

# KG COLLEGE OF ARTS AND SCIENCE

(affiliated to Bharathiar University and Accredited by NAAC)
Research and Development Cell
Faculty Researcher Profile



## FACULTY RESEARCHER PROFILE TEMPLATE

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|---|---|---|---|---|--|--|
| Teaching/ Research  | https://drive.google.com/file/d/1roJ6GPghoU95CVMfSMhBKuos7VWmuAAj/view?usp=sharing  |   |   |   |  |  |
|   | Teaching/ Research Experience   |   |   |   |  |  |
| ➤ Responsible Teacher with excellent communication skills demonstrated by more than 9                 |   |   |   |   |  |  |
| years of teaching and 3 years of research.  |   |   |   |   |  |  |
| ➤ Life Science graduate with team spirit and a positive, can-do attitude. Highly                      |   |   |   |   |  |  |
| organized with well-developed communication and time management skills.                               |   |   |   |   |  |  |
| <ul> <li>Working as Assistant Professor, Department of Biotechnology in KG College of Arts</li> </ul> |   |   |   |   |  |  |
| and Science, Coimbatore. (Feb 2019 – Till Date)   |   |   |   |   |  |  |
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| Academic Details  |   |   |   |   |  |  |
| Degree/Standard   | University /<br>Board   | Institution   |   |   |  |  |
| Ph.D  | Bharathiar  | UPASI Tea   | 2   | 013   |  |  |
| and Biotechnology   | University  | Research Institute,<br>Valparai.  |   |   |  |  |
| M.Sc<br>Biochemistry  | Bharathiar<br>University  | Science College,  | 20  | 007 75  |  |  |
| B.Sc<br>Biochemistry  | Bharathiar<br>University  | Shri Nehru Maha<br>Vidyalaya College o  | of Arts   | 005 72  |  |  |
| _   | <ul> <li>➤ Life Science organized with and Science, where we want is a superscience of the science and th</li></ul> | <ul> <li>➤ Life Science graduate with organized with well-developed</li> <li>➤ Working as Assistant Profess and Science, Coimbatore. (Feb.</li> <li>➤ From June 2014 to April 20 Science and Humanities, SNS</li> <li>➤ From June 2011 to April 20 Humanities, Ranganathar In</li> <li>➤ From October 2008 to March Project in UPASI Tea Resear Academic Details</li> <li>Degree/Standard University / Board</li> <li>Ph.D Bharathiar Plant Physiology and Biotechnology University</li> <li>M.Sc Bharathiar University</li> <li>B.Sc Bharathiar</li> </ul> | <ul> <li>➤ Life Science graduate with team spirit and a organized with well-developed communication and</li> <li>➤ Working as Assistant Professor, Department of B and Science, Coimbatore. (Feb 2019 – Till Date)</li> <li>➤ From June 2014 to April 2018 worked as Ass Science and Humanities, SNS College of Engineee</li> <li>➤ From June 2011 to April 2014 worked as Lectur Humanities, Ranganathar Institute of Technologe</li> <li>➤ From October 2008 to March 2011 worked as Jun Project in UPASI Tea Research Institute, Valpana Academic Details</li> <li>Degree/Standard University / Board</li> <li>Ph.D Bharathiar UPASI Tea</li> <li>Plant Physiology and Biotechnology University Research Institute, Valparai.</li> <li>M.Sc Bharathiar Kongunadu Arts &amp; Science College, Coimbatore.</li> <li>B.Sc Bharathiar Shri Nehru Maha Biochemistry University Vidyalaya College of College of</li></ul> | <ul> <li>➤ Life Science graduate with team spirit and a positive, can-do organized with well-developed communication and time management.</li> <li>➤ Working as Assistant Professor, Department of Biotechnology in KO and Science, Coimbatore. (Feb 2019 – Till Date)</li> <li>➤ From June 2014 to April 2018 worked as Assistant professor in Science and Humanities, SNS College of Engineering, Coimbatore.</li> <li>➤ From June 2011 to April 2014 worked as Lecturer in Department Humanities, Ranganathar Institute of Technology, Coimbatore.</li> <li>➤ From October 2008 to March 2011 worked as Junior Research fellow Project in UPASI Tea Research Institute, Valparai, Coimbatore Dia Academic Details</li> <li>Degree/Standard University / Board Ph.D Bharathiar UPASI Tea</li> <li>Ph.D Plant Physiology and Biotechnology University Research Institute, Valparai.</li> <li>M.Sc Bharathiar Kongunadu Arts &amp; Valparai.</li> <li>M.Sc Bharathiar Kongunadu Arts &amp; Science College, Coimbatore.</li> <li>B.Sc Bharathiar Shri Nehru Maha</li> </ul> |  |  |

## **RESEARCH PROJECTS / FOCUS AREAS**

Dynamics of certain enzymes involved in tea (Camellia sps.) plant metabolism"

• Tea is a small, evergreen, woody perennial tree, cultivated for the production of leaves, which are

manufactured into a beverage.

- Characterization of tea clones with respect to quality and productivity is an important criterion in
  order to develop markers for plant breeding and improvement programs. Productivity related
  enzymes (RUBISCO, MDH and PEPC), quality related enzymes (PPO,POX, PAL and
  Chlorophyllase), stress related enzymes (APOX,CAT, SOD and GR) were analysed in thirty
  UPASI clones in all seasons.
- Relationship between enzyme and their substrate ratio, clonal and seasonal variation in enzyme activity, yield and quality variations between clones were analysed.
- Classifies the tea clones drought tolerant and susceptible depends their antioxidative enzyme activity, and also analysed antioxidative enzymes in disease and pest infested leaves.
- Unexploited tea accessions were classified depends chemotaxonomy. Trail experiments were carried out for drought and quality improvement.

#### **PUBLICATIONS**

- G. Yashodha and D. Shalini, An integrated approach for predicting and broadcasting tea leaf disease at early stage using IoT with machine learning A review, Materials Today: Proceedings, <a href="https://doi.org/10.1016/j.matpr.2020.05.458">https://doi.org/10.1016/j.matpr.2020.05.458</a>
- 2. N.Nandakumar, D.Shalini, S.Suresh, Dr.Manimehalai.P 2020. Early finding of cervical cancer with the help of arousal fluid. International Journal of Psychosocial Rehabilitation, Vol.24. Issue 6. https://doi.org/10.37200/IJPR/V24I6/PR261188
- 3. Shalini.D 2020.Screening of High Yielding Tea (*Camellia Sinensis*) Clones using Enzymes and Canonical Discriminate Analysis with Yield .IJRASET.8(IV) p2033-2042
- 4. Shalini D and Raj kumar R 2017.Exogenous Foliar Application of Phenolic Acids on Quality Constituents of Tea. IJRASET.5(vII)p505-510.
- 5. Shalini D and Raj kumar R 2017. Changes in antioxidative enzymes and isozyme pattern due to Exobasidium vexans (blister blight) infection in tea cultivars. Malaya Journal of biosciences 4(1)p11-16.

| Google     | https://scholar.google.com/citations?user=0JQ6zjcAAAAJ&hl=en&authuser=1 [or] |
|------------|--|
| Scholar ID | Dr.D.SHALINI   |
|            | https://www.researchgate.net/profile/Shalini-Devaraj-2                       |
| Research   |  |
| Gate ID    |  |
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#### FACULTY MEMBER CONTACT SECTION

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|--------------------|--|
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