Bio-data

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Name	: R. Mahesh			
Sex	: Male			
Date of Birth	: 7 th May, 1965			
Qualification	: M.Pharm., Ph.D			
Designation	: Professor			
Address:				
Office	: Professor, Department of Pharmacy, Birla Institute of Technology & Science, Pilani Pilani Campus, Vidya Vihar, Rajasthan - 333031, India			
Residence	: House No. 147, Shiv Ganga Marg, Birla Institute of Technology & Science, Pilani Pilani Campus, Vidya Vihar, Rajasthan- 333031, India			
Year of award of Doctoral degree	: October, 1997			
Subject Expert & Research Areas	: Medical Chemistry and Pharmacology : <u>Neuropsychopharmacology</u> -Depression, Anxiety, Alzheimer's & Parkinson's Diseases, Depression Co-morbid with Metabolic Disorders <u>Malaria</u>			

Detailed Bio-Data

Teaching and Research Experience

a. Teaching:

Duration	Institution	Courses taught and introduced*		
1989 to date	BITS, Pilani	Courses taught and introduced* <u>First Degree (Under-graduate)</u> Medicinal Chemistry Chemistry of Synthetic Drugs* Applied Pharmaceutical Chemistry* Instrumental Methods of Analysis Bioethics & Biosafety* Application of Biomedical Instrumentatio Techniques in Healthcare* <u>Higher Degree (Post-Graduate)</u> Advanced Medicinal Chemistry* Computer Aided Drug Design* Advanced Pharmacology* Molecular Biology and Immunology* Screening Methods & Techniques in Pharmacology Fermentation & Biotechnology* Disinfection and Sterilization Clinical Pharmacy and Therapeutics*		

b. <u>Research:</u>

Duration	Institution	Particulars of work done/Area		
1989 to date	BITS, Pilani	Medicinal Chemistry and Neuro Psycho- pharmacology:Design, synthesis and Neuro-Psycho- pharmacological investigations pertaining to serotonergic modulators with special emphasis on depression and co-morbid disorders such as hypertension, diabetes, anxiety and obesity.		

Academic Designations Held (1989 till date):

2010 - till date	Professor
2005 – 2010	Associate Professor
2000 – 2005	Assistant Professor
1989 – 2000	Lecturer
Post Ph.D. Experience (since Oct 1997)	~ 22.5 years
Teaching, Research Experience	~ 30 years
(since July,1989)	

Administrative Experience:

1	Dean, Faculty Affairs Division	May 2011 – May 2018	
2	Chief, Community Welfare and Societal Development Unit	August 2010 – September 2012	
3	Head – Department of Pharmacy	August 2002 - July 2010	
4	Co-ordinator/In-Charge, Central Analytical Laboratory (CAL)	Nov 1998 - July 2010	
5	In-Charge, Central Animal Facility	~March 2005 – July 2010	
6	Resident Warden- Boys Hostel	July 1995- July 2005	
7	Student Welfare Division - Nucleus member of the Division	July 1996 – April 2008	
8	Academic Registration and Counselling Division	July 1989 - July 1996	

Responsibilities and activities related to some of the aforementioned administrative functions are given below.

Dean, Faculty Affairs Division (FAD)

- Responsibilities as Dean of Faculty Affairs included creation of office of Faculty Affairs as well as introducing and streamlining various processes and procedures, as given below.
- Faculty Appointments: tenured -on-campus, off campus; non-tenured-on-campus, off-campus. Creation of complete Recruitment Process cycle protocol in association with a RPO for both on-campus and off-campus tenure track faculty recruitment for the 3 campuses in India.

- Appointment of Non-tenured (short-term) faculty processes and related guidelines
- Revision of pay structure and removal of disparities in pay.
- Guidelines and procedures related to exposure of faculty to universities abroad
- Guidelines and procedures related to immersion of faculty in industries in India to enhance faculty- industry engagement
- Guidelines related to the appointment of Guest Faculty, DST-INSPIRE fellows at BITS campuses
- Revision of policies related to Medical reimbursements, Institutional support for staff and staff spouse Children Education.
- Creation of faculty induction kit for new joiners
- Implementation of Annual performance Appraisals for faculty and related procedures.
- Guidelines for creating Chair Professorships, OPERA awards to attract and retain senior and new faculty, respectively.
- Faculty extensions, promotions, regularization, renewal of appointments and related
- issues, identification of potential faculty at senior levels through consultants.
- Dubai campus: streamlining and implementation of faculty appraisals, addressing faculty issues with creation of new pay structure, employment terms and conditions, benefits, promotions, faculty recruitment process
- Off-Campus programmes: Streamlining the recruitment process, re-designations of existing faculty in line with new positions, creation of practice track for faculty not involved in research, streamlining the process of faculty industry immersion process
- Creation of Faculty Affairs Division Website with all information associated with the above and population of information including off-campus and non-teaching staff- appointments, policies, guidelines, opportunities, appraisals, others. (http://www.bits-pilani.ac.in/university/fad/Policies)

Chief, Community Welfare and Societal Development Unit (CWSDU)

- a) Streamlined house allotment policy and guidelines and made allotments transparent.
- b) Involved in renovation of several quarters
- c) Infant Care Centre (currently rechristened as Blossoms Kids Zone) was renovated and upgraded
- d) Medical Centre and Medical Shop were renovated and redesigned respectively, with addition of 3 new rooms in Medical Centre with facility of monitoring, observation rooms

with beds and related infrastructure, facilitated visit of specialists, enhanced testing procedures with new equipments.

- e) Involved in introducing "best performer Awards" for non-teaching staff, related procedures.
- f) Facilitated procurement of new Critical Care Ambulance, body freezer and new digital Xray machine for local hospital.
- g) Introduced a car pool scheme for students and staff and circular bus transport within campus during new admission reception of reporting students.
- h) Conducted "Passport Mela" for students, staff and their family members as well as their issue, coordinating with Regional Passport Office twice.
- i) Health Camps, Pollution check for all vehicles in campus were conducted.
- j) Medical Centre registration and Medical Shop billing procedures were upgraded.
- k) Involved in facilitating issue of Aadhar Card by organizing camp within campus.
- I) Facilitated creation of 2 new parks for children near teaching and non-teaching staff quarters with play equipments.
- m) Facilitated remodeling of BITS-CO-OP stores Vegetable shop, with provision car parking facility.
- n) Participated and provided inputs for project "Parivarthan" as Member, User Council.

Head, Department of Pharmacy (activities involved in brief other than routine):

- a) Served as <u>Head of the Department for eight years</u>
- Member of several committees such as Senate, Recruitment, Research Board, BITS Cooperative stores, Selection, Institutional Animal, Human Ethics, Library, Admissions, etc.
- c) Member, organizing committee for several national and international seminars and conferences.
- d) Renovated most of the B.Pharm. and M.Pharm. Laboratories with UGC-DRS SAP-Level- I and Level – II (five years each) fund support through proposals.
- e) Obtained DST-FIST support for up-gradation of laboratory facilities with new equipments.
- g) <u>Curricular Development:</u>
 - Involved in introducing a new programme Master's in Public Health jointly offered with Bio-Sciences Group and courses for the degree (was deputy-coordinator and later coordinator for the programme) with funded support from proposal sanctioned by UGC under "Innovative New Programmes" scheme.
 - Involved in developing several courses at the first degree as well as higher degree level including programme structure for M.Pharm. With specializations in Pharmaceutics and Medicinal Chemistry.

- Standardized animal models for the evaluation of co-morbid depression treatment resistant depression namely:
 - a) olfactory bulbectomy in rats and
 - **b)** traumatic brain injury models that mimic human depression state.

Co-ordinator, Central Analytical Laboratory (CAL)

- a) Added new equipments such as HPTLC, HPLC's, moisture balance, analytical balances, Brookfield viscometer, stability chambers, visual melting range apparatus, etc. with funding from various sources.
- b) Developed Standard Operating Procedures for all analytical equipments in CAL.
- b) Updated the Laboratory Experiment Instruction Manual for all experiments for the course Instrumental Methods of Analysis

In-Charge, Central Animal Facility

Conceptualized, designed, created the new Central Animal Facility with Institutional support including infrastructure development for teaching and research in all relevant disciplines of the Institute. (*Currently houses several small animals for research with CPCSEA approval for housing as well as breeding licenses*).

Student Welfare Division (SWD)

- a) <u>Nucleus member</u> of Student Welfare Division for 15 years- involved in several developmental activities such as automation of student dues, issue of certificates, standardization of procedure for first degree reception, health club and student's activity centre (SAC) development, etc.
- b) <u>In-charge- processing and member of scholarships</u> committee of Institute's merit-cummeans scholarships for several years – involved in streamlining and automation of the process.
- c) <u>In-Charge of Recreational Activities Forum</u> Streamlined all R.A.F. activities and procedures, developed assets.
- d) Involved in the design and development of squash and badminton courts at Student Activities Centre.

Academic Registration and Counselling Division (ARCD)

- a) <u>In-Charge</u>, substitution and withdrawal from courses since joining as nucleus member of Academic Registration and Counselling Division and later-
- b) <u>In-Charge, Registration</u>, which includes Registration of students in programmes of all programmes of the Institute.

<u>Projects Details as Principal Investigator/Co-Investigator (ongoing / started/</u> <u>completed in the last 5 years)</u>

- Synthesis and pharmacological evaluation of novel phosphodiesterase 4 inhibitors for their anti-depressant and anxiolytic potential (DBT, Rs. 51.69 Lakhs; three years, Completed March 2013)
- 2. Novel Neuro-Pharmacological Agents for the Treatment of Depression, Anxiety, Cognitive Dysfunction and CCIE: Design, Synthesis and Screening of Potential Serotonergic Modulators (ICMR, Rs. 31.20 Lakhs; 3 years, Completed Dec 2013)
- International malarial research consortium for the development of novel classes of antimalarials, Indo-Canadian DBT Project (Indo-Canadian Joint Research Consortium on Anti-Malarials; DBT; Rs, 35.50 Lakhs; three years, Phase-I; Completed Sept 2013)
- International malarial research consortium for the development of novel classes of antimalarials, Indo-Canadian DBT Project (Indo-Canadian Joint Research Consortium on Anti-Malarials; DBT; Rs, 21.86 Lakhs; two years, Phase-II; Completed FY 2016-17)
- Infrastructural development of the department (level II) (UGC Rs. 72 Lakhs; five years)
 Deputy Co-ordinator.
- 6. Design and Synthesis of Novel Agents for the Management of Rheumatoid Arthritis, (UGC, 2010-13, 11.98 Lakhs, three years, Completed August 2013), Co-Investigator.

Besides the above, few minor research projects have been completed in the past.

As head of the Department, was instrumental in submitted proposals for upgrading Departmental infrastructure for research and academics through UGC –DRS-SAP Level I and II, DST –FIST Level I and II. Funds received have been utilized for enhancing research equipments assets. Pharmacy laboratories were upgraded with additional funds of Rs. 40.00 lakhs obtained from UGC for infrastructural development over 2 years.

Patents

- Radhakrishnan Mahesh, Muthu Venkatesh Sudali '*PDE4 inhibitor compounds for treating anti-depressant and anxiolytic related disorders*', Application No. 1290/DEL/2014 dated 15/05/2014 (Patent Pending)- FER filed Jan., 2020
- Sushil Kumar Yadav, Mahesh Radhakrishnan, Vishal Saxena 'Non-enzymatic method for large scale isolation of β-casein from milk', - Application No. 201811018301, dated 16th May, 2018 (Patent Pending).
- Sushil Kumar Yadav, Mahesh Radhakrishnan, Vishal Saxena- : 'A Method for determining A1/A2 genotype of milch animals',- Application No: 201911018953, dated 13th May, 2019 (Patent Pending)

Awards and Honors:

 DBT, ICMR and APTI Sponsored National Conference NIPICON International Conference 	: Best Poster (1 st Prize), 2016 : Best Poster (II nd Prize), 2014
Pharmanext (AIPER)	: Best Poster, 2012
 Indian Pharmaceutical Association 	: Best Poster (II nd Prize), 2012
 Indian Pharmacological Society International Convention 	: Best Poster (Neuro Pharmacology), 2011
 Indian Pharmacological Society International Convention 	: PC Dandiya Award, 2011
 Assoc. of Pharm. Teachers of India Conference 	: Best Poster, 2009
 Indian Pharmacological Society International Convention 	: Best Poster, 2008
 Indian Pharmaceutical Congress Annual Convention 	: Best Paper, 2005

- Best Published Paper Award (Assoc. of Pharm. Teachers of India Conf. 2014) Prof. Duggirala Visweswaram & Prof. Sreemantalu Satyanarayana Award (Best published paper in Ind. J. Pharm. Edu. and Res. - Pharmacology)
- Best Published Paper Award (Indian Pharmacology Society Conf. 2013) NN Dutta Prize (Best Published Paper in Indian Journal of Pharmacology)
- Best Published Paper Award (Assoc. of Pharm. Teachers of India Conf. 2012) Prof. Duggirala Visweswaram & Prof. Sreemantalu Satyanarayana Award (Best published paper in Ind. J. Pharm. Edu. and Res. - Pharmacology)
- Best Published Paper Award (Assoc. of Pharm. Teachers of India Conf. 2011) Prof. Duggirala Visweswaram & Prof. Sreemantalu Satyanarayana Award (Best published paper during the year in Ind. J. Pharm. Edu. and Res. - Pharmacology)

Thesis Guided:

Ph. D: Completed: 12

- (5 in Medicinal Chemistry;
- 6 in Pharmacology
- 1 in Veterinary Pharmacology)
- Doctoral Advisory Committee member for several Ph.D. candidates

Details of Ph.D. thesis guided till date:

S.No.	Name of Candidate	Thesis Title	Area	Start of Ph.DYear of Award	Status
1	Venkatesha Perumal R	Design Synthesis and pharmacological evaluation of novel serotonergic 5HT3 receptor antagonist as potential agents for the treatment of cancer chemotherapy induced emesis	Drug design and Development, Synthetic Medicinal Chemistry	August, 2001 - September, 2005	Completed
2		Behavioural Neuropharmacological Studies of Selected Serotonin Type-3 Receptor Antagonists as Potential Anti-depressants	Neuropsycho- pharmacology division, (Drug discovery, standardization and development of new animal model)	August, 2004 - March 2008	Completed
3	Dilip Kumar Pandey	Neurobehavioural and Neurochemical Evaluation of Selected Monoaminergic Modulators in Animal Models of Comorbid Depression and Anxiety	Neuropsycho- pharmacology division, (Drug discovery, standardization and development of new animal model)	August, 2007 - March 2011	Completed
4		Novel Quinoxaline Carboxamides: Design, Synthesis And Neuro- Pharmacological Evaluation as Anti-depressants, Anxiolytic And in the Management of Cancer Chemotherapy-Induced Nausea and Vomiting	Drug design and Development, Synthetic Medicinal Chemistry	December, 2007 - January 2012	Completed
5	Shvetank Bhatt	Behavioural and Neuropharmacological Screening of Potential Serotonergic Ligands for Co- morbid Depression, Anxiety and Related Disorders such as Cancer Chemotherapy Induced Nausea and Vomiting (CINV)	Neuropsycho- pharmacology division, (Drug discovery, standardization and development of new animal model)	October, 2008 - March, 2015	Completed

6	Arghya K Dhar	Novel Neuro-Pharmacological Agents for the Treatment of Depression, Anxiety, Cognitive dysfunction and Cancer Chemo- Therapy Induced Emesis: Design synthesis and Screening of Potential Serotonergic Modulators	Drug design and Development, Synthetic Medicinal Chemistry	January, 2010 - May, 2016	Completed
7	Ankur Jindal	Behavioral and Neuropharmacological Screening of Phosphodiesterase4 (PDE4) Inhibitors for Anti-depressant and Anxiolytic Potential	Neuropsycho- pharmacology division, (Drug discovery, standardization and development of new animal model)	January, 2010 - December, 2015	Completed
8	Muthu V. Sudali	Design, Synthesis and Pharmacological Evaluation of Novel Phosphodiesterase-IV inhibitors for their Anti- depressant and Anxiolytic Potential	Drug design and Development, Synthetic Medicinal Chemistry	June, 2010 - Octiber, 2015	Completed
9	Sourabh Mundra	Design, Synthesis and screening of Potential Anti- malarial Agents.	Drug design and Development, Synthetic Medicinal Chemistry	September, 2010 - June, 2017	Completed
10		Behavioral and Neuro- pharmacological Screening of Potential Serotonergic Ligands for Co-morbid Depression	Neuropsycho- pharmacology, (Drug discovery, standardization and development of new animal model)	August, 2011 - April, 2017	Completed
11	Yeshwant Kurhe	Behavioral and Neuropharmacological Screening of Potential Serotonergic Modulators for Depression Comorbid with Obesity	Neuropsycho- pharmacology, (Drug discovery, standardization and development of new animal model)	January, 2012 - January, 2018	Completed
12	Sushil Yadav	Isolation and Characterization of Genetic Variants of Beta Casein From Cow Milk and to Study Their Effects on Osteoporosis	Neuropsycho- pharmacology, Veterinary Pharmacology and Biotechnology	August, 2012 – Oct., 2019	Completed

- **Higher Degree**: Guided several M. Pharm. students for various projects in the area of New Drug Design and Synthesis, Neuro-psychopharmacology, Design and development of new animal models, with special reference to serotonergic modulators and related disorders. Many have culminated in conference presentations and or publications.
- First Degree: Guided two (completed) first degree thesis students and currently guiding one first degree student in the area of Neuro-psychopharmacology, Design and Development of new Animal Models and related protocol standardization. Guided several B.Pharm. Students on Special Projects, Lab. Oriented Projects, Study Oriented Projects, Computer Projects. A few have culminated in conference presentations and or publications.

Conferences Organized:

Organizing Committee Member/Co-ordinator:

- a) International Symposium on Recent Advances in Drug Design and Drug Delivery Systems, February 2005.
- b) International Workshop on Drug Design, February 2005.
- c) International Symposium on Public Health awareness (in association with Bio-Sciences Group), March,2005
- d) National Symposium on Challenges in Drug Discovery Research: Networking Opportunities between Academia and Industry, (in association with Chemistry Group) April, 2006
- e) International Symposium on "Emerging Trends in Life Sciences Research" (in association with Bio-Sciences Group), March, 2009

Professional Activities:

(A) Memberships of Professional Bodies:

- 1. Member, Board of Studies, (Pharmacy), DIT University, Dehradun
- 2. Member- Selection Committee for JRF/SRF- CSIR
- 3. Life Member Society of Neurochemistry, India
- 4. Life Member Indian Pharmacological Society
- 5. Life Member Association of Pharmacy teachers of India

(B) Referee for Journals:

- 1. Chemical Biology and Drug Design Publisher Willey
- 2. Indian Journal of Medical Research- Publisher ICMR
- 3. Indian Journal of Experimental Biology- Publisher NISCAIR
- 4. Indian Journal Of pharmaceutical Sciences- Publisher- Medknow

(C) Member, Committees:

- Member, Research and Recognition Committee, SPP School of Pharmacy & Technology Management, Narsee Monjee Institute of Management Sciences, Mumbai

Book Chapter:

 Yong –Ku Kim (editor) et al., 'Understanding Depression …"- Springer Nature Singapore pvt ltd., Vol-2, <u>Chapter-17</u>, pp-235-249, 2018 with research scholar, Ms. Deepali Gupta.

International

- Kurhe Y, Mahesh R, Devadoss T. Novel 5-HT3 receptor antagonist QCM-4 attenuates depressive-like phenotype associated with obesity in high-fat-diet-fed mice. Psychopharmacology 2017; 234, 1165-1179. (Springer) (IF-3.87)
- Mundra S, Thakur V, Bello A. M, Rathore S, Asad M, Wei L, Yang J, Chakka S. K, Mahesh R, Malhotra P, Mohmmed A, Kotra L. P. A novel class of Plasmodial ClpP protease inhibitors as potential antimalarial agents. Bioorganic & Medicinal Chemistry 2017; 25, 5662-5677 (IF-2.793)
- Bhatt S, Mahesh R, Devadoss T, Jindal A. Neuropharmacological evaluation of a novel 5-HT3 receptor antagonist (4-benzylpiperazin-1-yl)(3-methoxyquinoxalin-2-yl) methanone (6g) on lipopolysaccharide-induced anxiety models in mice. Journal of Basic and Clinical Physiology and Pharmacology 2016, Volume 28, Issue 2, Pages 101–106, ISSN (Online) 2191-0286, ISSN (Print) 0792-6855, (*De Gruyter*)
- 4. Bhatt S, Mahesh R, Jindal A, Devadoss T. Neuropharmacological and neurochemical evaluation of Nn-propyl-3- ethoxyquinoxaline-2- carboxamide (6n): a novel serotonergic 5-HT3 receptor antagonist for co-morbid antidepressant-and anxiolyticlike potential using traumatic brain injury model in rats. Journal of Basic and Clinical Physiology and Pharmacology 2016 Volume 28, Issue 2, Pages 93–100, ISSN (Online) 2191-0286, ISSN (Print) 0792-6855, (De Gruyter)
- 5. Kurhe Y, **Mahesh R.** Pioglitazone, a PPAR-Υ agonist rescues depression associated with obesity using chronic unpredictable mild stress model in experimental mice. Neurobiology of Stress 2016; 3, 114-121. *(Elsevier) (IF-1.0)*
- Bhatt S, Bagal SM, Butola S, Dhar AK, Mahesh R. Antidepressant-and anxiolytic-like effect of novel 5-hydroxytryptamine3 receptor antagonist 2-[4-(3-chlorophenyl) piperazin-1-yl]-1, 8-naphthyridine-3-carboxylic acid (7e)-: An approach using rodent behavioral antidepressant and anxiolytic test battery. International Journal of Nutrition, Pharmacology, Neurological Diseases 2016; 6, 81-89. (Medknow) (IF-0.6)
- Gupta D, Prabhakar V, Radhakrishnan M. 5HT3 receptors: Target for new antidepressant drugs. Neuroscience & Biobehavioral Reviews 2016; 64, 311-325. (*Elsevier*) (*IF-10.52*)
- 8. Gupta D, Thangaraj D, **Radhakrishnan M**. A novel 5HT3 antagonist 4i (N-(3-chloro-2-methylphenyl)quinoxalin-2-carboxamide) prevents diabetes-induced

depressive phenotypes in mice: Modulation of serotonergic system. Behavioral Brain Research 2016; 297, 41-50. *(Elsevier) (IF-3.0)*

- Kurhe Y, Mahesh R. Ondansetron attenuates co-morbid depression and anxiety associated with obesity by inhibiting the biochemical alterations and improving serotonergic neurotransmission. Pharmacology Biochemistry and Behavior 2015; 136, 107-116. (Elsevier) (IF-2.78)
- Mundra S, Mahesh R. Pyridine-based microwave assisted one-pot synthetic protocol for the synthesis of ethyl 3-substituted-4-oxo-2-thioxo-1,2,3,4-tetrahydropyrimidine-5carboxylates. Research on Chemical Intermediates 2016; 42, 4207-4219 (Springer) (IF- 1.3)
- 11. Kurhe Y, **Mahesh R**. Mechanisms linking depression co-morbid with obesity: An approach for serotonergic type 3 receptor antagonists as novel therapeutic intervention. Asian Journal of Psychiatry 2015; 17, 3-9. *(Elsevier) (IF-0.6)*
- Chakka S. K, Kalamuddin M, Mundra S, Mahesh R, Malhotra P, Mohmmed A, Kotra L. P. Identification of novel class of falcipain-2 inhibitors as potential antimalarial agents. Bioorganic & Medicinal Chemistry 2015; 23, 2221-2240 (Elsevier) (IF-3.3)
- Gupta D, Mahesh R, Kurhe Y. Effect of a novel 5-HT3 receptor antagonist 4i, in corticosterone-induced depression-like behavior and oxidative stress in mice. Steroids 2015; 96, 95-102. (*Elsevier*) (*IF-2.71*)
- Jindal A, Mahesh R, Bhatt S. Etazolate, a Phosphodiesterase 4 enzyme inhibitor produces antidepressant-like effects by blocking the behavioral, biochemical, neurobiological deficits and histological abnormalities in hippocampus region caused by olfactory bulbectomy. Psychopharmacology, 2015; 232, 623-637. (Springer) (IF-3.396)
- Jindal A, Mahesh R, Bhatt S. Type 4 phosphodiesterase enzyme inhibitor, rolipram rescues behavioral deficits in olfactory bulbectomy models of depression: Involvement of hypothalamic-pituitary-adrenal axis, cAMP signaling aspects and antioxidant defense system. Pharmacology Biochemistry and Behavior 2015; 132, 20-32. (Elsevier) (IF-2.78)
- Kurhe Y, Mahesh R, Devadoss T. QCM-4, a 5-HT3 receptor antagonist ameliorates plasma HPA axis hyperactivity, leptin resistance and brain oxidative stress in depression and anxiety-like behavior in obese mice. Biochemical and Biophysical Research Communications 2015; 456, 74-79. (*Elsevier*) (*IF-2.281*)
- Mundra S, Mahesh R. Evaluation of novel 1-(4-(substituted)piperazin-1-yl)-2-(phenylamino)ethanone derivatives as Falcipain-2 inhibitors. Journal of young Pharmacist 2015; 7, 96-105. (*Elsevier*) (*IF-0.5*)

- Dhar AK, Mahesh R, Jindal A, Bhatt S. Piperazine analogues of naphthyridine-3carboxamides and indole-2-carboxamides: Novel 5-HT3 receptor antagonists with antidepressant like activity, Archive Der Pharmazie 2015; 348, 34-45. (Wiley Online Library) (IF-1.39)
- Kurhe Y, Mahesh R, Gupta D, Thangaraj D. Effect of (4a) a novel 5-HT3 receptor antagonist on chronic unpredictable mild stress induced depressive-like behavior in mice: an approach using behavioral tests battery. Journal of Basic and Clinical Physiology and Pharmacology, 2015; 26, 25-33. (*De Gruter)(IF-0.6*)
- 20. Mahesh R, Mundra S, Devadoss T. Design, synthesis and evaluation of 2-(4-(substituted benzoyl)-1,4-diazepan-1-yl)-N phenylacetamide derivatives as a new class of falcipain-2 inhibitors. Arabian Journal of Chemistry 2014; 20, 212-224. (Elsevier) (IF-2.7)
- Gupta D, Mahesh R, Kurhe Y. Ondansetron, a 5HT-3 receptor antagonist reverses depression and anxiety-like behavior in streptozotocin-induced diabetic mice: Possible implication of serotonergic system. European Journal of Pharmacology 2014; 744, 59-66. (Elsevier) (IF- 2.754)
- Dhar AK, Mahesh R, Jindal A, Devadoss T, Bhatt S. Design, Synthesis, and Pharmacological Evaluation of Novel 2-(4-substituted piperazin-1-yl)1, 8 Naphthyridine 3-Carboxylic Acids as 5-HT3 Receptor Antagonists for the Management of Depression. Chemical Biology & Drug Design 2014; 84, 721-31. (Willey) (IF-2.50)
- Kurhe Y, Mahesh R, Gupta D, Devadoss T. QCM-4, a serotonergic type 3 receptor modulator attenuates depression co-morbid with obesity in mice: An approach based on behavioral and biochemical investigations. European Journal of Pharmacology 2014; 740, 611-618. (*Elsevier*) (*IF-2.75*).
- Kurhe Y, Mahesh R, Gupta, D. Ondansetron attenuates depression co-morbid with obesity in obese mice subjected to chronic unpredictable mild stress; an approach using behavioral battery tests. Metabolic Brain Disease 2014; 29, 701-710. (Springer) (IF-2.39).
- 25. Gupta, Deepali; Radhakrishnan, Mahesh; Kurhe, Yeshwant; Anxiolytic-like effects of alverine citrate in experimental mouse models of anxiety, European journal of pharmacology, 742 94-101 2014, Elsevier
- Gupta D, Mahesh R, Kurhe Y, Thangaraj D, Prabhakar V, Kanade P. Antidepressantlike effects of 6z, a novel 5HT3 receptor antagonist in acute and chronic mouse models of depression. Acta Pharmacologica Sinica 2014; Accepted. (*Nature*) (2.496).

- Kurhe Y, Mahesh R, Gupta D. Effect of a Selective Cyclooxygenase Type 2 Inhibitor Celecoxib on Depression Associated with Obesity in Mice: An Approach Using Behavioral Tests. Neurochemical Research 2014; 39:1395-1402. (Springer) (IF-2.55)
- Bhatt S, Mahesh R, Jindal A, Devadoss T. Protective effects of a novel 5-HT3 receptor antagonist, *N*-n-butyl-3-methoxy quinoxaline-2-carboxamide (60) against chronicunpredictable mild stress—induced behavioral changes and biochemical alterations. Pharmacology Biochemistry Behavior 2014; 122: 234-239. (*Elsevier*) (*IF-*2.75)
- Bhatt S, Mahesh R, Jindal A, Devadoss T. Neuropharmacological Effect of Novel 5-HT3 Receptor Antagonist, *N*-n-propyl-3-ethoxyquinoxaline-2-carboxamide (6n) on Chronic Unpredictable Mild Stress-Induced Molecular and Cellular Response : Behavioural and Biochemical Evidences. P harmacological Reports 2014; 66: 804-810. (*Elsevier*) (*IF-1.96*)
- Gupta D, Radhakrishnan M, Thangaraj D, Kurhe Y. Antidepressant and anti-anxiety like effects of 4i (3-Chloro-2-methylphenyl) quinoxalin-2-carboxamide), a novel 5-HT receptor antagonist in acute and chronic neurobehavioral rodent models. European Journal of Pharmacology 2014; 735: 59-67. (Elsevier) (IF-2.592)
- Gupta D, Radhakrishnan M, Kurhe Y. Insulin reverses anxiety-like behavior evoked by streptozotocin-induced diabetes in mice. Metabolic Brain Disease, 2014; 29, 737-46. (Springer) (IF-2.33)
- Gupta D, Kurhe Y, Radhakrishnan M. Antidepressant effects of insulin in streptozotocin induced diabetic mice: Modulation of brain serotonin system. Physiology & Behavior 2014; 129: 73-78. (Elsevier) (IF-3.1)
- Mahesh R, Dhar AK, Jindal A, Bhatt S. Design, synthesis and evaluation of anti depressant activity of novel 2-methoxy 1, 8 naphthyridine 3-carboxamides as 5-HT3 receptor antagonists. Chemical Biology & Drug Design 2014; 83, 583-91. (Wiley Online Library) (IF-2.50)
- 34. Kurhe Y, Mahesh R, Gupta D, Thangaraj D. QCM-4 a novel 5-HT3 antagonist attenuates the behavioral and biochemical alterations on chronic unpredictable mild stress model of depression in Swiss albino mice. Journal of Pharmacy and Pharmacology 2014; 66, 122-32. (Wiley Online Library) (IF-2.03)
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