

CURRICULLAM VITAE

PERSONAL INFORMATION

- 1. Name** : **Dr. R.UMA MAHESWARI**
2. Date of Birth : **13.05.1983**
3. Address : **1/1355L,10th Cross Vasan
Nagar, Rettaivaikal,
Vayalur Road,Trichy**

ACADEMIC INFORMATION

4. Designation & Department: Assistant Professor, Department of Biotechnology

5. Educational Qualification :

| Degree | Year of passing | College / University |
|-----------------------|------------------------|--|
| B.Sc., Botany | 2003 | Holy cross College, Trichy. |
| M.Sc., Biotechnology | 2005 | Bishop Heber College, Trichy. |
| PGDBI | 2006 | Bharathiyar University |
| M.Phil.,Biotechnology | 2007 | Bharathidasan University,Tiruchirappalli |
| Ph.D | 2015 | Bharathidasan University,Tiruchirappalli |

6. Experience :

c) Experience Details regarding previous and present employment

| Date of Joining | | INSTITUTION | Year of Experience | | |
|------------------------|-----------|---|---------------------------|----------|----------|
| From | To | | Y | M | D |
| 2.5.2011 | 30.6.2014 | JUNIOR RESEARCH FELLOW BHARAHIDASAN UNIVERSITY | 3 | 1 | 28 |
| 27.2.2016 | 6.10.2016 | SENIOR RESEARCH FELLOW NRCB | - | 7 | 9 |

| | | | | | |
|-----------|-----------|-------------------------|---|---|----|
| 7.10.2016 | 30.6.2017 | Research Associate NRCB | - | 8 | 23 |
| | | Total | 4 | 7 | 00 |

Teaching Experience:

| Date of Joining | | INSTITUTION | Year of Experience | | |
|-----------------|------------|---|--------------------|---|----|
| From | To | | Y | M | D |
| 10.08.2005 | 30.4.2011 | HOD, PAVENDAR BHARATHIDASAN COLLEGE OF ARTS & SCIENCE,TRICHY | 6 | 2 | 20 |
| 7.7.2014 | 9.6.2015 | HOD, PAVENDAR BHARATHIDASAN COLLEGE OF ARTS & SCIENCE,TRICHY | 1 | 1 | 2 |
| 01.7.2015 | 26.2.2016 | HOD, DHANALAKSHMI SREENIVASAN COLLEGE OF ARTS&SCIENCE FOR WOMEN,PERAMBALUR | - | 8 | - |
| 01.10.2017 | 30.06.2018 | HOD, PAVENDAR BHARATHIDASAN COLLEGE OF ARTS & SCIENCE,TRICHY | | 8 | |
| 02.07.2018 | Till date | | 3 | 2 | 2 |
| | | Total | 12 | 2 | 24 |

7. Areas of Specialization : PLANT BIOTECHNOLOGY

8. Languages known : TAMIL&ENGLISH

9. Subjects Taught :

| | |
|-----------|--|
| UG | <ol style="list-style-type: none"> 1. Plant Tissue Culture 2. Microbial Biotechnology 3. Molecular Genetics 4. Bio molecules 5. IPR & Bio-ethis 6. Environmental Studies 7. Value Education 8. Plant Biotechnology |
|-----------|--|

| | |
|-----------|--|
| | 9. Immunology 10. Cell Biology 11. Molecular Biology 12. Environmental Sciences 13. Clinical Mycology and Virology 14. Clinical Parasitology 15. Applied Microbiology 16. Microbial Biotechnology 17. Basic Microbiology |
| PG | 1. Nanotechnology 2. Plant Biotechnology 3. Molecular Biology 4. Biochemistry 5. Metabolomics 6. Enzymes |

10. Details of Papers Presented:

| Date | Organizer | Name of the Seminar | Paper Name |
|-------------------------|---|--|---|
| 6/03/2019- 8/03/2019 | Pavendar Bharathidasan College of Engineering & Technology | International Conclave | Isolation, Purification and mass production of protease from <i>Bacillus cereus</i> |
| 6/03/2019- 8/03/2019 | Pavendar Bharathidasan College of Engineering & Technology | International Conclave | Anxiolytic and Anti- depressant effects of AgNps fabricated using Diosgenin |
| 22/02/2019 | Periyar EVR College (Autonomous), Trichy | International Conference on Cancer Inferno and Its Prevention Strategies | Synthesis of Plant Mediated Gold Nanoparticles using <i>Azima tetraacantha</i> Lam. Leaves Extract and Evaluation of their Antimicrobial Activities. |
| 11/09/2018 | Holy Cross College (Autonomous), Trichy | International Conference on New Vistas in Life Sciences | Green Synthesis of Silver Nanoparticles using <i>Momordica</i> <i>charantia</i> Fruit Extract and its Anti- coagulant Activity |

11. Details of Seminars / Conferences / Workshops Attended:

| Year & Date | Organizer | Title | National / International | Topic |
|------------------------|---|--|---------------------------------|--------------------------------|
| September 28-30, 2018. | Department of Biotechnology, Cauvery College For Women, Trichy. | Two days Science Academies' Lecture Workshop | - | Advances in Biosciences |
| 19/02/2019 | Thanthai Hans Roever College (Autonomous), Perambalur | One Day Conference | International | Emerging Trends in Biosciences |

12. Details of In-charge / Participation in Extracurricular Activities:

(NSS, NCC, Sports, Games, Voluntary Association and Cultural Activities):

| Nature of Activity | Period of Incharge |
|---------------------------|---------------------------|
| Club Activity | 2018-2019 |

13. Details of Membership in Academic Bodies/ Board of Studies:

| S. No | Nature of Position | Institution Name | Topic / Competition / Function | Date |
|--------------|---------------------------|---|---------------------------------------|-------------|
| 1 | Board of Studies Member | Thanthai Hans Roever College(Autonomous), Perambalur-621220 | Biotechnology UG, PG &M.Phil. | 18.8.2018 |
| 2 | Board of Studies Member | Thanthai Hans Roever College(Autonomous), Perambalur-621220 | Biotechnology UG, PG &M.Phil. | 4.01.2021 |

14. Any other information if any:

| S. No | Nature of Position | Institution Name | Topic / Competition / Function | Date |
|--------------|---------------------------|---------------------------------|---|------------------|
| 1 | Judge | Bharathidasan University | District Level Competition for Science project (TNSTC) | 28.9.2018 |

15. Publications :

a. Books

| Title | Author(s) | Year of Publication | Publisher | ISBN No. |
|--|--|---------------------|---|-------------|
| “New Avenues in Life Sciences TRENDS AND CHALLENGES” | Dr.R.Uma Maheswari Dr.R.Sugunadevi Ms.P.Gajalakshmi | 2016 | Iyal Publication 23B/2739,Thoppil Pillaiyar koil St,South Rampart, Thanjavur-613001,Tamilnadu, | 938528352-9 |
| | | | India. | |
| | | | Email:iyalpublication@gmail.com | |

b. Book Chapters

| Name of the Book | Title of the Chapter | Publisher | Year |
|--|--|--|------|
| International Conference on Energy and Environmental Engineering | Green Silver nanoparticle Synthesis from an important Medicinal Plant <i>Dioscorea oppositifolia</i> L. and their efficacy in neurological disorder. | Department of Petrochemical technology Anna University-BIT Campus Tiruchirappalli-620024,Tamilnadu,India | 2014 |

c. Popular articles

Newspapers –Thinakaran Paper Pg.No.19.Dated.24.January2013

d. Medals, Awards and Fellowships obtained Previously (Local / National / International)

| S. No | Award | Instituted By | Year |
|-------|---|---|-------------------|
| 1 | Rajiv Gandhi Fellowship Meritorious Award | UGC | 2011-2014. |
| 2 | G.N. Chakrapani Chetti Memorial Silver Medal for proficiency in English in 12 standard public Exam | Seva Sangam Girls Higher Secondary School | 2000 |
| 3 | I prize for Proficiency in General English | Holy Cross College | 2000-2001 |
| 4 | Best Oral Presentation Award in International Conference for on Green Technology for Environmental Pollution Prevention and control (ICGTEPC 2014) | Department of Chemical Engineering National Institute of Technology, Tiruchirappalli (NIT) | 2014 |
| 5 | Best Oral Presentation Award in International Conference on Sustainable Utilization, Management and Conservation of Bio Resources (ICSMCB-2013), Tamil Nadu, India on 10 &11thJan 2013. | St.Joseph's college. (Autonomous), Tiruchirappalli-620002 | 2013 |

Conference Organized Previously

- I organized the One day National Symposium on “Challenging Aspects in Environmental & Molecular Biotechnology” held at Pavendar Bharathidasan College of Arts and Science on 8th Feb 2008.
- I organized two days National Conference at Dhanalakshmi Srinivasan College of Arts& Science for Women, Affiliated to Bharathidasan University, Perambalur-621212 on 28&29 January 2016.

Workshop Organized Previously

1. Workshop on “Electrophoresis Techniques” in Pavendar Bharathidasan College of Arts and Science On Oct 2005.
2. Two days workshop on “Recent tools in Bio-informatics” organized by Department of Biotechnology in association with NEOGEN Bio-solution, Chennai on 8 & 9 of September 2009.

g. Seminars/Conferences/Trainings attended and paper presented Previously

| S.No | Name of the Seminar/Conference/ | Organization name | Date |
|----------|---|---|---|
| | Training | | |
| | International Conference | | |
| 1 | International Conference on Climate Change and Bioresearch | Department of Biotechnology, Bharathidasan University | 9-12 February 2010(Poster Presentation) |
| 2 | International Conference Plant Mediated Synthesis of Silver Nanoparticles by Using Leaf Extract of <i>Dioscorea oppositifolia</i> L. and their activity against Some Human pathogen (Oral Presentation) | PG and Research Development of Plant Biology and Plant Biotechnology, Quaid–E–Millath Government College for Women. (Autonomous),Chennai-600002 | Conference 1-to 3rd February 2012(Oral Presentation) |
| 3 | International Conference on Sustainable Utilization, Management and Conservation of Bio Resources (Oral Presentation) (ICSMCB-2013) | Department of Botany, St.Joseph's college. (Autonomous),Tiruchirappalli-620002,Tamilnadu,India on | 10 &11thJan 2013(Oral Presentation) |
| 4 | Best oral Presentation Award International Conference on Green Technology for Environmental Pollution Prevention and control (ICGTEPC 2014) On “In vitro cytotoxicity of Silver nanoparticles synthesized from Diosgenin , a steroidal saponin an active constituents of <i>Dioscorea oppositifolia</i> L. against Breast Cancer cell line MCF-7”. | Department of Chemical Engineering , National Institute of Technology Tiruchirapalli (NITT), India | 27th-29th September 2014 (Oral Presentation) |

| | | | |
|----------------------------|--|---|---|
| 5 | <p>International Conference on Green Technology for Environmental Pollution Prevention and control (ICGTEPC 2014)</p> <p>Oral Presentation award</p> <p>“Silver nanoparticles synthesis from Aristolochia tagala Cham., an endangered plant for the application of Photocatalytic degradation of dyes and its antimicrobial activity.”</p> | <p>Department of Chemical Engineering , National Institute of Technology Tiruchirapalli (NITT), India</p> | <p>27th-29th September 2014 (Oral Presentation)</p> |
| 6 | <p>International conference on Energy and Environmental Engineering</p> | <p>Department of Petrochemical Technology, Anna University-BIT Campus, Tiruchirappalli-620024, Tamilnadu, India. sponsored by TEQIP-II</p> | <p>6&7 November 2014(Oral Presentation)</p> |
| 7 | <p>International conference on Reasserting Microbial Biotechnology to deflate global disease burden</p> | <p>Microbial Biotechnology Laboratory, Department of Biotechnology, Manonmanian Sundaranar University, Tirunelveli-627012, Tamilnadu, India.</p> | <p>28&29 September 2015(Oral Presentation)</p> |
| 8 | <p>International Conference On “New Vista in Life Sciences”</p> | <p>Presented paper On “Green synthesis of silver nanoparticle from <i>Momardica charantiae</i> fruit extract and its anti coagulant activity</p> | <p>11th September, 2018</p> <p>Holycross College, (Autonomous) Trichirappalli-620002. (Oral Presentation)</p> |
| National Conference | | | |
| 9 | <p>Two days National conference on. “Recent tools in Bioprospectious of plants.”</p> | <p>Department of Plant Science, Bharathidasan University</p> | <p>March 28&29(2014)</p> |
| 10 | <p>National Symboisium on use of RAPD technique for detection of Banana streak virus</p> | <p>J.J. Arts and Science college, Pudukkottai</p> | <p>16th,17th March 2008</p> |

| | | | |
|------------------------|--|---|--|
| 11 | National Conference on Green Engineering & Technologies for sustainable future | Department of Petrochemical Technology, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli-620 024, Tamil Nadu, India. | 5&6 December 2014(Oral Presentation) |
| 12 | National Conference on Genomics and genetic Engineering Strategies for Crop Improvement | Department of Biotechnology, Periyar University, Periyar University, Salem-636011, Tamilnadu. | 27-28 February 2012(Oral Presentation) |
| Training Course | | | |
| 13 | One Month In-plant training on Bio-control in Sugarcane | Aringar Anna Sugar Industry, Thanjavur | May 2004 |
| 14 | In-plant training on Production of Biofertilizer by using coir pith based cyano bacteria & natural farming from | NFMC, Bharathidasan University, and Trichy - 24. | 19.06.2008 to 21.06.2008 |
| 15 | Short term Training Course on Advances in Gene Identification and Marker development | Dept of Biotechnology. National Research Centre for Banana, NRCB. (ICAR) | 1-10, Oct-2012 |
| 16 | Short Term training course on Plant Genetic Engineering | Department of Biotechnology & Genetic Engineering, Bharathidasan University, Trichy. | 13-28, 2013 |

h.Publications:

- 1. Uma Maheswari R(2021)**Assessment of behavioral changes and antitumor effects of silver nanoparticles synthesized using diosgenin in mice model. *Journal of Drug Delivery Science and Technology*.(Under Accepted)(*SCI –Impact-3.98*)
- 2. Uma Maheswari R(2021)**Isolation, purification, and mass production of protease from *Bacillus subtilis*.*International Journal of Botany Studies*.Volume 6;Issue 2;2021.Page No. 95-98.
- 3. In vitro** cytotoxicity of *Dioscorea oppositifolia* L., against breast cancer cell line MCF-7.*International Journal of Botany Studies*.Volume 6;Issue 2;2021.Page No. 427-429.
- Joe Antony Jacob, ArunPrasanna Vimalanathan, Ziyu Jiang, Rajesh Mani, Prasannabalaji Nainangu, **Uma Maheswari Rajadurai**, Baoan Chen. Influence of diet and dietary nanoparticles on gut dysbiosis. *Microbial Pathogeneis*118,61-65
- 5. Uma Maheswari R**, Jayabarath J, Maanusha B, Bhavanisowndharya (2017). Detection of WSS Virus on Banana Prawn, *Peneaus mergueinsis* by PCR Technique. *Journal of Chemical and Pharmaceutical Sciences*. October - December 2017 *JCPS Volume 10 Issue 4*(*SCI –Impact-1.68*)
- 6. Uma Maheswari R**, Selvarajan R, Nandagopalan V, Lakshmiprabha A. (2014). Genetic variation of *Dioscorea oppositifolia* L. from four different regions of Tamil Nadu. *International Journal of Chemical and Pharmaceutical Science*. (Vol.14) *PP (36-36)*. (*SCI Impact 0.68*)
- 7. Uma Maheswari R**, and Lakshmi Prabha A. (2016). Antibacterial activity of silver nanoparticles developed using *in vitro* leaf extracts of *Dioscorea oppositifolia*. L. *International journal of Microbiology and applied biosciences*. (*Impact 1.8*) (74-77).
- 8. Uma Maheswari R**, Selvamurugan C, Jayabarath J, Lakshmi Prabha A (2011).Hairy root culture of an important medicinal plant: *Coleus forskohlii*. *International Journal of Agriculture Sciences*. Vol. 3, Issue 2, 2011, *PP-(82-89)*. (*Impact -3.3*)
- 9. Uma Maheswari R**, Lakshmi Prabha A, Nandagopalan V, Anburaja V and Jaya Barath J (2012). Syntheses of silver nanoparticles by using fruit extract of *Dioscorea oppositifolia* L. *Journal of Research in Nanobiotechnology* 009-013 Vol 1.
- 10. Uma Maheswari R**, Lakshmi Prabha A, Nandagopalan V, Anburaja V (2012). Green Synthesis of Silver Nanoparticles by Using Rhizome Extract of *Dioscorea oppositifolia* L. and their antimicrobial activity against Human pathogens. *Journal of Pharmacy and Biological Sciences (IOSRJPBS)* ISSN: 2278-3008 Volume 1. *PP (38)*. (*Impact-1.13*)
- 11. Uma Maheswari R**, Lakshmi Prabha A, Nandagopalan V, and Anburaja V (2012). *In-vitro* Rhizome Production from Nodal Explants and Callus formation of a Medicinal Plant *Dioscorea oppositifolia* L. (*IOSR*) *Journal of Pharmacy and Biological Sciences (IOSRJPBS)* ISSN: 2278-3008 Volume 1, Issue 6 , *PP (17-21)* (*Impact-1.13*)
- 12. Uma Maheswari R**, Lakshmi Prabha A, Nandagopalan V, and Anburaja V (2011).

Antimicrobial Activity of *Dioscorea oppositifolia* L. an endangered Medicinal Plant against Some Human Pathogens. *International Journal of Research in Antimicrobials*.

13. **Uma Maheswari R**, Lakshmi Prabha A, Nandagopalan V. (2012). Plant mediated synthesis of silver nanoparticles by using leaf extract of *Dioscorea oppositifolia* L. and their antimicrobial activity. Society for biology and biotechnology. *Plant cell biotechnology and molecular biology* 13(1-4).
14. Anburaja V, Nandagopalan V, Lakshmi Prabha, A, and **Uma Maheswari R**. (2011). Antimicrobial activities of *Dioscorea oppositifolia* L. leaf ethanol extract. *Journal of Antimicrobials*. PP (1).

ANY OTHER INFORMATION -2020-2021

Seminar/ Conference /Workshop Attended

International Webinar -5

National Webinar - 15

Faculty Development Programme -4

E Workshop -1

Online Course Completed -4