233- 252. ISBN No. 978-1-63315-205-2, printed in K-State Union, KSU, Manhattan, USA.
- 16. Zhentao Sheng, **Chandrasekar**, **R**. (2014) The regulatory juvenile hormone biosynthetic pathway. *Short Views on Insect Biochemistry and Molecular Biology*, (Eds.) R.Chandrasekar, B.K.Tyagi, Z.Z.Gui, and G.Reeck, International Book Mission, Academic Publisher, Chapter 8, Vol. (1): 217- 230. ISBN No. 978-1-63315-205-2, Printed in the USA.
- 17. Tyagi, B.K., Dhanenjeyan, K., and **Chandrasekar, R.** (2014) Molecular taxonomy based on DNA extracted from mosquito exuvium. *Short Views on Insect Biochemistry and Molecular Biology*, (Eds.) R.Chandrasekar, B.K.Tyagi, Z.Z.Gui, and G.Reeck, International Book Mission, Academic Publisher, Chapter 15, Vol. (1): 355- 361. ISBN No. 978-1-63315-205-2, printed in K-State Union, KSU, Manhattan, USA.
- 18. Somasundaram,,P., **Chandraseakr, R.,** Ashok Kumar, K., and Manjula, A.(2014) Key biochemical markers in silkworms challenged with immuno elicitors and their association in genetic resistance for survival. *Short Views on Insect Biochemistry and Molecular Biology*, (Eds.) R.Chandrasekar, B.K.Tyagi,

- Z.Z.Gui, and G.Reeck, International Book Mission, Academic Publisher, Chapter 11, Vol. (1): 271-289. ISBN No. 978-1-63315-205-2, printed in K-State Union, KSU, Manhattan, USA.
- 19. Murugan, K., James Pichai, G., Madhiyazhagan, P., Nataraj, T., Nareshkumar, A., Jiang-Shiou Hwang, **Chandrasekar, R.**, Nicoletti, M, Amsath, A., Bhagooli, R. (2014) Larvicidal, repellent and smoke toxicity effect of neem products against malarial vector, *Anopheles stephensi*. *International Journal of Pure and Zoology*, Vol.2 (2): 71-83.
- 20. Aarthi, N., JamesPitchai, G., Murugan, K., Madhiyazhagan, P., Nataraj, T., Nareshkumar, A., Kalimuthu, K., Wang, J.S., Barnard, D.R., Hui Wei, **Chandrasekar, R.**, Amsath A. (2014) Studies on the effect of *Sida acuta* and *Vetiveria zizanioides* against the malarial vector, *Anopheles stephensi* and malarial parasite, *Plasmodium berghei. International Journal of Pure and Applied Zoology*, Vol.2 (1): 51-60.
- 21. Lu Guo, Minglin Lang, **Raman Chandrasekar** and Guiru Liu (2014) Advances in the Study of Genetic Enrichment of Selenium in Plants. *Cloning & Transgenesis*, 3(1): 1000121. OMIC Publishing Group.

2013

- 22. Ashok Kumar, K.., Somasundaram, P., Rajesh, G.K., **Chandrasekar**, **R**., Balachandran , N., and Sivaprasad, V. (2013) Protein markers as a potential tool for biochemical characterization of silkworm genetic resources. http://silkwormmori.blogspot.com/ Thursday, 26 September 2013.
- 23. Chandrasekaran M, **Chandrasekar R**, Tong-Min Sa, and Sathiyabama M. (2013) Serine protease (AsP) identification and three dimensional molecular structure predictions from a phytopathogenic fungus *Alternaria solani* (Ell. and Mart.) Sorauer. *J. Basic Microbiology* 53: 1-9.
- Chandrasekar, R, Murugan, K., and Atanu Bhatacharyya, (2013) Specific biomarker for sexing pupae in groundnut pest, *Amsacta albistriga* (Lepidoptera: Arctiidea). *Asian J. Agricultural and Biology* 1(3): 118-126.
- 25. Chandrasekar R, Brintha PG, Ming Lang, Chandrasekaran M, Murugan K. (2013) Three-dimensional molecular structure prediction of selenocysenin methyltransferase (BoSMT) from *Brassica oleracea*. Brassicaceae: Characterization, Functional Genomics and Health Benefits, Ed. by Ming Lang, (ISBN: 978-1-62808-856-4), NOVA Science Publisher Inc., New York, USA. p.149-169.
- Chandrasekar R. (2013). NMDA Receptors and Alcohol: Current approach and future direction. Frontier Molecular Neurobiology. DOI: 10.3389/fnmol.2013.00014.

2012

- Chandrasekar Raman (2012). Electron microscopy and immunogold labelling analysis of smart nanoparticles in insects. Current microscopy contributions to advances in science and technology, Vol.(1): 168-178.
- 28. Jingjing Xu, **Chandrasekar**, **R**., Anjiang Tan, Subba Reddy Palli. (2012) The function of nuclear receptors in Male contribution to egg production in the red flour beetle, *Tribolium castaneum*. *Journal of Insect Physiology*, 58:710-717.

2011

29. **Chandrasekar, R.,** Palli, S.R. (**2011**). Reproductive Biology of *Tribolium castaneum. Entomology: Ecology and Biodiversity*, (Eds.) By Tyagi B.K. and Vijay Veer, Scientific Publisher, India (Book Chapter)

30. **Chandrasekar, R.**, Vijay Ananad, A., Brintha, P.G., Tyagi, B.K. (2011). Impact of *Enterobacter sp.* Infection in phenotypic changes and hemolymph protein profiling in silkworm, *Bombyx mori*, L. *Entomology: Ecology and Biodiversity*, Ed. By Tyagi B.K. and Vijay Veer, Scientific Publisher, India. (Research Article)

2009

- 31. Sumithra P., **Raman Chandrasekar** and Krishnan M. (2009). Autophagic programmed cell death in the peripheral fat body tissues of the silkworm, *Bombyx mori* L. *Short Views on Insect Molecular Biology*, edited by R.Chandrasekar, International Book Mission, South India. Vol.(1), Chapter 9: 159 174. (Book Chapter)
- 32. **Raman Chandrasekar** (2009). Perspective of Molecular Approaches to Entomology, *Short Views on Insect Molecular Biology*, edited by R.Chandrasekar, International Book Mission, South India. Vol.(1), Chapter 1: 1 20. (Book Chapter)
- 33. **Raman Chandrasekar**, Muthu Meenakshi and Luiz Paulo MA. (2009). Insect Hexamerin Storage Proteins: Biosynthesis, Utilization and Evolution. *Short Views on Insect Molecular Biology*, edited by R.Chandrasekar, International Book Mission, South India. Chapter -3: 49 20. (Book Chapter)
- 34. **Raman Chandrasekar** (2009). *Short Views on Insect Molecular Biology*, Edited by Raman Chandraskear, *International Book Mission*, South India. Vol.(1), Apirl 2009. (Book)

2008

- 35. Vijaya Anand A, Kalavathy S, Chenniappan M, Sampth Kumar P, Manoharan N, Sheik Abdulla S, Chandrasekar R, and Hari Krishnan B (2008). Pragmatic aspect of C-reactive protein alone and in combination with Lipid Profile in patients with Coronary Artery Disease. *J. Medical Science*, 8 (8): 743-746.
- 36. **Chandrasekar R,** Seo SJ, Park EY, Harikrishnan R, (2008) An Electron Microscope Study of the Fat Body Tissues of the Red Hairy Caterpillar, *Amsacta albistriga*. *Korean J. Microscopy*, 38 (4), 1070.
- 37. **Chandrasekar R**, Seo SJ, and Krishnan M. (2008) Expression and Localization of storage protein-1 (SP1) in differentiated fat body of red hairy caterpillar, *Amsacta albistriga*. *Archive*. *Insect Biochem*. *Physiol.*, 69 (2): 70-84.
- 38. **Chandrasekar R** Sumithira P, Seo SJ and Krishnan M. (2008) Sequestration of storage protein 1 (SP1) in differentiated fat body tissues of the female groundnut pest *Amsacta albistriga* (Lepidoptera: Arctiidae). *Inter. Journal .of Tropical Insect Science* 28 (2), 78-87. (Cambridge University Press).
- 39. **Chandraskar R,** and Krishnan M. (2008). Hexameric storage proteins in groundnut pest, *Amsacta albistriga* Walker. *Proc. of Asia-Pacific Congress of Sericulture and Insect Biotechnology* (APSERI-2008), Japan. CR04, pp.24-25.

2007

- 40. **Chandrasekar R**, Suganthi LM, Nirmala X, Krishnan M. (2007) Expression of silk gene with respect to the supplementation of hydrolyzed soy bean protein (P-Soyatose) in the fifth instar male larvae of *Bombyx mori. J. Cell and Molecular Biology* Vol.6 (2) 163-174.
- 41. Meenakshi PM, **Chandrasekar R** and Krishnan M. (2007) Molecular Characterization of the Vitellogenin and Vitellogenin Receptor in the Cotton Pest, *Spodoptera litura Dimensions of Molecular Entomology*, *Universities press*, Chapter 9: 122-137. (Book Chapter)

- 42. **Chandrasekar R**, Dhanalakshmi R, Krishnan M, Kim HJ and Sook Jae Seo (2005) Computational analysis of apolipohorin-III in *Hyphantria cunea*. *Inter. J. Indus. Economic Entomol.*10: 25-33.
- 43. Saravanan TS, Aneez Mohamed M and **Chandrasekar R**, Sundrasmoorthy M. (2003) Fresh water fishes as indicators of Kaveri river pollution, *Journal of Environmental Biology*, 3: 29-34.
- 44. Saravanan TS. **Chandrasekar R** and Aneez Mohamed M. (2003) Endosulfan induced changes in the liver and ovary of the freshwater fishes, *Oreochromis mossambicus* (Trewaves), *Malaysian Journal of Science*, 22: 29-34.
- 45. Ravikumar G, Balasubramaniam U, **Chandrasekar R** and Krishnan M. (2002). Effect of casitose [P & PH] supplementation on the nutritional indices of the silkworm *Bombyx mori L.* XIX *Congress of the International Seri cultural Commission Proceedings*, 345 351.
- 46. **Chandrasekar R,** Shahul Hameed P and Amanullah M. (2001) Comparative Studies on the Benthic animal composition of lotic (River Cauvery) and a lentic (Muttarasanallur Pond) water bodies in Tiruchirappalli, India, *Journal of Eco. Res. Biocon.* 2: 1-8.

Laboratory/Workshop Manual Book

Raman Chandrasekar (2015) Bioinfomratics Workshop – 2015, workshop manual, College Eng., Kansas State University, Organized by Kansas State University Postdoctoral Association, KSU, Manhattan 66506, KS, USA. Page no. 1-50, April 3rd 2015, K-State Printing and Copy Center, K-State Union, USA.

Krishnan M, **Chandrasekar R** and Natarajaseenivasan K. (2007) *Laboratory Manual of Recombinant DNA Technology and DNA Fingerprinting analysis*, Dept. of Environmental Biotech & Biomedical Diagnostic Laboratory, Bharathidasan University, Tiruchirappalli, Sponsored by Dept. of Biotechnology (DBT), Ministry of Science and Technology, New Delhi. Page no. 1-50, Feb 12th 2007, Starsri printers Trichy, South India.

Chandrasekar, R., Krishnan, M. and Vivekanandan, M. (2002). *Indo-UK Practical Course Book of Molecular Biology*, Dept. of Biotechnology, Bharathidasan University. Nachiyar Printer, Tiruchirappalli, India.

Professional Activities and Editorial Boards/Reviewers

Journal of Carcionogesis	Aprl.2015
Database: The Journal of Biological Databases and Curation (UK)	Oct.2014
BMC Genome	Nov.2014
Alcoholism: Clinical and Experimental Research (External Reviewer)	Jan. 2014
Neurotransmitter (Smart Science & Technology, USA)	June 2014
Frontiers in Integrative Physiology (Associate Editor)	Nov.2013
Frontier in Cell and Developmental Biology	Oct 2013
Advances in Genomics and Genetics (Dove Medical Press)	Nov.2013
Neuroscience and Neuroeconomics (Dove Medical Press)	Nov.2013
Open Access Bioinformatics (Dove Medical Press)	Nov.2013
Research and Reports in Biochemistry (Dove Medical Press)	Nov.2013
Asian Journal of Agricultural and Biology, Pakistan	April 2012
Journal of Infertility and Reproductive Biology, Iran	April 2013
Clinical Reviews and Opinions	Jan2011

Journal of Biotechnology and Biomaterials	May 2012
Advances in Life Sciences (http://journal.sapub.org/ALS)	June 2012
International Journal of Agriculture and Forestry	June 2012
American Journal of Bioinformatics Research	June 2012
American Society of Entomology	Jan 2010
Kentucky American Water	Jan 2010
Biotechnology and Bioprocess Engineering	Oct 2008
Japanese Society of Microscopy	Nov.2008
Applied Microbiology and Biotechnology	Sept 2008
International Journal Medicine and Medical Sciences	Jan.2008
Journal Environmental Chemistry and Eco-toxicology	Jan.2008
Biotechnology Research Society, Regional Research Laboratory, Kerala.	Oct.2007
Japanese Society of Applied Entomology and Zoology, Japan	Aug.2007
Korean Society of Sericulture, South Korea	March 2003

Organized National /International workshop/ Conference/ Resource person

One day "Bioinformatics Lecture-cum-3D protein model workshop" at Fiedler Auditorium, College of Engineering, Kansas State University, April 3rd 2015, sponsored by K-State Postdoctoral Association, KSU, USA and MOSE Center for BioMolecular Modeling, USA.

One day grant writing-workshop for "**Funding Opportunities: The Art of Grantsmanship**" by Mary Lou Marino, Director of the Office of Research and Sponsored Projects at Kansas State University, held at Mara Conference Center, College of Veterinary Medicine, Kansas State University, Feb.6th **2015**, sponsored by K-State Postdoctoral Association, KSU, USA.

Two days **workshop on Nano-biotechnology and Nanodevice,** Center for Nanotechnology and Advance Biomaterial, SASTRA University, Thanjavur, from 23-24th Feb.2009.

International Workshop on Molecular Microbial Pathology, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, from 12-18th March 2008, Sponsored by DST and CSIR, New Delhi.

Recombinant DNA Technology and DNA Fingerprinting analysis, Dept. of Environmental Biotech & Biomedical Diagnostic Laboratory, Bharathidasan University, Tiruchirappalli, from Feb.12-26th **2007**, Sponsored by Dept. of Biotechnology (DBT), Government of India, New Delhi.

Summer School on Immuno-Techniques, Biomedical Diagnostic Laboratory, Business Development Centre (BARD-BDU). Bharathidasan University, Tiruchirappalli, June $9-17^{th}$ **2006**.

Training workshop on Molecular Biological Techniques, Biomedical Diagnostic Laboratory, Business Development Centre (BARD-BDC), Bharathidasan University, Tiruchirappalli, from May 10th -31st 2006.

Two Days **National Seminar on Environmental Genomics**, Department of Eco-Biotechnology, Bharathidasan University, Tiruchirappalli, from March 18-19, **2006**.

One day **National Seminar on AIDS-TB Pandemic global perspectives**, Department of Biotechnology, Bharathidasan University, Tiruchirappalli, on February 28th 2006. University Grant Commission (UGC), New Delhi.

Demonstrated in ten days **INO-UK Workshop on Molecular Biology** conducted by Dept. of Biotechnology, Bharathidasan University during Feb. 4–14th, 2002, Tiruchirappalli, India.

National Seminar on Current Developments in Human Genome Project, Department of Biotechnology, Bharathidasan University, Tiruchirappalli from March 9-11th 2001. Dept. Biotechnology (DBT), New Delhi.

Professional experience

Period From - To	Post held with Scale of pay and	Name of the Institution / College / University	Nature of Duties
	Present salary		
2012- till date	Research Associate	Department of Biochemistry &	a) RNAseq
		Biotechnology Core Facility	b) Transcriptomics
		Kansas State University	c) RNAi approach
		Manhattan, KS, USA	d) co-guiding graduate
			students
July 2010 –	Post-Doctoral Fellow	Anatomy and Physiology,	Molecular Neurobiology
2012		College of Veterinary Medicine	and Proteomics
		Kansas State University	
		Manhattan, KS, USA.	
21st April 2009	Post-Doctoral Fellow	Agriculture Science Centre,	Functional Genomics
- June 2010		University of Kentucky, Kentucky, USA.	and RNAi approach
Oct.2008	BK21 Fellow	Division of Applied Life Science	i) Research
Dec.2008	Senior Researcher	Geyongsang National University	ii) Assist. Teaching
		Jinju, South Korea	Faculty
Feb.12-26,	Technical committee	Biomedical Diagnostic Laboratory &	Resource person for
2007	Member	Dept.Environmental Biotech., BARD	Mol.Bio. Techniques
Jan. 2006 –	Senior Research	Department of Environmental	Research & Teaching for
Dec.2006	Fellow	Biotechnology, BARD	PG students
Jan.3-29, 2005	Camp	School of Language Education and	Prepare camp program
	Co-Coordinator	International Program, Geyongsang	schedule, course material,
		National University, Jinju, South	safety, to asset foreign
		Korea.	teacher
Dec.2003-2005	Brain Korean 21st	Division of Applied Life Science,	Research
	Century Fellow	Geyongsang National University, Jinju,	
	(BK21) Pre-doctoral	South Korea.	
July 7,2002-	Junior Research	Department of Biotechnology, BARD	Research & handling
Dec.2003	Fellow		practical for PG students
June 1998 –	PG Asst for Biology	Vinmathee Matriculation	Teaching
July 2002	Teacher	Hr.Sec.School, Manapparai	