Name : Dr. D. ARUL ANANTH, M.Sc., Ph.D., PDF (Israel)

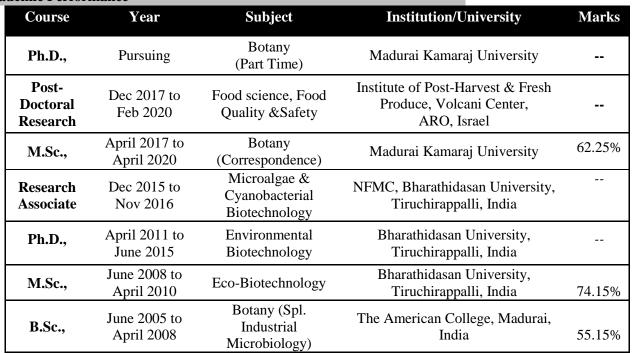
Designation : Assistant Professor
Department : Biotechnology

Address : The American College, Satellite Campus, Madurai

Date of Joining : 05/07/2023

E-mail : arulananth@americancollege.edu.in

Academic Performance



Positions Held

- **Assistant Professor**, Department of Biotechnology at The American College Madurai (Since July 2023).
- **Head,** Centre for Plant Tissue Culture & Central Instrumentation at Karpagam Academy of Higher Education, Coimbatore (Aug 2022 to July 2023).
- ♣ Associate Professor, Department of Biotechnology at Karpagam Academy of Higher Education, Coimbatore (Dec 2020 to July 2023).
- **4** Guest Scientist at Gilat Research Center, ARO, Israel (March 2019 to Feb 2020).
- **ARO** (Indo-Israel) Post Doctoral Fellow at Gilat Research Center, Israel (Dec 2016 to Dec 2018).
- ♣ Research Associate at NFMC, Bhartahidasan University, India (Dec 2015 to Nov 2016).
- **University Research Fellow** at Bharathidasan University, India (July 2013 to Dec 2014)

Other Academic Positions

- Coordinator SWAYAM NPTEL online courses (Feb 2022 to July 2023).
- **Coordinator** − **NAAC Criteria 4** (Feb 2022 to July 2023).



Research Experience

Post-Doctoral Research: (March 2019 – Feb 2020)

Title: Mass spectrometry based fingerprinting of nutritional compounds from Teff and Fonio using UPLC-TO-S-MS/MS.

Supervisor: Dr. Liron Klipcan

Post-Doctoral Research: (Dec 2016 – Dec 2018)

Title: Phytochemical composition and health-promoting properties of Sesame and Teff.

Supervisor: Dr. Zipora Tietel

Research Associate: (Dec 2015 - Nov 2016)

Title: Sustainable bio energy from microalgae – A systems perspective (BBSRC, Indo-UK Project)

Supervisor: Prof. L. Uma

Doctoral Research: (Apr 2011- July 2015)

Title:Profiling of bioactive compounds from *Pergularia daemia* Forsk. (Veliparuthi) through LC-MS analysis and evaluating its anti-arthritic potential.

Supervisor: Prof. T. Sivasudha

Post Graduate Dissertation: (Jan 2010 - Apr 2010)

Title:Isolation and identification of gut microbes from cotton pest *Spodoptera litura* through molecular approach.

Supervisor: Prof. M. Krishnan

Under Graduate Dissertation: (Jan 2008 - Apr 2008)

Title: Survey of wild edible medicinal plants in Madurai & Virudhunagar districts, Tamil Nadu.

Supervisor: Prof. Winfred Thomas

Awards

- 4 Annual Research Day cash award for WOS research publication by KAHE, Coimbatore 2021 & 2022.
- **↓** Outstanding Reviewer Award 2018 by Elsevier.
- **♣ Best Alumni Award 2018** at Bharathidasan University, India on 8th April, 2018.
- **♣ Best Poster Award** in2ndInternational Conference on **Advances in Plant Sciences (ICAPS 2014),** Malaysia on 18th to 22nd November, 2014.
- **Best Poster Award** in National Conference on "**Recent Trends in Bioprospecting of Plants**", India on 28 & 29th March, 2014.

Research Publications (33)

- 1. Suganya T^{OI}, Packiavathy IASV^{OI}, Aseervatham GSB, Carmona A, Rashmi V, Mariappan S, Devi NV, **Ananth DA*** (2022). Tackling Multiple-Drug-Resistant bacteria with conventional and complex phytochemicals. *Frontiers in Cellular and Infection Microbiology*, 12: 883839, 1-21. [IF- 6.073] (Corresponding author)
- 2. Suriyakalla U^Q, **Ananth DA** , Ramachandran R, Sankarganesh D, Angayarkanni, Tietel Z*, Achiraman S* (2022). Analysis of phytochemical composition of leaf extract of sacred fig (*Ficus religiosa* L.) by UPLC-QqQ-MS and assessment of their hepatocurative potential in mouse model. *South African Journal of Botany*. (Q equal first author contribution). In Press [IF- 3.111]
- 3. **Ananth DA***, Deviram G, Mahalakshmi V, Bharathi BR (2021). Active status on phytochemistry and pharmacology of *Pergulariadaemia*Forsk. (Trellis-vine) a review. *Clinical Phytoscience*. 7:60. (Corresponding author)
- 4. Tietel Z^{OI}* **Ananth DA**OI, Klipcan L, Sivasudha T (2021). Metabolomics of *Cassia auriculata* L. plant parts (leaf, flower, bud) and their ant diabetic medicinal potentials. *OMICS: A Journal of Integrative Biology*. In Press (OI equal first author contribution). [IF- 3.978]
- 5. **Ananth DA**, Mahalakshmi V, Sivasudha T, Klipcan L, Tietel Z* (2021). Identification and quantification of polyphenols from *Cassia auriculata* L. leaf, flower and bud using UPLC-QqQ-MS/MS. *Israel Journal of Plant Sciences*.1 (aop), 1-9. [IF- 0.675]
- 6. Tietel Z*, Simhon E,Gashu K, **Ananth DA**, Schwartz B, SarangaY, Yermiyahu U (2020). Nitrogen availability and genotype affect major nutritional quality parameters of tef grain grown under irrigation. *Scientific Reports*. 10:14339.[IF- 4.996]
- 7. Deviram G, Mathimani T, Anto S, ShanAhamed T, **Ananth DA**, Pugazhendhi A* (2019). Applications of microalgal biomass on the way to a sustainable environment. *Journal of Cleaner Production*. 253:119770 [IF- 11.072]
- 8. Srinivasan V, Jhonsi MA, Dhenadhayalan N, Lin K, **Ananth DA**, Sivasudha T, Radhakrishnan N, Kathiravan A* (2019). Pyrene-based prospective biomaterial: *In vitro* bioimaging, protein binding studies and detection of bilirubin and Fe³⁺. *SpectrochimicaActa Part A: Molecular and Biomolecular Spectroscopy.* 221: 117150. [IF- 4.831]
- 9. Deviram G, Muthukumar C, **Ananth DA**, Mathimani T, Pham AD, Pugazhendhi A* (2019). Cyanobacteria role in agriculture and industrial sectors: An outlook on economically important by products. *Applied Microbiology and Biotechnology*. 103: 4709-4721 [IF- 5.560]
- 10. Jeyadevi R, **Ananth DA**, Sivasudha T* (2019). Hepatoprotective and antioxidant activity of *Ipomoea staphylina* Linn. *Clinical Phytoscience*. 5:18.

- 11. **Ananth DA***, Deviram G, Mahalakshmi V, Sivasudha T, Tietel Z* (2019). Phytochemical composition and antioxidant characteristics of traditional cold pressed seed oils in South India. *Biocatalysis and Agricultural Biotechnology*. 17: 416 421. (Corresponding author)
- 12. Guna R, Kumar LD, Karthik R, Abbirami E, Gayathri N, **Ananth DA**, Sivasudha T* (2019). Dietary advanced glycation end products as potential endocrine disruptors; an inevitable threat to contemporary and future generation. *Environment International*. 123: 486 500. [IF- 13.352]
- 13. Karthik R, **Ananth DA**, N Gayathri N, Kumar LD, Sivasudha T* (2019) Evaluation of Anti-arthritic Potential of *Pisoniagrandis* R. Br Against Complete Freund's Adjuvant (CFA) Induced Albino Wistar Rats. *Phytotherapie*.16 (S1), S96-S103.
- 14. **Ananth DA**, Tietel Z, Aseervatham GSB, Deviram G, Sivasudha T* (2018). Phytochemical and pharmacological status of indigenous medicinal plant *Pedalium murex L. Biomedicine and Pharmacotherapy*. 103: 1456-1463.[IF- 7.419]
- 15. Rameshkumar A, **Ananth DA**, Sivasudha T* (2018). Diuretic effect of chlorogenic acid from traditional medicinal plant *Merremia emarginata* (Burm. F.) and its by product hippuric acid. *Clinical Phytoscience*. 4: 29.
- 16. Jhonsi MA*, **Ananth DA**, Gayathri N, Sivasudha T, Yamini R, Behra S, Kathiravan A (2018). Antimicrobial activity, Cytotoxicity and DNA binding studies of Carbon Dots. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 196: 295-302. [IF-4.831]
- 17. Bhuvaneshwari T, Princey RD, Rashmi V, Deviram G, **Ananth DA**, Uma L, Prabaharan D*, (2017). Cytomorphological and nitrogen metabolic enzyme analysis of psychrophilic and mesophilic *Nostoc* sp.: a comparative outlook. *3 Biotech*, 7: 107.[IF-2.893]
- 18. Dineshbabu G, Uma VS, Mathimani T, Deviram G, **Ananth DA**, Prabaharan D, UmaL* (2017). On-site concurrent carbon dioxide sequestration from flue gas and calcite formation in ossein effluent by a marine cyanobacterium *Phormidium valderianum* BDU 20041. *Energy Conversion and Management*, 141: 315-324. [IF-11.533]
- 19. **Ananth DA**, Rameshkumar A, Jeyadevi R, Aseervatham GSB, Sripriya J, Bose PC, Sivasudha T* (2016). Amelioratory effect of flavonoids rich *Pergularia daemia* extract against CFA induced arthritic rats. *Biomedicine and Pharmocotherapy*, 80:244-252 [IF- 7.419]
- 20. Ananth DA, Rameshkumar A, Jeyadevi R, Jagadeeswari S, Nagarajan N, Renganathan R, Sivasudha T* (2015). Antibacterial potential of rutin conjugated with thio glycolic acid capped cadmium telluride quantum dots (TGA-CdTe QDs). SpectrochimicaActa Part A: Molecular and Biomolecular Spectroscopy, 138: 684–692. [IF- 4.831]
- 21. Ilangovan A*, Anandhan K, Prasad KM, Vijayakumar P, Renganathan R, **Ananth DA**, Sivasudha T (2015). Synthesis, DNA-binding study, and antioxidant activity of 14-aryl-14H-dibenzo[a,j]xanthene derivatives. *Medicinal Chemistry Research*, 24: 344-355. [IF-2.351]

- 22. Revathi R*, **Ananth DA**, Rameshkumar A, Sivasudha T (2015). Synthesis, Characterization and Antioxidant Studies of Curcumin Derivatives. *Asian Journal of Chemistry*, 27(4): 1489.
- 23. **Ananth DA**, Aseervatham GSB, Kartick R, Sivasudha T* (2014). Detection of phenolics and appraisal of antioxidant and antimicrobial properties of *Arenga wightii*. *International Journal of Pharmaceutical Sciences Review and Research*, 26(1): 55-62.
- 24. Kathiravan A*, Sundaravel K, Jaccob M, Dhinagaran G, Rameshkumar A, **Ananth DA**, Sivasudha T (2014). Pyrene Schiff base: Photophysics, Aggregation Induced Emission and Antimicrobial Properties. *The Journal of Physical Chemistry B*, 118(47):13573-81. [IF-3.466]
- 25. Aseervatham GSB, Sivasudha T*, Sasikumar JM, Christabel PH, Jeyadevi R, Ananth DA (2014). Antioxidant and hepatoprotective potential of *Pouteriacampechiana* on acetaminophen-induced hepatic toxicity in rats. *Journal of Physiology and Biochemistry*, 70(1): 1-14[IF-5.080]
- 26. Revathi R*, **Ananth DA**, Sivasudha T, Elizabeth PS (2014). Synthesis, Characterization, *In vitro* Antioxidant and Antimicrobial Studies of Rhodanine Functionalized Quinoline Derivatives. *Advanced Science Focus*, 2: 1-8.
- 27. **Ananth DA**, Sivasudha T*, Rameshkumar A, Jeyadevi R, Aseervatham GSB (2013). Chemical constituents, *in vitro* antioxidant and antimicrobial potential of *Caryotaurens* L. *Free Radicals and Antioxidants*, 3:107-112.
- 28. Nagarajan N, Vanitha G, **Ananth DA**, Rameshkumar A, Sivasudha T,Renganathan R* (2013). Bioimaging, Antibacterial and Antifungal properties of imidazole-pyridine fluorophores: Synthesis, Characterisation and Solvatochromism. *Journal of Photochemistry and Photobiology B: Biology*, 127:212-222.[IF-6.814]
- 29. Jeyadevi R, Sivasudha T*, Rameshkumar A, **Ananth DA**, Aseervatham GSB, Kumaresan K, Kumar LD, Jagadeeswari S, Renganathan R (2013). Enhancement of anti arthritic effect of quercetin using thioglycolic acid-capped cadmium telluride quantum dots as nanocarrier in adjuvant induced arthritic Wistar rats. *Colloids and Surfaces B: Biointerfaces*, 112: 255–263. [IF-5.999]
- 30. Aseervatham GSB, Sivasudha T*, Jeyadevi R, **Ananth DA** (2013). Environmental factors and unhealthy lifestyle influence oxidative stress in humans an overview. *Environmental Science and Pollution Research*, 20: 4356 4369. [IF-5.190]
- 31. Rameshkumar A, Sivasudha T*, Jeyadevi R, Sangeetha B, **Ananth DA**, Aseervatham GSB, Nagarajan N, Renganathan R, Kathiravan A (2013). *In vitro* antioxidant and antimicrobial activities of *Merremiaemarginata*using thio glycolic acid-capped cadmium telluride quantum dots. *Colloids and Surfaces B: Biointerfaces*, 101: 74-82. [IF-5.999]
- 32. Rameshkumar A, Sivasudha T*, Jeyadevi R, **Ananth DA**, Pratheepa G (2012). Effect of environmental factors [air and UV-C irradiation] on some fresh fruit juices. *European Food Research and Technology*, 234: 1063–1070. [IF-3.498]

33. Jeyadevi R, Sivasudha T*, Rameshkumar A, Sangeetha B, **Ananth DA**, Aseervatham GSB (2012). Nutritional constituents and medicinal values of *Momordica cymbalaria* (Athalakkai) - A review. *Asian Pacific Journal of Tropical Biomedicine*, S456-S461. [IF-1.514]

Book Chapters (4)

- 1. Kannan K, Ramachandran R, Suvathika G, **Ananth DA**, Murugan Mani Sabareesh MM. (2023). Nanomaterials degradation by enzymes, Nano-Enzyme Incorporated Particles: Fundamental Concepts, Synthesis and Applications, edited by Chaudhery Hussain, Ananthi Veleeswaran and Alagarsamy Arun, Nano-Enzyme Incroprated Particles: Fundamental Concepts, Synthesis & Applications. (Accepted)
- Aseervatham GSB, Ananth DA, Doulathunnisa JA (2022). Nanobiocatalysts and photocatalyst in dye degradation". Emerging Contaminants: Remediation Technologies, edited by Jeyaseelan Aravind and Murugesan Kamaraj, Berlin, Boston: De Gruyter, pp. 121-144. https://doi.org/10.1515/9783110751727-006ISBN: 9783110751581
- 3. Aseervatham GSB, **Ananth DA**, Sivasudha T (2018). The Liver: Oxidative Stress and Dietary Antioxidants, edited by Vinood B. Patel, RajkumarRajendram and Victor R. Preedy, Academic Press, pp. 239-246. https://doi.org/10.1016/B978-0-12-803951-9.00020-3 ISBN: 9780128039519
- 4. Rameshkumar A, **Ananth DA**, Sivagurunathan P, Deviram G, Sivasudha T* (2018). Green Metal Nanoparticles: Bioconjugated quantum dots used for pathogen reduction and detection, edited by SuvardhanKanchi and Shakeel Ahmed, Wiley Book Edition, Scrivener Publishing LLC, pp. 671-690.https://doi.org/10.1002/9781119418900.ch19ISBN: 978-1-119-41887-0

Abroad Visits (2)

| Country | Purpose | Date |
|----------|------------------------|----------------------|
| Israel | Post Doctoral Research | Jan 2017 to Feb 2020 |
| Malaysia | Poster Presentation | 18-22 November 2014 |

Memberships in Professional Bodies (2)

- Member **Board of studies** in the Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore (2022 & 2023).
- Life Member International Society of Quantum Biology and Pharmacology. (Since Aug 2022).

SWAYAM NPTEL online courses completed (2)

- Experimental Biotechnology
- Electronic Waste Management

Webinar Organized (6)

- 1. Guest lecture on "The Chemistry of Day-to-Day life: Hidden Facts and Bitter Truths" was organized by Centre for Plant Tissue Culture & Central Instrumentation, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India on 03.03.2023. (Resource person: Dr. Guna Ravichandran).
- 2. Webinar on "Gas Chromatography an Mass Spectrometry (GC-MS) an Integrated Approach for Analysis, Identification, Quantification and Beyond" was organized by Department of Biotechnology,

Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India on 26.10.2022. (Resource person: Dr. Srimurali Sampath).

- **3.** Guest lecture on "Principle and Applications of Confocal Microscopy" was organized by Centre for Plant Tissue Culture & Central Instrumentation, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India on 21.10.2022. (Resource person: Dr. Udhayaraj Suriyakalaa).
- **4.** Webinar on "**Seaweeds resources in India : Cultivation, Opportunities and Challenges**" was organized by Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India on 05.008.2022. (Resource person: Dr. Dinesh Kumar).
- **5.** Webinar on "**Skills of Entrepreneurs from Science to Business Road to Success**" was organized by Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India. on 24.09.2021. (Resource person: Dr. G. Smilin Bell Aseervatham).
- **6.** A Vitrual International Laboratory Visit & Special Lecture on "**Mycotoxoins contamination in food and feed and their health impacts**" was organized on 25.02.2021, Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India. (Resource person: Dr. Sunderson Sadhasivam).

Editorial Activity

Co- Editorin a compendium of abstracts (*ISBN: 978-93-83213-15-3*) presented in the **International Conference on Microalgal and Cyanobacterial Biotechnology (MACB 2016**) on August 30th to September 01st 2016, held at NFMC, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.

Area of Interest

- Phytochemistry & Phytomedicine
- ❖ Agricultural Food Chemistry
- ❖ Food Quality & Safety

Journal Reviewer (10)

- ✓ Applied Biochemistry and Biotechnology (*Springer*)
- ✓ Steroids (*Elsevier*)
- ✓ Process Biochemistry (*Elsevier*)
- ✓ Bioorganic Chemistry (*Elsevier*)
- ✓ Industrial Crops and Products (*Elsevier*)
- ✓ Biocatalysis and Agricultural Biotechnology (*Elsevier*)
- ✓ Photobiology and Photochemistry B: Biology (*Elsevier*)
- ✓ 3 Biotech (*Springer*)
- ✓ Metabolic Brain Disease (*Springer*)
- ✓ Pharmaceutical Biology (*Tailor & Francis*)

Techniques Known

- ❖ UPLC-TQ-S -MS/MS (*Waters Acquity, Xevo TQ-S Micro*)
- UHPLC (Arc HPLC, Waters)
- **❖** HPLC (*Waters* & *Agilent*)

Hands on Training (2)

- Participated virtual hands on training on "Data Interpretation of GC-MS & LC-MS" organized by CytoGene Research & Development, Lucknow during 02nd to 03rd April, 2022.
- 2 Participated hands on training on "Instrumentation of Preparative High Performance Liquid Chromatography (Prep-HPLC)" at the Sophisticated Instrumental Facility, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli during 12 to 15th July, 2021.

M.Sc., student dissertation guidance (11)

- 1. Mr. **Sakthi Vignesh K.** Targeted metabolite profiling of *Helicteresisora L.* (Malvaceae) fruit extract using GC-MS and UPLC-Q-TOF-MS. (May 2023).
- 2. Ms. **Sakthi Keerthana M. -** Comparison of targeted metabolites from Cassia flowers using GC-MS and UPLC-Q-TOF-MS analysis. (May 2023).
- 3. Ms. **Rajeswari K.** Evaluation of *in vitro* antioxidant, anti-bacterial and anti-cancer potential of *Moringa oleifera* L. leaf extract. (May 2023).
- 4. Mr. **Adilmehadi Karikazi** Pharmacoinformatics based investigation of traditional medicinal plants for hepatoprotective effect against Rifampicin induced liver injury. (May 2023).
- 5. Ms. **Shree Vakkund** Antimicrobial activity of *Eucalyptus globules* Labill. Essential oil: A negative report. (May 2023).
- 6. Ms. **Perosia Nancy J. -** GC-MS profiling of phytocompounds from various parts of *Delonix elata* (L.) Gamble: A comparative study. (May 2023).
- 7. Mr. Nihaal Ahamed N. Identification of polyphenolic compounds from *Delonix elata* (L.) Gamble using UPLC-Q-TOF-MS and appraisal of it's *in vitro* antioxidant potential. (May 2023).
- 8. Ms. **Mamtha M.** Confirmation of polyphenols from *Delonix elata* (L.) Gamble extract using UHPLC analysis: A comparative study. (May 2023).
- 9. Ms. **Almas S. -** UPLC-Q-TOF-MS profiling of phytochemicals from *Drynaria quercifolia* (L.) rhizome and assessment of its anti-cancer potential. (April 2022).
- 10. Mr. **Veeraprakash -** Anti-cancer potential of *Ipomoea aquatic* Forsk. (Water spinach) leaf extract against HSC3 oral cancer cell lines. (April 2022).
- 11. Ms. **Nandhini P.** Phytochemicals profiling of *Ipomoea pes-tigridis* L. using UPLC-Q-TOF-MS and evaluating its *in vitro* antioxidant potential. (April 2021).

Paper's / Posters presented (International conferences – 10)

- Devanesan Arul Ananth* presented a paper entitled "Chromatography Mass Spectrometry (LC-MS) in Agriculture and Food Chemistry" in International Conference on "Innovative Approaches in Life Sciences-ICIALS23, on 24th to 25th of March 2023, held at Department of Food Science and Nutrition, The American College, Madurai, Tamil Nadu, India.
- 2. **D. Arul Ananth***and S. Suresh presented a poster entitled "UPLC-ESI-MS based phytochemicals analysis from *Drynaria quercifolia* rhizome and evaluation of its anti-cancer potential" in **International Symposium on Plant Taxonomy, Ethanobotany and Botanic Gardens**, on 13th to 14th of February 2023, held at Botanical Survey of India, Kolkata, India.

- 3. **Devanesan Arul Ananth*** presented a paper entitled "Identification and confirmation of phytochemicals from medicinal plants using UPLC-MS/MS and evaluating its biological activities" in **International Conference on Unifiying Biology Through Diversity (ICUBD 2022),** on 14th to 15th of October 2022, held at PG & Research Department of Botany, The American College, Madurai, Tamil Nadu, India.
- 4. **Devanesan Arul Ananth*** and Liron Klipcan* presented a poster entitled "Mass spectrometry based phytochemical finger printing of African nutritious grains Teff and Fonio using UPLC-QqQ-MS/MS and GC-MS" in **International Conference on Recent Advances in Applied Sciences, Technology and Health** (**RASTH 2021**), Virtual on 03rd to 05th of March 2021, held at SRM Institute of Science and Technology, Chennai, Tamil Nadu, India.
- 5. **Devanesan Arul Ananth*** presented a paper entitled "Nitrogen: A key factor affecting sesame seed oil phytonutrients" in International Symposium on "Innovative Approaches in Life Sciences-ICIALS23, on 07.01to 25th of January 2019, held at PG & Research Department of Biotechnology and Bioinformatics, Holy Cross College, Tiruchirappalli, Tamil Nadu, India,
- 6. **Devanesan Arul Ananth**, Tilagar Sivasudha*. presented a poster entitled "Identification of bioactive compound from *Pergularia daemia* Forsk and evaluating its anti- arthritic potential" in **XXVI Annual Conference of Indian Association for Angiosperm Taxonomy (IAAT)** and International Seminar on Conservation and Sustainable Utilization of Biodiversity on 07th to 09th of November 2016, held at Shivaji University, Kolhapur, Maharashtra, India.
- 7. **Devanesan Arul Ananth**, Tilagar Sivasudha*. presented a paper entitled "Role of bio flavonoids against Rheumatoid Arthritis" in **International Conference on Environment and Health in Changing Climate** (**ICEHCC 2016**) on 14th to 16th of September 2016, held at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.
- 8. R. Karthik, **D. Arul Ananth**, N. Gayathri, L. Dinesh Kumar, R. Guna, E. Abbirami, T. Sivasudha*. HPLC profiling and *in vitro* antioxidant studies on *Pisoniagrandis R.Br*. (LeechaiKottaiKeerai) in **International Conference on Environment and Health in Changing Climate (ICEHCC 2016)** on 14th to 16th of September 2016, held at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.
- 9. Chandra Bose P, Arul Ananth D, Deviram GVNS, Shan Ahamed T, Uma L, Maheshwari AS presented a paper entitled "In vitro antioxidant efficacy of C-phycoerythrin from marine filamentous cyanobacteria Phormidium sp." in International Conference on Microalgal and Cyanobacterial Biotechnology (MACB 2016) on August 30th to September 01st 2016, held at National Facility for Marine Cyanobacteria, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.
- 10. **Devanesan Arul Ananth** and ThilagarSivasudha* presented a poster entitled "Anti arthritic potential of *Pergularia daemia* Forsk.: A traditionally reported medicinal plant" in 2nd **International Conference on Advances in Plants Sciences (ICAPS 2014)**"on November 18th to 22nd, 2014 held at Hotel Four Points by Sheraton, Kuching, Sarawak, Malaysia. (**Best Poster Award**).

Paper's / Posters presented (National conferences - 4)

- Devanesan Arul Ananth, Dharmar Prabaharan, Lakshmanan Uma, Thilagar Sivasudha* presented a paper entitled "Anti-rheumatic potential of flavonoid rich *Pergularia daemia* extract against CFA induced arthritic rats" in National Conference on Recent Trends in Modern Biology & 47th Aqua-Terr National conference on 27th and 28th of February 2016 held at Madurai Kamaraj University, Madurai, Tamilnadu, India.
- 2. D. Arul Ananth, R. Karthik, T. Sivasudha* presented a paper entitled "Antimicrobial activity of quantum dots (TGA-CdTe QDs) conjugated with phenolics for the control of microbes in drinking water" in National conference on Advances in Biological and Environmental Sciences (NCABES- 2016) on 25th & 26th of February 2016 held at Gandigram Rural University, Dindigul, Tamilnadu, India.
- 3. **Devanesan Arul Ananth,** G. Smilin Bell Aseervatham, Thilagar Sivasudha* presented a poster entitled "Antioxidant and hepatoprotective activity of *Pergularia daemia* containing polyphenolic compounds on CCl₄ induced liver damage in Wister rats" in National Conference on "Recent Trends in Bioprospecting of Plants" on March 28 & 29th, 2014 held at Department of Plant Science, Bharathidasan University, Tiruchirappalli, Tamilnadu, India. (Best Poster Award).
- **4. D. Arul Ananth,** G. Smilin Bell Aseervatham, T. Sivasudha* presented a paper entitled "*In vitro* free radical scavenging potential and antimicrobial activity of wild palm, *Arenga wightii* Griff." in **NABS- National Seminar on 'Microbes and Human Welfare'** on July 20 & 21, 2013 held at Department of Microbiology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.

Invited/Special Lectures (11)

| Sl. No. | Nature of Presentat ion | Nature and title of the program | Title of the presentation | Organizing College/Institute/Universit y | Date |
|------------|-------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------|
| 1. | Invited Lecture | International Conference on "Innovative Approaches in Life Sciences-ICIALS 23" | Application of Liquid Chromatography Mass Spectrometry (LC-MS) in Agriculture and Food Chemistry | Dept of Food Science and Nutrition, The American College, Madurai, Tamil Nadu, India | 25.03.2023 |
| 2. | Invited Lecture | Workshop on "General Techniques in Phytochemical Analysis". | High Performance Liquid Chromatography (HPLC) and its applications. | Department of Biotechnology (FOE) and Skill Development Centre, Karpagam Academy of Higher Education, Coimbatore | 08.02.2023 |
| 3. | Invited Lecture | Student Internship Program. | Principle and Basics of Chromatographic Techniques. | Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli | 02.12.2023 |

| 4. | Invited Lecture | Short term course on "Characterizations of Active Phytomolecules using Modern Technique". | Characterization of phytomolecules using Ultra Performance Liquid Chromatography Mass Spectrometry (UPLC-MS). | Department of Biotechnology(FASCM), Karpagam Academy of Higher Education, Coimbatore | 17.11.2022 |
|-----|---------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------|
| 5. | Invited Lecture | Short term course on "Environmental Biotechnology for Human Welfare". | Application of Municipal Solid Waste in Agriculture. | Department of Biotechnology(FASCM), Karpagam Academy of Higher Education, Coimbatore | 11.10.2022 |
| 6. | Invited Lecture (Virtual) | Hands on training program on "Chromatography and Extraction Techniques". | Applications of UHPLC-ESI-MS/MS on Phytochemistry, Agriculture and Food Chemistry. | Center for Laboratory Animal Technology and Research, Sathyabama Institute of Science and Technology, Chennai | 25.08.2022 |
| 7. | Invited Lecture (Virtual) | On line Student Development Program. | Application of Liquid Chromatography Mass Spectrometry (LC-MS) in Food and Phytochemistry. | Dept of Biotechnology and Bioinformatics, Holy Cross College, Tiruchirappalli, Tamil Nadu, India | 06.02.2021 |
| 8. | Invited Lecture | Special Lecture Program | Role of nitrogen fertilizer on sesame seed oil quality. | Dept of Botany, The American College, Madurai, Tamil Nadu, India | 22.02.2019 |
| 9. | Invited Lecture | Special Lecture Program | Effect of nitrogen fertilizer on sesame seed oil quality. | Dept of Microbiology, Madura College, Madurai, Tamil Nadu, India | 09.01.2019 |
| 10. | Plenary Lecture | International Symposium on | Nitrogen: A key factor affecting sesame seed oil phytonutrients. | Dept of Biotechnology and Bioinformatics, Holy Cross College, Tiruchirappalli, Tamil Nadu, India | 07.01.2019 |
| 11. | Special Lecture | Students Day Celebration | Effect of nitrogen fertilization on sesame seed oil phytochemicals. | Institute of Postharvest and Food Sciences, The Volcani Center, ARO, Israel | 22.11.2018 |

Travel Grants

- Received travel grant from Council of Scientific and Industrial Research (CSIR) to participate "Renewing the Tradition of Natural Product Research in India A Brain-Storming Meeting" CSIR-Central Drug Research Institute, Lucknow, India on 21st to 23rd January 2016,
- Received International travel grant from Council of Scientific and Industrial Research (CSIR) attending the 2nd International Conference on Advances in Plant Sciences (ICAPS 2014) Kuching, Sarawak, Malaysia on 18th to 22nd November, 2014.

• Received International travel grant from Centre for International Co-operation in Science (CICS) for attending the 2nd International Conference on Advances in Plant Sciences (ICAPS 2014) Kuching, Sarawak, Malaysia on 18th to 22nd November, 2014.

Abstracts submitted (International Conferences - 13)

- 1. S. Suresh and **D. Arul Ananth*** presented a poster entitled "UPLC-ESI-MS based phytochemicals analysis from *Drynaria quercifolia* rhizome and evaluation of its anti-cancer potential" in **International Symposium on Plant Taxonomy, Ethanobotany and Botanic Gardens**, on 13th to 14th of February 2023, held at Botanical Survey of India, Kolkata, India.
- 2. Murugan Priyadharshini **and Devanesan Arul Ananth*** presented a paper entitled "Identification of flavonoids from *Ipomoea aquatic* Forsk. and evaluation of its anti-cancer potential" in **International Conference on Unifiying Biology Through Diversity (ICUBD-2022),** on 14th to 15th of October 2022, held at PG & Research Department of Botany, The American College, Madurai, Tamil Nadu, India.
- 3. Sampath Manju Praveena, Sheik Ameer Almas, **Devanesan Arul Ananth***. Profiling of phytochemicals from *Drynaria quercifolia* (L.) rhizome and assessment of its anti-cancer potentialin **1**st **International Conference on Recent Innovations in Multidiciplinary Scientific Research (ICRIMSR 2022)** during 09th to 11th June 2022, held at Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, Tamilnadu, India.
- 4. Jenifer Vargeese, Abdul Saleem Rasheedha, Moses Lenus Joy, Devanesan Arul Ananth*.Identification of bioactive compounds from *Ipomoea pes-tigridis* L. leaf extract and evaluating its anti-cancer potential in 1st International Conference on Recent Innovations in Multidiciplinary Scientific Research (ICRIMSR 2022) during 09th to 11th June 2022, held at Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, Tamilnadu, India.
- 5. Sivakumar Arun Bharathi, Devanesan Arul Ananth*. Anti-cancer potential of *Ipomoea aquatic* Forsk. (Water spinash) leaf extract against HSC3 oral cancer cell lines in 1st International Conference on Recent Innovations in Multidiciplinary Scientific Research (ICRIMSR 2022) 09th to 11^h June 2022, held at Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, Tamilnadu, India.
- 6. Sheik Ameer Almas, **Arul Ananth D***. Photolabeling and antimicrobial efficacy of polyphenolic rich *Pergularia daemia* extractin **National Conference Modern Utilization of Smart Nanomaterials in Healthcare and Environment** on 23rd and 24th September 2021, held at Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, Tamilnadu, India.
- 7. Vaishnavi BP, Gowri K, VinithNandhan R, Ragesh S, Dineshkumar M, **Arul Ananth D***. Fluorescence quenching and antimicrobial efficacy of rutin and caffeinein **National Conference Mordern utilization of smart nanomaterials in healthcare and Environment** on 23rd and 24th September 2021, held at Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, Tamilnadu, India.
- 8. Gayathri N, Karthik R, Dinesh Kumar L, Abbirami E, Guna R, **Arul Ananth D**, Sivasudha T*. Evaluation of *in vitro* Antioxidant Potential of *C. auriculata* in **International Seminar on Biology for Sustainable Environment (ISBSE-2017)** on 07th to 08th March 2017, held at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.
- 9. L. Dinesh Kumar, **D. Arul Ananth**, R. Karthik, N. Gayathri, R. Guna, E. Abbirami, T. Sivasudha* Environmental, lifestyle impacts on osteoarthritis and natural prospects for the disease management in **International Conference on Environment and Health in Changing Climate(ICEHCC 2016)** on 14th to

- 16th of September 2016, held at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.
- 10. Gayathri N, Karthik R, Dinesh Kumar L, Abbirami E, Guna R, Arul Ananth D, Sivasudha T* Identification of Phytocompounds and Evaluating their Antioxidant Potential of *Cassia auriculata* Bud in International Conference on Environment and Health in Changing Climate(ICEHCC 2016) on 14th to 16th of September 2016, held at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.
- 11. Shylaja Naciyar M, Deviram GVNS, **Arul Ananth D**, Uma L, Prabaharan D. Diversity of Glutathione S-Transferases among the cyanobacteria: implication for structure, substrate recognition and catalytic functions in **International Conference on Microalgal and Cyanobacterial Biotechnology (MACB 2016)** on August 30th to September 01st 2016, held at National Facility for Marine Cyanobacteria, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.
- 12. A. Darshana, G. Dinesh Babu, **D. Arul Ananth**, V. Rashmi, D. Prabaharan, L. Uma. Biological applications of extracellular polysaccharides produced by heterocystous forms of marine cyanobacteriain **International Conference on Microalgal and Cyanobacterial Biotechnology (MACB 2016)** on August 30th to September 01st 2016, held at National Facility for Marine Cyanobacteria, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.
- 13. GVNS. Deviram, G. Dinesh Babu, **D. Arul Ananth**, L. Uma, D. Prabaharan. Plant growth promoting hormones in Nostac sp. from diverse geographical habitatsin **International Conference on Microalgal and Cyanobacterial Biotechnology (MACB 2016)** on August 30th to September 01st 2016, held at National Facility for Marine Cyanobacteria, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.

Conferences/ Seminars participated (International level – 4)

- 1. Virtual International seminar on "Advancements in Life Sciences and its Industrial Applications," held at PG Research Department of Biotechnology & Bioinformatics, Holy Cross College, Tiruchirappalli and BIORKS Life Sciences Pvt, Ltd, Dharmapuri, Tamilnadu, India on 18th December, 2021.
- 2. Seminar on High Performance Liquid Chromatography (HPLC) held at Volcani Research Center, Agriculture Research Organization, Israel on Sep 01, 2019
- 3. UK-Israel Conference on "Climate Change and Food Systems" held at Volcani Research Center, Agriculture Research Organization, Israel on 2nd -4th October, 2018.
- 4. "International symposium on Trace Organic Pollutants in the Environment (ISOTOPE)," held at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India on 23rd April, 2010.

Conferences/ seminars participated (National level – 5)

1. Virtual National seminar on "A Juncturen of Classical and Contemporary Research in Biological Sciences" held at Department of Microbiology, Mathura College, Madurai, Tamilnadu, India on 27th and 28th March, 2021.

- 2. Virtual National seminar on "**Bio Energy & Bio Diversity Conservationfor a Sustainable Future**" held at Department of Biotechnology, KarpagaVinayaga College of Engineering and Technology, Kancheepuram, Tamilnadu, India on 23nd March, 2021.
- 3. One day Seminar on "Genome & Protein Engineering," held at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India on 12th February, 2016.
- 4. "35th Annual Conference of Ethological Society of India" (ACESI-2011) & "Symposium on Chemical Signals in Animal Welfare (CSAW-2011)," held at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India on 15&16th December, 2011.
- 5. Colloquium on "3R Concept and its Practice in Academia and Research," held at Mahatma Gandhi-Dorenkamp Center (MGDC) for Alternatives to Use of Animals in Life Science Education, Bharathidasan University, Tiruchirappalli, Tamilnadu, India on 2nd October, 2011.

Workshops participated (National level -5)

- 1. DBT STAR College Scheme Sponsored SCIENCE ACADEMIES Virtual Lecture Workshop on 'Microbial Biotechnology for Sustainable Agriculture' organized by the PG and Research Department of Biotechnology, Hindusthan College of Arts and Science, Coimbatore on 05th & 6th February 2021.
- 2. National Seminar- cum- workshop on "Methods and approaches in Screening of Traditional Medicines," held at Department of Pharmacology and Environmental Toxicology, Madras University, Dr.ALM P.G.IBMS, Sekkizhar Campus, Taramani, Chennai, India on 29th & 30th March, 2012.
- 3. National Workshop on "Network Pathways and Systems Biology," held at PG & Research Department of Biotechnology & Bioinformatics, Holy Cross College, Tiruchirappalli, Tamilnadu, India on 22th-24thAugust, 2012.
- 4. "Science Academies Lecture Workshop on Challenges in Environmental Restoration (SAWCER 2012)," held atDepartment of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India on 5th& 6th March, 2012.
- 5. One day Regional Workshop on "Recent Trends in University-Industry Relations," held at Department of Environmental Management, Bharathidasan University, Tiruchirappalli, Tamilnadu, India on 16th February, 2012.