BRIEF PROFILE OF Dr. B. E. RANGASWAMY

Dean Research & Development,
Professor& Head, Department Of Biotechnology
Bapuji Institute of Engineering and Technology
Davangere-577004
Member, Academic Senate, Visvesvaraya Technological University, Belagavi
swamyber@hotmail.com, **Mobile: +91-9844622611**

1. NAME AND DESIGNATION WITH FULL ADDRESS	Dr. B.E.Rangaswamy Ph.D FIAS Dean, Research & Development **AND** Professor & Head, Department of Biotechnology Bapuji Institute of Engineering & Technology Davangere-577004
2. NAME OF THE INSTITUTION	Bapuji Institute of Engineering & Technology Post Box No;325, Shamanur Road, Davangere-577004
3. GENDER AND CATEGORY	Male, General Merit
4. WHETHER DIFFERENTLY ABLED (YES/NO)	No

5. ACADEMIC QUALIFICATION (Under graduate onwards)

SN	Degree	Year	Subject	University/Institution
1	B.Sc.	1993	CBZ	Bangalore University
2	M.Sc.	1995	Botany/Life Sciences	Bangalore University
3	PhD	2001	Botany/Life Sciences	Bangalore University
4	Training on Aerobiology & Bacteriology in 2008		Environmental Diagnostic Lab, Florida USA	
5	Course on Aerobiology in 2011		Roskilde University, Denmark	

6. PH.D. THESIS TITLE, GUIDE'S NAME, INSTITUTE/ORGANIZATION/UNIVERSITY, YEAR OF AWARD.

PhD Thesis title: "Melittopalynological Investigation of Karnataka with particular reference to Dakshina Kannda and Udupi district"
Guide Name: Dr. Shripad N Agashe, Emeritus Professor of Botany (Retd), Bangalore University, Bengaluru
Year of Award: 2001

7. SPECIALIZATION	Aerobiology, Bio-pollution, Envt. Engineering, PG: Botany and Plant Taxonomy
8. AREAS OF EXPERTISE	Aerobiology, Microbiology, Biodiversity, Bioethics & Palynology

9. WORK EXPERIENCE (IN CHRONOLOGY)

SN	Positions Held	Name of the Institute	From	To
1	Guest Faculty	Department of Botany, Bangalore University	1997-98	2003-04
2	Lecturer	Surana College, Bangalore	2003-04	2005-06
3	Asst. Professor	Bapuji Institute of Engineering & Technology	2006	2010
4	Professor	Bapuji Institute of Engineering & Technology	2010	Till date
5	Dean R&D	Bapuji Institute of Engineering & Technology	2014	Till date

10. PROFESSIONAL AFFILIATION

Member/ Chairman of Boards OR Committee

(Like Member, Board of Studies, Faculty of Engineering, Academic Council, Senate, Syndicate, State Level Committees, National Level Committees, Governing Bodies of Professional Societies etc.)

S.N	Position held	Member OR Chairman	Period
1	Board of Examination in Biotechnology under Visvesvaraya Technological University, Belgaum	Member	2007-08, 2010-11, 2018-19
2	Board of Examination in Biotechnology under Visvesvaraya Technological University, Belgaum	Chairman	2011-12 & 2014-15
3	Board of Examination in **Nanotechnology**, Visvesvaraya Technological University, Belgaum	Member	2015-16
4	Board of Examination & BOS in Biotechnology, **Karnataka State Open University, Mysore**	Member	2015-16
5	**Board of Studies in Biotechnology** for both (UG and PG) **Davangere University**	**Chairman**	**2012-15**
6.	**Board of Studies in Biotechnology** (UG & PG), Visvesvaraya Technological University, Belgaum	**Member**	2013-16
7	**Board of Studies in Biotechnology** (UG), **University of Mysore, Manasagangothri, Mysore**	**Member**	2013-16
8	Joint Secretary, Society of Cytologists, Geneticists in India,	Secretary	2017-21
9	Executive Council Member, Indian Aerobiological Society	EC-Member	2012-17
10	**Aerobiology Committee of Asia Pacific Association of Allergy, Asthma and Clinical Immunology (APAAACI)**	Member from India	2010-20
11	Indian Society For Technical Education (ISTE)	Life Member	2006 onwards
12	Karnataka Rajya Vignana Parishath, Davangere District	**President**	**2017-21**
13	Davangere Science Centre	Secretary	2010-till date
	OTHERS		
14	**Journal of Indian Aerobiology Published. From IAS Kolkata**	Chief Editor	2012-2017
15	Journal of Cytology and Genetics	Member Editorial Committee/EC	2017-till date
16	**Board of Studies in Biotechnology** (UG & PG), Visvesvaraya Technological University, Belgaum	**Chairman**	**2019-22**
17	**Davangere District Parisara Mitra School Programme**	Advisor	2010-till date
18	**International Association for Aerobiology, Hq. Krakow, Poland**	**EC Member at Large,**	**2018-22**
19	**Indian Society for Technical Education, New Delhi**	**Executive Council Member**	**2020-2024**
20	**Visvesvaraya Technological University, Belagavi**	**Academic Senate Member**	**2019-22**

11. SPONSORED RESEARCH PROJECTS

MAJOR PROJECTS: **10,** MINOR PROJECTS :**25**

LIST OF MAJOR PROJECTS SANCTIONED/COMPLETED AS PRINCIPAL INVESTOGATOR/COORDINATOR

SN	Title of the Project	Name of the Funding Agency	Amount Sanctioned/ generated	Project Duration
1	"Socio Economic Development Of Through Vermicomposting And Beekeeping In Davangere District"	DBT, Govt. of India	**13.20 lakhs**	2008-11
2	Fermentative Production of Microbial Cellulose"	Department of Science and Technology, Govt. of India.	**22.40 Lakhs**	2012-15
3	**Atmospheric Microbial Diversity** With Particular Reference To Allergic Pulmonary Infections In Davangere	Department of Science and Technology, Govt. of India.	**21.20 lakhs**	2012-15
4	Modernization of Genetic Engg. And Immunotechnology Lab	AICTE, New Delhi	**15.74 lakhs**	2013-14
5	Production Of Bacterial Cellulose	AICTE, New Delhi	**12.65 Lakhs**	2013-16
6	**Airborne Bio-contaminant**s and their Association With Asthma, Respiratory Infections And Genetic Pre-Disposition	DBT, Govt. of India	**26.50 lakhs**	2014-17
7	Diversify bacterial and fungal aerosols prevailing in brachio-vescular infections	VGST, Govt. of Karnataka (**With student)**	**04.00 lakhs**	2014-15
8	Development of biodegradable, cost effective, eco-friendly and sanitary napkins with deodorizing properties.	Sanctioned under NAIN Scheme by Dept. of IT, BT and S & T (Govt. of Karnataka)	**1.79 Lakhs**	2018-19
9	Preliminary Investigation of Bio-Diesel from atmosphere of Davangere city with particular reference to allergic infections in human	KSPCB, Davangere, Govt. of Karnataka	**0.20 Lakhs**	2018-19
10	By doing Consultancy: culture identifications and water testing and microbial analysis, soil microbial analysis department has earned a total of		**1.60 lakhs**	2011-17
11	Microbial cellulose a Natural Biopolymer: Production and its biomedical application	VGST, Govt. of Karnataka (With student)	**20.00 lakhs**	2019-22
12	Designing the low cost isolation chambers for COVID 19 patients with effective filters"	Visvesvaraya Technological University, Belagavi	**0.50 lakhs**	2020
13	Immunological maps in the community: An epidemiological investigation tool for Covid 19	Proposal submitted to SERB-Govt of India	**18.75 Lakhs**	Waiting for the results

12. MINOR STUDENTS PROJECTS SANCTIONED (by KSCST, VGST under Spice/Institute, VTU)

List of minor/students projects sanctioned from Funding agencies

SN	Title of the Project	Name of the Funding Agency	Amount Sanctioned	Project Duration
1	Exploration of bacteriophage therapy against the causative agents for human skin infections	Karnataka State Council for Science & Technology (KSCST)	5000/-	2006-07
2	Preliminary investigation on aeromycofloral studies on some libraries in Davangere	Karnataka State Council for Science & Technology (KSCST)	6000/-	2007-08
3	Aeromycofloral studies of some occupational Sites in Davangere city	Karnataka State Council for Science & Technology (KSCST)	5000/-	2008-09
4	Biotechnological process of composting and field evaluation studies	Karnataka State Council for Science& Technology (KSCST)	7000/-	2008-09
5	Slow Pyrolysis of Kikar for generation of solid, liquid and Gaseous fuels	Karnataka State Council for Science & Technology (KSCST)	4500/-	2008-09
6	"Anti-cancer activity of some plants.	Karnataka State Council for Science & Technology (KSCST	6000/-	2009-10
7	Production of Ethanol from beetroots	Karnataka State Council for Science & Technology (KSCST)	5000/-	2010-11
8	Evaluation of Hypoglycemic and anti-diabetic activities from selected plants	Karnataka State Council for Science & Technology (KSCST)	5000/-	2011-12
9	Utilization of crude glycerol obtained from waste fish oil in the production of 1,3-propanediol	Karnataka State Council for Science & Technology (KSCST)	5000/-	2011-12
10	"*Swietenia mahagoni*- The potential source for the production of biodiesel	Karnataka State bio-fuel Development Board(KSBDB)	9000/-	2011-12
11	**Bioethanol production from Eupatorium –a weed**	**Vision Group for Science & Technology (Spice project)**	**30000/-**	**2011-12**
12	Phytochemical vitamin-C and antioxidant evaluation of some underexploited fruits	Karnataka State Council for Science & Technology (KSCST)	4500/-	2013-14
13	Phytochemical screening, Anti-microbial Anti-oxidant and anti-cancer activity of *plectranthus amoinicus and bacopa monnieri*	Karnataka State Council for Science & Technology (KSCST)	5500/-	2013-14

14	Optimization of ethanol production from fruit waste	Karnataka State Council for Science & Technology (KSCST)	5500/-	2013-14
15	**Value added utilization of cured glycerol**	**Karnataka State bio-fuel Development Board (KSBDB)**	**15000/-**	**2013-14**
16	Farmer and eco-friendly approach to Target bacterial blight of pomegranate	Karnataka State Council for Science & Technology (KSCST)	5000/-	2015-16
17	Effect of acoustic waves on notorious bacteria causing various diseases	Karnataka State Council for Science & Technology (KSCST)	4000/-	2016-17
18	Maize cob as a recycled agro waste-a feasibility study	BIET, R&D cell	4000/-	2016-17
19	Effect of acoustic waves on notorious bacteria causing various diseases	BIET, R&D cell	4000/-	2016-17
20	Development of biodegradable eco-friendly and cost effective sanitary napkin	Karnataka State Council for Science & Technology (KSCST)	6000/-	2017-18
21	Development of biodegradable eco-friendly and cost effective sanitary napkin	Karnataka State Council for Science & Technology (KSCST)	10000/- (upgrading the project)	2018-19
22	Microalgae as a source of mycosporines to explore as a Natural anti-cancer and sunscreen agent.	Karnataka State Council for Science & Technology (KSCST)	8000/-	2018-19
23	Isolation and rapid plastic degrading bacteria from dumped soil areas in Davangere.	BIET, R&D cell	6000/-	2018-19
24	Bio-composites: A comparative study	BIET, R&D cell	6000/-	2018-19
25	Production of vinegar from millets	Karnataka State Council for Science & Technology (KSCST)	5000/-	2019-20

As a coordinator Completed five National Environmental Awareness Campaign (NEAC) programme from 2009-10, 2010-11, 2011-12, 2012-13, 2013-14 sponsored by Ministry of Environment and forest and Karnataka Rajya Vignana Parishath (KRVP)

13. UG/PG PROJECTS GUIDED:

So far, a total of 52 UG and 2 PG Final Year Student Projects in the field of bioenergy, Biofuels, microbial diversity, Bio-composites, Guided, ethno botany related, Grass pollen flora related student projects were guided.

14. RESEARCH PAPERS PUBLISHED

- Total Number of Research Papers Published : 52
- Research Papers in National & International Journals: 40
- Research Papers in Proceedings : 12
- Articles in Magazine/Newspapers: 24
- **Pollen and Spore calendar weekly Reports published in Times of India 236 (1996-2003)*See Annexure1**

Important Research Papers (listed with Scopus/have impact factor) from 2011-12 onwards)

S.N	Research Paper Detail	Journal where published	Year
1	Jayasimha V.L, Niranjan H.P, **Rangaswamy B.E**, Yogesh Babu K.V, Vinod Kumar C.S & Basavarajappa K.G *"Bacteriological study of chronic obstructive pulmonary disease amongst allergy induced patients*	"Indian Journal of Aerobiology, Vol 24, No. 2 pp 91-95 **NAAS impact factor 2.7.**	**2011**
2	**Rangaswamy B.E**, Francis Fernandes, K.K. Prakash, Ravishankar B.V. & Shanmukhappa S.S. Occurrence of microbes causing respiratory ailments in the Garden of Davangere.	Indian Journal of Allergy, Asthma and Immunology, Jul-Dec 2012 , Volume 26 (2), 61-65 **(Kluwer Publishers)**	**2012**
3	**Rangaswamy B.E**, K.K. Prakash, Francis Fernandes, and Jayasimha V.L. 2012.Distibution Pattern of Airborne Fungi and Bacteria in the School Environment.	*Indian J. Aerobiol* Vol 25. No2 pp 53-58. **NAAS impact factor 2.7.**	**2012**
4	**Rangaswamy B.E**, Francis Fernandes, K.K. Prakash & Manjunath N.S. "Variability in airborne bacterial and fungal population in the tertiary health care centre"	*Aerobiologia* ***(Impact factor 1.56)*** Vol 29 (4): 473-479 **Springer Publishers**	**2013**
5	Manjunath N.S, Dayanand A, Jagannath K.V, Basavarajappa K.G**, Rangaswamy B.E**. 2013. Prevalence of Human Pyogenic Skin Infections, Bacterial Pathogens and their Antibiotic Susceptibility Profile.	**J Pub Health Med Res 1(1):37-42**	**2013**
6	Manjunath N.S, Dayanad Agsar, Jagannath K.V., **Rangaswamy B.E,** Chandrasekhar Sagar, Surya Chandra Rao, Anand S, and Yogesha S, 2013. Charactrisation and in Vitro Efficacy studies of wide host range lytic bacteriophage DMPAI infecting *Pseudomonas aeroginosa* isolated from pyogenic Skin infections,	**Trends In Biotechnology Research** Vol 2(1), Page 4-11.	**2013**
7	Manjunath N.S., Dayanand A., Jagannath K.V., **Rangaswamy B.E.,** Surya Chandra Rao., Anand S., and Yogisha S. (2013). Characterization and in vitro efficacy studies of wide host range lytic bacteriophage ΦDMEC-1 infecting *Escherichia coli* isolated from pyogenic skin infections**.**	***Trends in Life Sciences***, **2(2):** 47-54.	**2013**

8	**Rangaswamy B.E.,** Manjunath N. S, Sujatha M. L **(2013).** Evaluation of Antidiabetic Activity from Methanolic Extract of Various Herbal Plants of Medicinal Importance.	**RGUHS J Pharm Sci.** (Vol 3) 4: 58-61.	**2013**
11	Anilkumar M.R., Shanmukhappa S., **Rangaswa my B.E**. and Revanasiddappa M. Synthesis, Characterization, and Antimicrobial Activity of Some Transition metal complexes with Schiff Base Ligand	Journal of Applicable Chemistry-ISSN2278-1862)	**2015**
12	**Rangaswamy B.E** Vanitha K.P. and Basavaraj S.Hungund. Microbial Cellulose Production from Bacteria Isolated from Rotten Fruit.	International Journal of Polymer Science Volume 2015, Article ID 280784, 8 Pages. **Hindwai Publishers**	**2015**
13	Vinay Kumar J., **Rangaswamy B.E.** and Jayasimha V.L. Role of HLA-DRB1 typing in studying the genetic predisposition of selected population in Davangere.	Indian Journal of Aerobiology, ISSN: 0971-1546 vol 28, no 1&2, pp: 63-68.	**2016**
14	**Rangaswamy B.E.,** Yogitha Seema A.M., Jayasimha V.L.Allergic Airway Diseases; Role Of Microbiota and Environment**".**	Journal of Recent Scientific Research Vol. 7, Issue 4, pp. 10326-10329.	**2016**
15	Sheryll Dsilva, Ashish Prabhu, Suhas B.C, **Rangaswamy B.E** and Venkata Dasu Veeranki Biosorption of hexavalent chromium by free and immobilized dead Sargassum sp: A study on isotherms and kinetics.	***Journal of desalination and water treatment*** by **Tylor and Francis**. pp: 335-345.	**2016**
16	**Rangaswamy B.E**. and Vanitha K.P. *Tridax Procumbens* Leaf Extract Based Bacterial Cellulose For Wound Healing.	Journal Asian **Journal** of Microbiology and Biotechnology, Vol 2 (1) pp 9-14.	**2017**
17	Vinaykumar J, Jayasimha V L, Rajesh B P and **Rangaswamy B E.** Association of HLA-DRB1 alleles in Genetic Predisposition of Davangere population	International Journal of innovative Research in Technology Vol 6,Issue 7 page 49-52	**2019**
18	Vasudevanayaka KBL, **Rangaswamy B E**, Tejaswini M, Shrilaxmi Bhat, Sahithya G and Annapurna Vajrad. Areca Husk Fibers as Agro-waste to value added products in Textile Sector-A Practicability study.	International Journal of Advanced Research Vol 7(9), pp-106-111	**2019**
19	Jayasimha VL, **Rangaswamy BE**, Niranjan K. Utility of Procalcitonin in early diagnosis of Neonatal sepsis.	Journal of International Medical and Dentistry Vol;4(1).	**2020**
	Jayasimha VL, Basavarajappa KG, **Rangaswamy BE,** Niranjan K. Clinicobacteriological correlation of Neonatal Sepsis and Sepsis Markers	Journal of Contemporary Pediatrics. Vol 5(1).	**2020**
20	**Rangaswamy B. E**., Prakash K. K., and Francis Fernandez. Aero-microbial assessment with reference to different seasons in a vegetable market	Research paper accepted for publication in **Journal of Environmental Biology**	**In Press**
21	Prakash K K., Francis F and **Rangaswamy B E.** Aerobacteriological investigation of different occupational sites in Davangere-Karnataka	Manuscript Submitted to Aerobiologia-Published from Springer	**In Press**
22	Amruta Patil-Joshi, **Rangaswamy B E** and Anjali Apte-Deshpande Paper based PCR method development, validation and application for microbial detection	Manuscript submitted to Springer Published Journal	**Communicated**

15. DETAILS OF PATENT

Dr. B.E.Rangaswamy and Vanitha K.P. (Research Student) filed patent Application in February 2016 on **"Natural Source Media for the Production of Bacterial cellulose" Application No: 201641004194**. Application is under Process

16. PAPER PRESENTED IN NATIONAL /INTERNATIONAL SEMINARS/ SYMPOSIA FROM 2011-12 ONWARDS (Total: 42*)*

- Total number of presentations in **National Conference is 40**
- Total number of Presentations in **International Conference is 8.**
- I have Chaired number of sessions during national and international conferences, worked as moderator and sectional committee sub Chair

- **Total number of invited lecture/public lectures delivered are around 110 at Various Universities and institutes both in India and abroad)**

Few names of the Universities where lectures have been delivered.

- Jagiellonian University, Krakow Poland
- University of Western Sydney Campbell town Medical School, Australia
- University of Parma, Italy
- Visva-Bharathi, Santhiniketan, West Bengal
- Amravati University, Amravati MH
- Osmania University, Hyderabad
- University of Kerala, Trivandrum
- Tumkur University, Tumkur
- Bangalore University, Bangalore
- Visvesvaraya Technological University, PG Centre Gulbarga
- Reva University, Bangalore
- Davangere University, Davangere
- Bangalore Institute of Technology, Bangalore
- Siddaganga Institute of Technology, Tumkur
- Bose Institute, Kolkata
- UBDT college of Engineering, Davangere
- S.S. Institute of Medial Sciences and Research Centre, Davangere
- Chaired session on" Academia industry Interaction: during 107th Indian Science Congress held at UAS, Bengaluru
- Bapuji Dental College and Hospital, Davangere
- College of Dental Science, Davangere
- Breakthrough Science Society of India
- J. J. M. Medical College and Hospital, Davangere etc.

17. TOTAL NUMBER OF SHORT- TERM COURSE, WORKSHOPS, FACULTY DEVELOPMENT PROGRAMME'S,CONFERENCS ORGANISED/CONDUCTED AS CHAIRMAN/COORDINAOTR : 42

SN	Events (symposiums/Seminars/workshops/FDP's organized)	Date
1	Biochemical – 2005 A National Symposium for students	24-25 November 2005
2	National Seminar on Trends in Biotechnology	11 November 2006
3	National Seminar for students - Medibiochemexcel – 2007	13 April 2007
4	Bio-nanoinformatics-2008; National Symposium on Bio-nanotechnology and Bioinformatics	3 March 2008
5	National seminar on Recent Trends in Nanotechnology	20 September 2008
6	Seminar on Biodiversity Conservation and Bio prospection	20 October 2008
7	Seminar on Opportunities in Biotechnology	13 November 2008
8	National Students symposium - Nithanth-2009	17 April 2009
9	Environmental Day – Special lecture on Conserving Nature	13 June 2009
10	National level symposium on Nanobiotech 2009- Applications in Medicine	28-30 November 2009
11	Training programme on Vermicomposting and Bee keeping for farmers	10 March 2010
12	National Students Seminar - Biosatum -2010	30 April 2010
13	Recent Trends in Water Quality and Sustainable Management (To commemorate 150th Birth anniversary of Sri M Visvesvaraya)	15-16 September 2010
14	National seminar on Occupational Health – in association with JJMC, Davangere.	28 September 2010
15	16 –NCA 2010 - 16th National Conference on Aerobiology and National Symposium on Applications of Biotechnology in Environment Management and Medicine	19- 21 November 2010
16	FDP on Re-engineering of Environmental Impact Assessment	5-7 March 2011
17	National Seminar on Conservation of Medicinal Plants	31 March 2011
18	DST – Subject Expert committee meeting under WOS-A Scheme	28-29 May 2011
19	Faculty Development Programme on NANOTECHNOLOGY - in association with VTU, Belgaum.	11th- 15th April 2012
20	Environmental Awareness Programme at Kadadakatte – in association with Karnataka Rajya Vijnana Parishath and MEoF.	5 June 2012
21	Seminar on Biotechnology in Human Welfare	13 February 2013
22	Environmental Awareness Programme –Conservation of Biodiversity with special reference to Medicinal plants and Fruit bearing trees	5 -6June 2013
23	Research Opportunities in Biotechnology and Allied Studies	19-20 October 2013
24	Distinguished scientist talk on 'Neglected Nature' by Padmabhushana Dr. Anil Prakash Joshi.	31 January 2014
25	Academia and Industry Integration in Biotechnology	7-8 February 2014
26	Recent Trends in Biological Sciences	8 October
27	Hands on workshop on Techniques in Biotechnology	19- 24 January 2015
28	Teachers Training Programme on comprehensive Chemistry	12-13 December 2015

29	Hands-on workshop on Biotech Industrial Job Training	18-24 January 2016
30	Workshop on Entrepreneurship Awareness	24-26 August 2016
31	Workshop on Mathematics for High School Teachers	15 -16 November 2016
32	Workshop on Applied Biotechnology- Hands-on.	16 -22 2017
33	Workshop on Plant Taxonomy (INSA & NAS supported)	27 -28 January 2017
34	Invited talk on Agro Waste- What needs to be done?	29 August 2017
35	World Ozone day – Observed in association with Karnataka Science and Technology Academy, Bangalore	16 September 2017
36	Invited talk on - India's Biosphere Dissection Using Genome Sequencing Technology	25 November 2017
37	Hands-on workshop on Trends in Biotechnology	15-21 2018
38	Lecture Series on - Strides in Biotechnology	19 February 2018
39	National conference on "New Trends in Bio-Technology & 14th Conference of Society of Cytologists and Geneticists	6 - 8 March 2019
40	Bio-Entrepreneur's Summit – Interactive Conglomeration of young entrepreneurs and students and faculty	7 March 2019
41	Hands on Workshop on Techniques in Biotechnology	9-15 March 2020
42	Webinar on Role of Biotechnology in Biodiversity conservation	22-23 June 2020 (Tentative)

18. PH. D. GUIDANCE (Recognized Guide from Visveswaraya Technological University, Belgaum)

SN	NAME OF THE STUDENT	RESEARCH TOPIC	STATUS
1	**Prakash K.K** (USN:4BD09PGN01)	Aerobacteriological Investigation of various occupational sites of Davangere.	Degree Awarded in 2017
2	**Francis Fernandes** (USN:4BD08PGN02**)**	Aerobiological investigation of various occupational sites of Davangere with particular reference to fungi	Degree Awarded in 2017
3	**Anil Kumar M.R** (USN:4BD08PGN01)	Synthesis, Characterization and Biological Studies of Some Transition Metal Complexes"	Degree Awarded in 2017
4	**Yogitha Seema A.M**. (USN:4BD11PGN05)	Microbial diversity with particular reference to allergic pulmonary infections in Davangere	Degree Awarded in 2018
5	**Vanitha K.P.** (USN:4BD12PGN01)	Fermentative production of microbial cellulose	Degree Awarded in 2018
6	**Vinayakumar J** (USN:4BD16PGJ01)	Role of Aspergillus species as allergen in selected population of Davangere and its Genetic predisposition	Thesis to be submitted by July 2020
7	**Patil Amruta Akaram** (USN:4BD17PGA03)	Development of paper based PCR method and its application in detection of microbes from different sources	Completed Course work
8	**Chandu Kishore T**	Natural Biopolymer: Production and its biomedical application	Under progress

19. AWARDS AND ACHIEVEMENTS

1. Recipient of P.H. Gregory Award instituted by Indian Aerobiological Society Kolkata in 2007

2. Outstanding Project of the Year award (Three times) from Karnataka State Council for Science and Technology (KSCST-DST) – Received for the Year 2012 , 2018 and 2019)

3. Joint paper by Prakash and Rangaswamy was awarded First Prize (cash award of twenty thousand rupees) at 5th Karnataka Science and Technology Academy, Govt. of Karnataka annual conference held at Dayanand Sagar Institutions Bangalore during 19-20th December 2012

4. Recipient of Davangere District **Karnataka Rajyothsava Award** from Dist. Administration, Davangere in the year 2017 for his contribution in the field of Science, Technology and Environment.

5. Recipient of Rajaram Bapu **National Award for Promising Engineering Teacher for Creative work done in Technical Education from Indian Society for Technical Education, New Delhi** -2018

6. Received Grants from IAA to Attended 10th Basic Course in Aerobiology, certificate course from Roskilde University, Denmark during July 2011. (Registration Fee supported by International Association of Aerobiology)

7. Paul Harish Fellow by Rotary International, 2010

8. Underwent advanced Indoor Air Quality Training at PUREAIR- Environmental Diagnostic Laboratory, Clearwater, Florida USA during May 2008

9. Received Certification of Appreciation from Royal Society of Chemistry, (Founded by Dr. Yousaf Hammed, founder of Cipla)

10. Received Certificate of Appreciation from Rotary India Literacy Mission (RILM), Kolkata for his outstanding contributions in training more than 8000 teachers in under TEACH as a Distract Literacy committee Chair of RID 3160

11. Received Travel Grants from AICTE to attend 5th European Aerobiology Society Conference at Poland in the year 2012

12. Received Registration Grants to participate and present paper in 10th International Aerobiology Conference held at Sydney Australia in September 2014

13. Received Travel Grant Support from SERB-DST to present research paper in 11th International Congress on Aerobiology held at Parma, Italy during September 2018.

14. Received Certificate of appreciation from offices of Bharata Ratna Dr. Abdul Kalam former president of India and Bharatha Ratna Dr. C N R Rao for organizing interaction programme with Davangere Children

15. **Elected Fellow of Indian Aerobiological Society** ®, 2018

16. Awarded with "Davangere Siri" Lions International Davangere in 2017

17. Joint Secretary, Society of for Cytologists and Geneticists in India ®

18. Elected Executive member of Indian Society for Technical Education (ISTE), New Delhi

19. Nominated as Academic Senate Member of Visvesvaraya Technological University, Belagavi

20. Elected as Executive council member at large-International Association of Aerobiology

Visited USA as Group Study Exchange-team member

21. Honored with Certificate of Appreciation by Governor of State Rhode Island and Providence Plantations, USA on 22nd April 2008.

22. Honored with Certificate of Appreciation by Speaker of the Commonwealth of Massachusetts State House, USA on 14th April 2008.

23. Honored by Mayor of Quincy-Boston as "Honorary Citizen of Quincy" USA on 15th April 2008 and New Bedford, USA 18th April 2008.

20. COUNTRIES VISITED (for academic interaction)

United States of America, Denmark, France, Sweden, Germany, Poland, Australia, Malaysia, Italy and Switzerland

21. OTHERS:

Since 1989 I have been donating blood regularly. So far I have **donated blood 27 times** as of March 2018.

PERSONAL:

Date of Birth: 28th May 1972

Permanent Address:
Dr. B E Rangaswamy
Bidarakere Village, Holalkere Taluka
Mallappanahally Post
Chitradurga District-577004

Aadhaar Card Number: 947489909083
Blood group: A-positive

REFERENCE:

Dr. Shripad N. Agashe
Professor Emeritus (Retd.)
401, 41st Cross, 5th Block
9th main, Jayanagar,
Bangalore, 560 041. INDIA
shripad3@yahoo.com
Phone: 080-26635103(Resi)
Mobile: +91-9844101215

Dr. A.B.Singh
Formerly Deputy Director
& Senior Scientist, IGIB,
Mall Road, Near Jubilee Hall,
New Delhi- 110007
singh49@hotmail.com
+91-9811554462

Dr. Karisiddappa
Hon'ble Vice Chancellor
Visvesvaraya Technological
University, Belagavi-
vc@vtu.ac.in
+91- 9448653599

(Dr. B E Rangaswamy)

Major contributions and Studies Carried out By Dr. B E Rangaswamy

Major Project work 1:

The study on Melittopalynological investigation of Karnataka with particular reference to Dakshina Kannada and Udupi district was carried out during 1996 to 2001. Extensive survey of flowering plants available for bee forage was carried out and identified more than 325 plants species including few mangrove species are the major bee foraging plants source. Bee floral calendar was prepared. The information was translated to Kannada and was circulated amongst the beekeepers from the District. **The study was funded by DST, Govt of India.**

Major Project work 2:

During 1997 to 2003 "**Bangalore pollen and Mould watch"** weekly pollen and fungal spores monitoring report published in Times of India which was carried out a jointly with my research supervisor Dr. Shripad N Agashe, Formerly Emeritus Professor at Department of Botany, Bangalore University, Bangalore. Rotorad and vertical cylinder spore trap (air samplers) were installed at the roof top of Bangalore Central Observatory, Palace Road, Bangalore. By using these Air samplers, every day airborne pollen and fungal spore concentration was measured. After seven days of sampling (one week) the data was compiled and published in times of India national daily under the caption "Bangalore pollen and mould watch". The study was carried out because of the raising number of allergy patients in mind and also the study was very handy for the doctors to treat patients suffering from respiratory disorders systematically. We have recoded more than 75 species of plants pollen 28 types of fungal spores in the Bangalore air. **The study was supported by MoEF, Govt of India**.

Major Project work 3:

Socio economic development of weaker section through training farmers and rural women on vermicomposting and beeping was carried out between 2008-2012 at Davangere district. More than 1200 farmers were trained on vermicomposting and around 600 farmers on beekeeping. 100 Farmers were provided with vermicomposting and beekeeping units. The community was trained to develop sustainable livelihood. **The study was supported by DBT, Govt of India.**

Major Project work 4:

Aerobacterialogical investigation of different occupational sites in Davangere **a** Scientific research on airborne bacteria from various sites of Davangere, Karnataka was carried out during 2009-2015. Emphasizes the importance of airborne bacteria in understanding the air quality and pathogenic importance of these microorganisms. This research reveals valuable information on airborne bacteria from

various **occupational sites including a health care unit, school, vegetable market and garden.** Conventional methods for morphological and biochemical characterization is utilized for the identification of trapped bacteria. This research is an attempt to investigate airborne bacteria, their distribution, seasonal variation and occurrence in different occupational sites. Data is collected from the selected experimental sites for two years. During this endeavor, comparative accounts of the population of bacteria identified at different sites have been worked out with reference to meteorological data and studying other environmental conditions.

Major Project Work 5:

The study on "Microbial diversity with particular reference to allergic pulmonary disorders in patients from Davangere" was carried out during 2013-2017. Respiratory diseases caused by microorganisms are an immense worldwide health burden. It is estimated that 235 million people suffer from asthma and more than 200 million people have Chronic Obstructive Pulmonary disease; 65 million endure moderate-to-severe COPD. The most important factor leading to the development of COPD is tobacco smoking. Tobacco smoke causes destruction of lung tissue and obstruction of the small airways, leading to emphysema and bronchitis, which are the main diseases of COPD. Today, respiratory disease is an important clinical problem for even agricultural workers. A significantly increased risk of respiratory morbidity and mortality among farm workers and workers of agro based industries has been demonstrated through numerous studies. Despite lower prevalence of smoking among these workers compared with the general population, above risk is seen; implicating occupational risk factors for respiratory disease. **The study was supported by DST, Govt of India**

Major Project Work 6:

The study on Aerobiological investigation of various occupational sites in Davangere with particular reference to fungi was carried out during 2010-2016**.** This study was aimed to investigate the concentration and type of airborne bacteria and fungi from patients clinically diagnosed with respiratory disease, their working environment and their immunological response. The study also emphasis a significance of *Klebsiella pneumoniae* in the patients working environment might exacerbate the COPD infections. *Klebsiella pneumoniae* was commonly isolated in both patient's clinical sample and their working environment. *Penicillium* was the fungi isolated in patient's clinical sample and *Aspergillus fumigatus* was isolated in patients working environment of the respiratory diseases. All the efforts are needed to improve the awareness among the agriculture and agricultural labourers on the respiratory disease and clinicians around the area should be educated with common bacteria causing respiratory illness and incidence of specific IgE levels in the population.

Major Project Work 7:

The studies on Role of Aspergillus species as allergen in selected population of Davangere and its genetic pre disposition was carried out during 2014-2018**.** A large number of diseases have been reported to show MHC (Major Histocompatibility complex) associations. The extreme degree of MHC polymorphism and their function as restriction elements in generating specific responses to foreign molecules make HLA alleles key components in the immunopathogenesis and susceptibility to certain diseases. These results provide further evidence of a possible role for bacterial, fungal infection and CD8+ T cells in activation of immune responses. The advances being made in determining the primary associations within the HLA region and fungal allergy will not only increase our understanding of the mechanisms behind disease pathogenesis but may also aid in the development of novel therapeutic targets in the future. **The study sponsored by DBT, Govt of India.**

Major Project Work 8:

The studies on 'Fermentative Production of Microbial Cellulose' was carried out during 2012-2018. Microbial cellulose, an exopolysaccharide produced by bacteria, has unique structural and mechanical properties and is highly pure compared to plant cellulose. Present study represents isolation, identification and screening of cellulose producing bacteria and further process optimization. The cellulose producer was isolated from rotten fruits and rotten vegetables. The isolates screened from rotten pomegranate, rotten sweet potato and rotten potato were identified as *Gluconacetobacter* sp. RV28, *Enterobacter* sp. RV11 and *Pseudomonas* sp. RV14 through morphological and biochemical analysis. Amongst them potent cellulose producing bacterium was isolated from a rotten sweet lime and identified as *Komagataeibacter hansenii* RV39 through morphological, biochemical and 16srRNA complete sequence analysis. The strain produced 4.7 g/L of cellulose at optimum growth conditions of temperature 30^{o}C, pH 6.0. **The study was sponsored by DST, Govt of India**

Major Project Work 9:

The studies on Synthesis, characterization and biological studies of some transition metal complexes was carried out during 2011-2017. The work embodied with the study on synthesis, spectral characterization and many biological activities on newly synthesized transition metal complexes of Schiff bases derived from condensation reaction of salicylaldehyde with two different amines such as 5-methy isoxazol -3-yl amine and isoxazol-3-ylamine.In the IR spectra of synthesized Schiff base ligand the bands due to the presence of azometine group . Schiff base ligands and their metal complexes have wide range applications in different fields such as pharmaceutical field, medicinal field, electroplating and catalysis etc.