CURRICULLAM VITAE

PERSONAL INFORMATION

1. Name : Dr. R.UMA MAHESWARI

2. Date of Birth : 13.05.1983

3. Address : 1/1355L,10th Cross

VasanNagar,

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.Researcher ID-Dr. R.UMA MAHESWARI

MOBILE: 8973761067

NEET EXPERIENCE: 5 Years

PREVIOUS NEET EXPERIENCE IN THE FOLLOWING CENTRES:

> TIME

> TEMPZ

> VISWAS

> POINT ACADEMY

> GREENS

> EDUTEL ACADEMY

> NIVEDITHA

Google Scholar: https://scholar.google.com/citations?hl=en&authuser=2&user=fpOgCxoAAAAJ

EMAIL:umamaheswari.bt@cauverycollege.ac.in

GOOGLE SCHOLAR:

https://scholar.google.co.in/citations?hl=en&user=fpOgCxoAAAAJ&view_op=list_works&sortby=title

ORCID: https://orcid.org/0000-0003-3948-1932

SCOPUS ID: 8788b662

PUBLONS: https://publons.com/researcher/4345863/umamaheswari-biotechnology/

MENDELEY:

VIDWAN : Profile URL: https://vidwan.inflibnet.ac.in/profile/206299

c) Experience Details regarding previous and present employment

| Date of Joining | | INSTITUTION | Year of Experience | | ence |
|-----------------|-----------|---|--------------------|---|------|
| From | То | | 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 |
| | I | Total | 4 | 7 | 00 |

Teaching Experience:

| Date of Joining | | INSTITUTION | Year of Experience | | |
|-----------------|------------|---|-----------------------|---|----|
| From | То | | 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 | CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS),TRICHY | 4 | 7 | 5 |
| | | Total | 13 | 2 | 27 |

6. Areas of Specialization : PLANT BIOTECHNOLOGY

7. Languages known: TAMIL&ENGLISH

| 9. | Immunology |
|----|------------|
|----|------------|

- 10. Cell Biology
- 11. Molecular Biology
- 12. Environmental Biotechnology
- 13. Clinical Mycology and Virology
- 14. Clinical Parasitology
- 15. Applied Microbiology
- 16. Microbial Biotechnology
- 17. Basics of Biotechnology
- 18. Bioinstrumentation

| PG | 1. Nanotechnology |
|----|--------------------------------|
| | 2. Plant Biotechnology |
| | 3.Molecular Biology |
| | 4.Biochemistry |
| | 5.Metabolomics |
| | 6.Enzymes |
| UG | 1. Plant Tissue Culture |
| | 2. Microbial Biotechnology |
| | 3. Molecular Genetics |
| | 4. Bio- molecules |
| | 5. IPR, Bio-ethics & Biosafety |
| | 6. Environmental Studies |
| | 7. Value Education |
| | 8. Plant Biotechnology |

8. S ubjects Taught

| Date | Organizer | Name of the Seminar | Paper Name |
|-------------------------|---|--|---|
| 7.04.2022 | KSR, Thiruchengode | Biotechnological Effective Apporaches | Invitro tuber production of |
| | | in science and | medicinal plant |
| | | Technology | Dioscorea |
| | | | oppositifolia |
| | | | L.for the |
| | | | enhancement of |
| 26.04.2021 | Patent Information | Doutioinatad | Diosgenin Tachnalagy transfor |
| 20.0 4 .2021 | Centre, Tamil Nadu | Participated | Technology transfer and commercialization |
| | State Council for | | aspects for SMEs |
| | Science and | | aspects for SIVIL's |
| | Technology | | |
| 28.04.2021 | Patent Information | Participated | Indigenous SMEs and |
| | Centre, Tamil Nadu | | Intellectual Property |
| | State Council for | | 1 7 |
| | Science and | | |
| | Technology | | |
| 30.04.2021 | Mary Matha College of | Participated | The impact of Covid- |
| | Arts and Science, | | 19 Pandemic on |
| | Periyakulam. | | Management and |
| | - | | Business Practices |
| 21/05/2021 | Valluvar College of | Participated | Explaining: Quality |
| | Science and | | mandate for Higher |
| | Management, Karur | | Education Institutions |
| 22/07/2021 | NGG 0 II 1 11 | | in India |
| 23/05/2021, | NSS &Kalasalingam | Participated | Certification |
| | School of Agricultural | | Procedures for Organic standards |
| | and Horticultural, Kalasalingam Academy | | standards |
| | of Research and | | |
| | Education, Krishnankoil | | |
| 21/06/2021 & | International School of | | A two day online |
| 22/06/2021 | technology& science | r | Global submit on |
| | for Women, East | | Enhancing Women |
| | Ganuguden, | | Empowerment through |
| | Rajanagaram | | Entrepreneurship |
| 16/08/2021 | Lady Doak College, | Participated | How to read Scientific |
| | Madurai, Tamil Nadu. | | Literature? |
| 16.9.2021 & | , School of Chemistry, | Participated | Indo – Malaysian Two |
| 17.09.2021 | Madurai Kamaraj | | Days International E- |
| | University and India | | Conference Partially |
| | and BioSES Research | | funded by MKU- |
| | Interest Group, Faculty of Science and Marine | | RUSA Phase II Scheme on Recent |
| | Environment, | | Trends in Natural |
| | University of Malaysia, | | Products Research and |
| | Terengganu. | | their Applications |
| 27/09/2021 & | Department of | Participated | A Juncture of Classical |
| 28/09/2021 | Microbiology, The | т | and Contemporary |
| | Madura College | | Research in Biological |
| | (Autonomous), | | Sciences |

| | Madurai. | | |
|-------------------------------------|--|--|--|
| 28/10/2021 & 28/10/2021 | , Department of Studies in Microbiology, Karnataka State Open University, Mysuru in Collaboration with Microbiology & Fermentation Technology Department, CSIR-Central Food Technological Research Institute, Mysuru | antidepressant efficiency of callus extract, in vitro tuber extract and in vivo tuber extract of Dioscoreaoppositifolia L. in Swiss albino mice | Gut- Brain – Health Connections |
| 05/06/2020 At 2.30pm | Fatima College, Madurai | International Webinar Novelties in Neutraceuticals | Participated |
| 08/06/2020 | GTN Arts of college (Autonomous), Dindigul | National level FDP on" Future of examinations: Bloom's Taxonomy and multiple assessment tools" | Participated |
| 09/06/2020 at 3.30 pm to 5.30 pm | Mahatma Gandhi University, School of Management and Business Studies, Kerala &MAR Baselio Institute of Technology and Science, Kothamangalam | International Webinar on How to Get Research Grants from UGC, AICTE | Participated |
| 11/06/ 2020 | Seethalakshmi Ramaswami college (Autonomous), Trichy | National webinar on "Nature as medicine" | Participated |
| 14/06/ 2020 | Dr. SivanthiAditanar College of Engineering, Tiruchendur. | International Webinar on "Biomaterials and their applications" | Participated |
| 10/07/2020 & 10/07/2020 | Dr. M.G.R. Educational and Research Institute, Chennai | A Two day National Level Workshop on "Understanding OBS studio &Streamyard for E- content creation and Live streaming" | Participated |
| 17/07/2020 | Cauvery College for Women (Autonomous), Trichy | International Webinar on "The Paradigm shift in weight management" | Participated |
| 24/07/2020 & 25/07/2020 | New Prince Shri Bhavani Arts and Science College, Chennai | <u> </u> | Participated |
| 6/03/2019- 8/03/2019 | Pavendar Bharathidasan Collegeof Engineering & Technology | International Conclave | Isolation, Purification and mass production of protease from Bacillus cereus |

| 6/03/2019- 8/03/2019 | Pavendar Bharathidasan Collegeof Engineering & Technology | International Conclave | Anxiolytic and Anti- depressant effects of AgNps fabricated using Diosgenin |
|-------------------------|---|--|--|
| 22/02/2019 | Periyar EVR College (Autonomous), Trichy | International Conferenceon Cancer Inferno and Its Prevention Strategies | Synthesis of Plant Mediated Gold Nanoparticles using <i>Azima tetracantha</i> Lam. Leaves Extract and Evaluation of their Antimicrobial Activities. |
| 11/09/2018 | Holy Cross College (Autonomous), Trichy | International Conferenceon New Vistas in Life Sciences | Green Synthesis of Silver Nanoparticles using Momordica charantia Fruit Extract and its Anti- coagulant Activity |

9. Details of Seminars / Conferences / Workshops Attended:

| Year & Date | Organizer | Title | National / | Topic |
|---------------|---|---|------------------|------------------|
| | | | International | |
| 22/ 02/2022 | Department of | National Science | Lecture Workshop | "Thrust Areas in |
| & | Biotechnology, Cauvery | Academies' Education | in Biotechnology | Biosciences" |
| 23/ 02/2022 | College For Women, | Programme | | |
| | Trichy | | | |
| 10.06.2021 | Department of | Improving the Quality | FDP | Improving the |
| | Biotechnology, Cauvery | and Visibility of | | Quality and |
| | | Scientific Research | | Visibility of |
| | College For Women, | Publications | | Scientific |
| | Trichy. | | | Research |
| | | | | Publications |
| 10.06.2021 | Department of Biotechnology and IQAC | Dr. K. S. Subramanian, Director of Research, Tamil Nadu Agricultural University, Covai. | FDP | Grantsmanship |
| September 28- | Department of | Two days Science | - | Advances in |
| 30, 2018. | Biotechnology, Cauvery | Academies' Lecture | | Biosciences |
| | College For Women, | Workshop | | |
| | Trichy. | | | |
| | Thanthai Hans Roever | | | Emerging |
| 19/02/2019 | College (Autonomous), | One Day Conference | International | Trends in |
| | Perambalur | | | Biosciences |

10. 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 |
| Cultural In-charge | 2019-2020 |
| Placement In-charge | 2021-2022 |

11. 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 |

12. 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 |

13. 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, India. Email:iyalpublication @gmail.com | 938528352-9 |

b. Book Chapters

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

c.Popular articles

 $New spapers-Thinakaran\ Paper\ Pg. No. 19. Dated. 24. January 2013$

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 profiency 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, Tiruchirapalli (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 &11th Jan 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 0n 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.

${\bf g.}\ Seminars/Conferences/Trainings\ attended\ and\ paper\ presented\ Previously$

| 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 Dioscorea oppositifolia 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 Sustainable Utilization Management and Conservation of Bio Resources (Ora Presentation) (ICSMCB- 2013) | St.Joseph's college. (Autonomous),Tiruchirappalli- 620002, Tamilnadu,India on | 10 &11thJan 2013(Oral Presentation) |
| 4 | Best oral Presentation Award International Conference on Gree Technology for Environmental Pollution Prevention and control (ICGTEPC 2014) On "In vitro cytotoxicity of Silve nanoparticles synthesized from Diosgenin , steroidal saponin an active constituents of Dioscore oppositifolia L. agains Breast Cancer cell lin MCF-7". | Engineering, National Institute of Technology Tiruchirapalli (NITT), India or d a e a e a st | 27th-29th September 2014 (Oral Presentation) |

| 5 | International Conference on Green Technology for Environmental Pollution Prevention and control (ICGTEPC 2014) Oral Presentation award Silver nanoparticles synthesis from Aristolochia tagala Cham., an endangered plant for the application of Photocatalytic degradation of dyes and its antimicrobial activity." | | 27th-29th September 2014 (Oral Presentation) |
|----|---|--|---|
| 6 | International conference on Energy and Environmental Engineering | Department of Petrochemical Technology, Anna University-BIT Campus, Tiruchirappalli- 620024, Tamilnadu, India. sponsored by TEQIP-II | 6&7 November 2014(Oral Presentation) |
| 7 | International conference on Reasserting Microbial Biotechnology to deflate global disease burden | Microbial Biotechnology Laboratory, Department of Biotechnology, Manonmanian Sundaranar University, Tirunelveli- 627012, Tamilnadu, India. | 28&29 September 2015(Oral Presentation) |
| 8 | International Conference On "New Vista in Life Sciences" | Presented paper On "Green synthesis of silver nanoparticle from Momardica charantiae fruit extract and its anti coagulant activity | 11 th September, 2018 Holycross College, (Autonomous) Trichirappalli- 620002. (Oral Presentation) |
| | National Conference | | |
| 9 | • | Department of Plant Science, Bharathidasan University | March 28&29(2014) |
| 10 | 3 | I.J. Arts and Science college, Pudukkottai | 16 th ,17 th March 2008 |

| 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.* (SCI –Impact-5.08)
- 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.Uma Maheswari R(2021).Invitro cytotoxicity of Dioscorea oppositifolia L., against breast cancer cell line MCF- International Journal of Botany Studies.Volume 6;Issue 2;2021.Page No. 427-429.
- **4.**Joe Antony Jacob, ArunPrasanna Vimalanathan, Ziyu Jiang, Rajesh Mani, Prasannabalaji Nainangu, **Uma Maheswari Rajadurai**, Baoan Chen (**2018**).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). Invitro 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-

- **12. Uma Maheswari R,** Lakshmi Prabha A, Nandagopalan V, and Anburaja V (2011). Antimicrobial Activity of *Dioscorea oppositifolia* L. an endangered Medicinal Plantagainst 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 -2021-2021

Seminar/ Conference /Workshop Attended

International Webinar -5

National Webinar - 10

Faculty Development Programme -4

Workshop -2

Online Course Completed -4

ANY OTHER INFORMATION -2021-2022 Seminar/ Conference / Workshop Attended

International Webinar -3

International Conference -2

National Webinar - 12

Faculty Development Programme -3

E Workshop -2