Dr.A. Balasubramani

Assistant Professor, Department of Zoology

Directorate of Distance Education, Madurai Kamaraj University

Madurai – 625021Tamil Nadu

Email: baluzoology@mkuniversity.org/ac.in (off)

balumku@gmail.com (personal)

Phone: 04522458471 (Off); 9442448966 (Mobile)

MKU web page link of the faculty Scopus link if available Vidwan link if available



1. Personal Details

Date of Birth & Age : 05.07.1962 Gender & Marital Status : Male & Married Community : Hindu – Isai Vellalar

Nationality : Indian Place of Birth : Madurai

2. Educational Qualifications

2.1. Academic

Degree/	Name of the	University/	Year of	Percentage/	Main
Examination	Exam	Institute	Passing	Grade	Subject
Under	BSc Degree	MKU/Madura	1984	70%	Zoology
Graduate		College			Chemistry
Post Graduate	MSc Degree	Annamalai	1990	59.5%	Zoology
		University			

^{*}Add additional rows for other academic degrees obtained / remove if not necessary

2.2. Research

Degree	Name of the	Title of the Thesis	Date of	Date of
	University		Submission	Award
PhD	Madurai	Endocrine and Genetic studies	29.12.2006	14.11.2007
	Kamaraj	in selected ornamental fish		
	University			

3. Post-Doctoral/ Research Associate / Industrial Experience - Nil

Name of the University / Institute / Industry	Period of Work	Nature of Work

4. Professional Experience

No	Name of the University /	Position Held	From	To (Date)
	Institution		(Date)	
	School of Biological	Technician/Administrative	15.11.1984	13.01.1992
	Sciences, Madurai Kamaraj	Officer		
	University			
	School of Chemistry,	Technician (PG)/Technical	13.01.1992	03.12.2013
	Madurai Kamaraj	Officer (PG) Special Grade		
	University			
	Thiagarajar College,	Assistant Professor in	11.09.2008	20.04.2010
	Madurai	Zoology (on lien from		
		MKU)		

5. Teaching (List all the courses taught (semester-wise) – MPhil, PG and UG)

No	Year	Semester	Course	Course Title	Hours per Week
			Code		
1	2022-23	I		MSc zoology – Animal Physiology, Aquaculture	4 h per round of contact seminar
				BSc and MSc zoology practical training and exams	30 hours per sem

^{*}Add additional rows

6. Design/Development of New Curricula and Courses

No	Description	Organization for which it was Developed	Level(PG/UG)
	B.Sc., Zoology	DDE, MKU	UG
	M.Sc., Zoology	DDE, MKU	PG
	M.Sc., Zoology	Yadava College for men, Madurai	PG

7. Creation of ICT Mediated Teaching-Learning Pedagogy - Nil

7.1. SWAYAM / MOOCs

No	Description	Organization for which it was Developed	Level(PG/UG)

7.2. E-Contents

No	Description	Organization for which it	Level(PG/UG)	
		was Developed		

7.3. Development of other ICT Mediated Teaching-Learning Pedagogy

No	Description	Organization for which it was Developed	Level(PG/UG)
	M.Sc., Zoology – Physiology course, PPT presentation for class	DDE, MKU	PG

8. Research Specialization / Field of Research

- > Reproductive biology of fish
- > Toxicology of EDCs in fish

9. Research Publications

Type	International	National
Papers Published in UGC-		Endosulfan suppresses
CARE Listed Journals		growth and reproduction in
		zebrafish, Balasubramani ,
		A. & Pandian, T.J.,
		Curr.Sci . 2008, 94: 883-890
	Effect of Tributyltin Chloride	
	on Survival, Growth and	
	Reproduction in Zebra Fish	
	Danio rerio.,	
	Balasubramani, A &	
	Pandian, T.J.,	
	J.Aquaculture 21: 146-156.	
		Norethindrone ensures
		masculinization, normal
		growth and secondary sexual
		characteristics in the fighting
		fish, Betta splendens,
		Balasubramani, A. &
		Pandian, T.J., Curr. Sci.
		2008, 95: 1446-1453.
	Effect of norethindrone	
	acetate on masculinization,	
	growth and reproduction in	
	zebrafish Danio rerio,	
	Balasubramani, A., Asian	
	Fisheries Science, 2010,	
	23:1256-1271.	
	Effect of commercial grade	
	endosulfan on growth and	
	reproduction in the fighting	
	fish Betta splendens,	
	Balasubramani, A. &	

Pandian, T.J., Environ	
Toxicol., 2014, 29:1054-	
1062.	
MnO 2 nanorods grown NGNF	
nanocomposites for the	
application of highly sensitive	
and selective electrochemical	
detection of hydrogen peroxide,	
K Ramachandran, A Zahoor,	
TR Kumar, KS Nahm, A	
Balasubramani, G	
Gnanakumar, J Ind Eng	
Chem. , 2017, 46:19-27.	
The Sensitive and Selective	
Enzyme free electrochemical	
H ₂ O ₂ Sensor based on	
rGO/MnFe ₂ O ₄ , 2017, K	
Ramachandran, A Zahoor, TR	
Kumar, KS Nahm, A	
Balasubramani, G Gnana-	
kumar, Electrocatalysis, DOI	
10.1007/s12678-017-0418-2	
Waste paper derived three-	
dimensional carbon aerogel	
integrated with	
ceria/nitrogen-doped reduced	
graphene oxide as	
freestanding anode for high	
performance and durable	
microbial fuel cells,	
Senthilkumar N, Aziz MA,	
Pannipara M, Alphonsa AT, Al-	
Sehemi AG, Balasubramani	
A, Gnanakumar G.,	
1 -	
1	
2019 DOI: 10.1007/S00449-	
019-02208-4	
Surfactant and binder free	
hierarchical NCNPs @CuO	
nanostructures on ITO for the	
cost effective enzyme free	
glucose sensor applications,	
Vasuki K, Siva G,	
Balasubramani A, Pannipara	
M, Al-Sehemi AG, Xia Y, Fang	
R, Yoo DJ, Kumar TR,	
Ramachandran R, Gnanakumar,	
G., Applied Physics A, 2019,	
125:384	
https://doi.org/10.1007/s00339-	
019-2652-3	

	I		
	Waste paper derived three-		
	dimensional carbon aerogel		
	integrated with ceria/nitrogen-		
	doped reduced graphene oxide		
	as freestanding anode for high		
	performance and		
	durable, Senthilkumar N,		
	Aziz MA, Pannipara M,		
	Alphonsa AT, Al-Sehemi AG,		
	Balasubramani A, Gnana		
	kumar G., Bioprocess and		
	Biosystems Engineering, 2020,		
	43 (1), 97-109		
	Acute and Chronic Toxicity of		
	Endocrine Disruptive Heavy		
	Metals and Pesticides Exposed		
	to freshwater fish P. reticulata		
	and P. spenops, Vidya		
	Varghese, N. Nagarani, A.		
	Balasubramani, Curr. World		
	Environ. , 2021, 427-435.		
Editor of Conference/Seminar	Laboratory Manual: Marine Ecotoxicology; Short-Term		
Proceedings	Hands on Training in Recent Advances in Marine		
	Ecotoxicological Testing, (RAMETOX-2015); 2017		
	Ed., Ramakritinan, C.M., A.K. Kumaraguru, B.R.		
	Subaramanian, D. Mohan, A. Balasubramani and		
	T. Muneeswaran		
Study materials prepared for	DDE Self Learning Materials for B.Sc., Zoology programme		
DDE students	PAPER - Developmental Biology and Molecular Biology		
	DDE Self Learning Materials for B.Sc., Zoology programme		
	PAPER – Cell Biology and Genetics		
	DDE Self Learning Materials for B.Sc., Zoology programme		
	PAPER - Biochemistry and Physiology		
	January Managy		
	DDE Self Learning Materials for B.Sc., Zoology		
	programme PAPER - Ecology and Evolution		
	programme FAFER - Ecology and Evolution		
	DDE Self Learning Materials for B.Sc., Zoology		
	programme PAPER - Biotechnology		
	DDE Self Learning Materials for B.Sc., Zoology		
	programme Practical II		
	DDE Self Learning Materials for B.Sc., Zoology		
	programme Practical III		
	DDE Self Learning Materials for B.Sc., Zoology		
	programme Practical IV		
	DDE Self Learning Materials for M.Sc., Zoology		
	9		
Í	programme PAPER – Fisheries and Aquaculture		

Danara Presented in	Effect of endosulfan on chosen ornamental fishes,
Papers Presented in	
Conferences/Seminars	Balasubramani, A. and Pandian, T.J., National Conference
	on Environment Science and Technology,Bharathidasan
	University, Tiruchirapalli,
	28 & 29.11.2008
	"Effect of Anthracene on Oxidative Stress in Zebrafish",
	Vidya Varghese, Nagarani, N. and Balasubramani , A.,
	National Conference on Innovations in Modern Biology
	& 48 th Aqua-Terr Annual Conference, 27 & 28.2.2017
Conference/Seminar/Workshop	Effects of heavy metal exposure to freshwater fish <i>Poecilia</i>
Attended	sphenops and Poecilia reticulata, Vidya Varghese,
	Balasubramani, A. and Nagarani, N., DST-SERB
	Sponsored International Conference on 'Emerging
	Contaminants in water and Environment', PSG institute of
	Advanced Studies, Coimbatore, 22 & 23.01.2019.
	Endocrine Disruptor Tributyltin (TBT) induces Obesity, C.
	Justin David and A. Balasubramani , International
	,
	Conference on Current Scenario of Physiology and
	Behaviour, Departmen of Zoology, Periyar University,
	Salem, 22 & 23.02.2019
	Transplantation of Obese Fish Gut Microbiome Accelerates
	Obesity in Zebrafish, <i>Danio rerio</i> , C. Justin David and A.
	Balasubramani, International Conference on Obesity,
	Diabetes and Cardiology, School of Biological Sciences,
	Madurai Kamaraj University, Madurai, 25 & 26.02.2020
	Expression of selected clock genes in Obese Zebrafish,
	Danio rerio, C. Justin David and A. Balasubramani,
	International Conference on Obesity, Diabetes and
	Cardiology, School of Biological Sciences, Madurai
	Kamaraj University, Madurai, 25 & 26.02.2020
	Molecular Identification Of Porites Spp. Associated
	Endosymbionts In Mandapam Coast, Palk Bay, India,
	Rajesh Kannan, M., N. Muthurakku (A) Sudha, T.
	Muneeswaran, B. Ramkumar, N. Sivakumar,
	P.Gunasekaran, A. Balasubramani, and
	C.M.Ramakritinan, National Conference on 'Environmental
	Sustain-ability, Health and Pollution Abatement
	• •
	(NCESHPA-2020) Wakf Board College, Madurai, 02-03-2020
	Preliminary Study On The Evaluation of Luminescent
	Bacteria Vibrio Campelli As a Biosensor for Toxicity
	Screening, Muneeswaran, T., N. Muthurakku (A) Sudha, T.
	Vennila, M. Rajesh Kannan, A. Balasubramani,
	C.M.Ramakritinan and Franck Quero, National Conference
	on 'Environmental Sustainability, Health and Pollution
	Abatement (NCESHPA-2020), Wakf Board College,
	Madurai, 02-03-2020
	Acute Toxic Effect of Atrazine and Malathion on Marine
	Bivalve Mollusc, <i>Donax Faba</i> , Ramakritinan, C.M., P.
	Sathiya Priya, A. Balasubramani and T. Muneeswaran,
	J = 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1

FEST'19, School of Energy, Environ-ment and Natural Resources, Madurai Kamaraj University, 05-04-2019

10. Citation Metrics

Cumulative Impact Factor (Recent Annual JCR)	
Total Citations (Scopus/Web of Science)	157
h-Index (Scopus/Web of Science)	6
g-Index (Scopus/Web of Science)	
i10 Index (Scopus/Web of Science)	6

11. Details of Patents - Nil

12. Research Guidance/Supervision

Degree / Programme	Completed	Submitted	Ongoing
PhD (Full-time)			
PhD (Part-time)		One	One
MPhil Research Project (Full-time)	Two		
MPhil Research Project (Part-time)	Two		
MSc Projects/Dissertation	One		
MSc Internships/Summer or Winter Projects			

13. Funded Research Projects NIL

13.1. Ongoing

No	Title of the Project	Funding Agency	Period / Duration	Total Grants Sanctioned (Rs)

13.2 Completed

No	Title of the Project	Funding Agency	Duration and Month &Year of Completion	Total Grants Received (Rs)	No of Papers out of Project

14. Reviewer in Journals (List of Journals and Total No of Articles Reviewed)

Name of the Journal	Publisher	No of Papers Reviewed
Numerous in the field of Toxicology	Springer, Elsevier and others	

15. Research Collaborations NIL

Name of the Collaborator	Institute	Collaboration Details

16. Countries Visited

Name of the Country	Period	Purpose
Thailand	15.02.2016 to	Toxicological Research
	26.02.2016	workshop and Training

17. Honours / Awards / Recognitions

Name of the Honours / Awards / Recognition	Awarding Agency	International / National / State / Institute Level
International sponsored (Travel and	International	International
accommodation) to the Chulabhorn	Development	15.02.2016 to
Research Institute, Bangkok,	Cooperation Agency,	26.02.2016
Thailand	Thailand	

18. Conferences / Seminars / Workshops Organized

Level	Conference Title	Date(s)	Place	Role Played	Funding
National	Recent Trends in	09.08.2017	Department	Organizing	MKU-DDE
Seminar	Ecotoxicological		of Zoology,	Secretary	
	Research		DDE,		
			Madurai		
			Kamaraj		
			University		

19. Invited Lectures / Resource Person: NIL

No	Institute /	Name of the Conference /	International / National	Date(s)
	Organizer	Seminar / Workshop	/ State / Institute Level	

20. Professional Development Programs / Faculty Development Programs Organized - NIL

Name of the Program	Role	Place	Date(s)	Funds in Rs &Sponsor

21. Professional Development Programs / Faculty Development Programs Attended

Name of the Program	Place	Date(s)	Sponsor
Orientation Programme	Academic Staff	18.05.2009 to	UGC
	College, MKU,	04.06.2009,	
	Madurai –	28 days	
Refresher Course in	MHRDC, MKU,	27-11-2015 to	UGC
Biological Sciences	Madurai	17.12.2015,	
		21 days	
Refresher Course in	MHRDC, MKU,	02.11. 2016 to	UGC
Biological Sciences	Madurai -	22-11-2016,	
		21 days	

22. Administrative Experiences

Role Played	Responsibilities	Period (from to)
Special Invitee	Board of Studies – Dept. of Zoology,	2008-2010
	Thiagarajar College, Madurai	
Grievance Officer,	Attended the grievances of the	01.06.2013 - 31.03.2014
DDE, MKU	students related to DDE and	
	Examinations.	
Additional Public	Attended to the RTI queries related	01.10.2013 - 30.06.2014
Information Officer,	to DDE.	
DDE, MKU		
SC/ST Cell-in-	Attended to the Scholarship disbursal	01.10.2013 - 30.06.2014
Charge, DDE, MKU	of DDE students and released	
	cheques to the tune of 12 lakh.	
Special Camp	Central Evaluation Board of DDE,	Nov., 2013 - Dec.2013
Officer	MKU	
Course Co-Ordinator	for UG/PG/Diploma courses in	3.12.2013 to till date
	Zoology, DDE, MKU	
Nodal Officer	Evaluation Board of UG/PG/PG	3.12.2013 to till date
	Diploma & Diploma/Certificate	
	Courses /	
Chief Superintendent	MKU-DDE Exams evaluation Board	Oct Nov., 2015
Assisted the Addl.	Evaluation Board of UG/PG/PG	Aug Sep., 2014
Controller of Exams,	Diploma & Diploma/Certificate	
DDE, MKU	Courses /	
Member - Organising	National Workshop on RAMETOX	05.01.2017 to
Committee	conducted by the Dept. of Marine	09.01.2017
	and Coastal Studies, MKU,	
	Pudumadam	
Member - Organizing	Served as a member for the	08.01.2018 to 10.01.2018
Committee	International Conference on Algebra	
	and Discrete Mathematics, DDE,	
Manalana	MKU	26.02.2018
Member- Organizing	Served as a member for one National	26.02.2018
Committee	Seminar on Cyber Crimes and	
	Security Issues in Digital World,	
Mamban Organizio	DDE, MKU Served as a member for National	22 % 22 02 2019
Member - Organizing Committee		22 & 23.03.2018
Committee	Seminar on Water Quality &	
Hood in Charge	Treatment, DDE, MKU Conductance of UG and PG	05.01.2018 to till date
Head-in-Charge,	Programmes in Zoology and other	05.01.2016 to thi date
Department of	related works	
Zoology, DDE, MKU	Collected data and assisted in the	18.08.2017 -30.06.2020
Member-IQAC,		16.06.2017 -30.00.2020
Madurai Kamaraj	preparation of report	
University		

23. Membership in Academic Bodies (BoS, DC, External Examiner, etc.)

Name of the University / Institute	Type of Membership	Duration / Period
/ College		
Madurai Kamaraj University	Special invitee for UG and	2 occassions
	PG board of Studies in	
	Zoology	
Yadava College, Madurai - 2022	University Nominee in the	3 years
	BoS of Zoology Board for	
	framing M.Sc., Zoology	
	Syllabus	
Dravidian University	Ph.D. thesis adjudicator	1 year
Alagappa University	Member of the panel of	3 years
	Question paper setter	
Bharathidasan University	Member of the panel of	3 years
	Question paper setter	

24. Membership in Recognised Professional Bodies

Name of the Professional Body	International / National	Type of Membership

25. Languages Known

Languages	Read	Write	Speak
TAMIL	Yes	Yes	Yes
ENGLISH	Yes	Yes	Yes

26. Competence in Computer Applications - Yes

27. Involvement in Extension Activities other than Academic Works - Yes

As a Head in charge, it is pertinent to established a separate laboratory for Zoology programmes in DDE, MKU with the financial assistance of DDE to a tune of 5 lakh in the DDE premises.

28. Any Other Relevant Information

I was instrumental in maintaining the office of MKU-Industrial Consultancy Group under the aegis of Department of Materials Science, MKU and accrued an amount of Rs.30 lakhs to the University funds during the year 1992 to 2006.