# Prof. (Dr.) K. SREEJITH, M.Sc, M.Phil, Ph.D Dean, Faculty of Science



Office : Department of Biotechnology & Microbiology

Kannur University, Thalassery Campus, Palayad 670661, Kerala. Ph. +91 4902347394

Email: sreejithkrishnan@hotmail.com/sreejithk@kannuruniv.ac.in

Phone : +91 9446 870 675
Residence : 'Neeranianam'

Keloth, Vadakkumbad PO, Thalassery, Kerala – 670 105

Age & Date of Birth : 51 Yrs, 02.01.1970

# **Educational Qualifications:**

Ph.D. Biochemistry, Mahatma Gandhi University, Kerala, 2000
M.Phil. Biophysics, Mahatma Gandhi University, Kerala, 1993
M.Sc. Biochemistry, Mahatma Gandhi University, Kerala, 1992

**B.Sc.** Zoology, University of Calicut, Kerala, 1990

No. of PhDs awarded under Guidance:
No. of PhD students presently under Guidance:
5

# Position held in Academic /Administrative Bodies:

# Presently:

- 01 Member, Syndicate, Kannur University, since, 10.03.2020
- 02 Dean, Faculty of Science, Kannur University, since 13.01.2020
- 03 Member, Faculty of Science, Kannur University, since 06.03.2012
- 04 DBT- Govt. of India Nominee, Institutional Bio-Safety Committee, Malabar Cancer Centre, Kerala, since 03.02.2017
- 05 Institutional Co-Ordinator, RUSA, Kannur University, since 24.01.2017
- 06 Member, Governing Council, RUSA, Kannur University, since 24.01.2017
- 07 Member, Doctoral Committee in Life Sciences, Kannur University, since 25.05.2016
- 08 Member, Institutional Bio-Safety Committee, Central University of Kerala, Kasaragod, Since 29.04.2014
- 09 Member, Institutional Bio-Safety Committee, Kannur University, Kerala, since 19.01.2012
- 10 Member, Institutional Animal Ethical Committee, Kannur University, Kerala, since 14.05.2010
- 11 External Expert, Scientific Review Board, Malabar Cancer Centre, Kerala, since March 2010
- 12 Adjunct Faculty, Inter University Centre for Biosciences, Kannur University, since 05.12.2009
- 13 Coordinator, UGC-NET Coaching for students belonging to SC/ST &Minority, 15.02.2008
- 14 Advisory committee for SC/ST, Kannur University, since, 2009

# Previously:

- 01 Director, Research Directorate, Kannur University, 01.02.2018 23.03.2020
- 02 Head, Dept. of Biotechnology & Microbiology, Kannur University 17.04.2013- 24.05.2016
- 03 Research Centre Head, Herman Gundert Central Library, Kannur University 01.09.2019- 23.03.2020
- 04 Vice Chairperson, Institutional Committee for Stem Cell Research, Central University of Kerala, 29.11.2017-28.11.2019
- 05 Member, IQAC, Kannur University, 01.04.2017 15.03.2020
- 06 Chairman, PG & UG Board of Studies in Microbiology, Kannur University, 23.11.2010 22.11.2012 & 06.08.2018 05.08.2020
- 07 Chairman, PG & UG Board of Studies in Biotechnology, Kannur University, 10.07.2013 09.07.2015 & 09.12.2015 08.12.2017
- 08 Chairman, Doctoral Committee in Life Sciences, Kannur University, 17.04.2013- 24.05.2016
- 09 Member, Academic Council, Kannur University, 17.04.2013 24.05.2016
- 10 Member, Doctoral Committee in Life Sciences, Kannur University, 16.07.2012- 16.04.2013
- 11 Member, PG & UG Board of Studies in Microbiology, Kannur University,
- 12 Member, PG & UG Board of Studies in Biotechnology, Kannur University, 23.11.2010 22.11.2012
- 13 Member, PG Board of Studies, in Biochemistry, Calicut University, 30.03.2010 29.03.2012
- 14 Member, UG Board of Studies in Biophysics, Calicut University, 16.01.2007- 15.01.2009
- 15 Programme Officer, National Service Scheme, Kannur University 11.12.2006 20.04.2012
- 16 Coordinator, Career Guidance Cell, Kannur University, 28.11.2011
- 17 Coordinator, Inculcate Programme, Govt. of Kerala, Kannur University, 2010-2011

## PG Teaching & Other Experience: 19 years:

DESIGNATION	PLACE OF WORK	FROM	то
Professor	Dept. Biotechnology & Microbiology, Kannur University, Kerala.	03.06.2014	Till date
Associate Professor	Dept. Biotechnology & Microbiology, Kannur University, Kerala.	03.06.2011	02.06.2014
Reader	Dept. Biotechnology & Microbiology, Kannur University, Kerala.	03.06.2008	02.06.2011
Lecturer (Joined Kannur University Regular Service)	Dept. Biotechnology & Microbiology, Kannur University, Kerala.	03.06.2003	02.06.2008
Biochemist (Kerala PSC Recruitment)	Government TD. Medical College, Alappuzha, Kerala,	11.11.2002	02.06.2003
Lecturer (Appointment on Contract)	Dept. Biotechnology & Microbiology, Kannur University, Kerala.	01.11.2000	08.11.2002
Biochemist (Employment Exchange Scheme, Kerala)	Government Medical College, Kottayam, Kerala	20.03.1997	19.03.1998

# **Research Expertise & Interest**

## **Broad Area of Interest: Antimicrobial Peptides & Cancer Biochemistry**

Specifically: Antimicrobial properties of Peptides of Bacterial origin & Activities of Bio-molecules from medicinal plants and their beneficial effects on Cancer and Poly Cystic Ovary Syndrome.

## Universities / Institutes visited abroad

- University of Amsterdam, The Netherlands, 2016
- University of Lisbon, Lisbon, Portugal, 2012
- TRE University, Roma, Italy, 2012

# **Projects Undertaken**

Kannur University Minor Research Project 2018

Project Title: Evaluation of the Effect of Adipocyte on Pyruvate Kinase Signaling in Breast

Cancer Cell

Duration: 16 months, Amount: 04 Lakhs

# **Research Publications:**

1. Shabeer Ali H, Ajesh K, Dileep KV, Prajosh P, Sreejith K

Structural characterization of Kannurin isoforms and evaluation of the role of β-hydroxy fatty acid tail length in functional specificity

Scientific Reports, 2020, 10 (1),1-12, Nature Publishing Group, IF: 4.01

2. Shabeer Ali H, Prajosh P, Shruthi P Nath, Sreejith K

Influence of Lipopeptide Biosurfactant 'Kannurin' on Petrochemical Consumption Exhibited by *Bacillus cereus* AK1 *Pollution Research* 2019, Vol 38 (3) 844-851, EM International Publishers

3. Jenson J, Sreejith K

Antioxidant and anti-inflammatory properties of *Pterospermum rubiginosum* Heyne Ex Wight & Arn and *Pterospermum reticulatum* Wight&Arn (sterculiaceae):an in vitro comparative study.

Asian Journal of Pharmaceutical and Clinical Research, 2019, Vol 12, (2), 272-275

4. Ajesh K, Nagaraja BK, Sreejith K

Kyasanur Forest Disease Virus (KFDV) Breaking the Endemic Barrier: An Investigation into Ecological Effects on Disease Emergence and Future Outlook

Zoonoses and Public Health, 2017, Vol.64 (7) 73-80, Wiley-Blackwell Publishers, IF: 2.46

5. Sandeep PM, Bovee THF, Sreejith K

Anti-androgenic activity of *Nardostachys jatamanasi*.DC and *Tribulus terrestris*. L with their beneficial effects on PCOS Induced Rat models

Metabolic Syndrome & Related Disorders, 2015, 13(6)248-54, Mary Ann Liebert Publishers, IF: 2.00

6. Ajesh K, Sreejith K

A novel antifungal protein with Lysozyme-like activity from seeds of *Clitoria ternatea Applied Biochemistry & Biotechnology*,2014,173:682–693, Springer–Nature Publishers, **IF: 2.27** 

7. Shabeer Ali H, Sreejith K

Multi-targeted action of a plant derived flavonoid glucoside 'apigetrin' against important macromolecular targets in cancer - An *in-silico* validation

International Journal of Pharma and Biosciences, 2014, 5(3): 478 - 490

8. Ajesh K, Sreejith K

Disease of the shells of Indian apple snails (Ampullariidae: *Pila globosa*)

Ruthenica – Russian Malacological Journal, Vol. 24 (1): 31-33, 2014, Russian Academy of Sciences Publishers

# 9. Ajesh K, Sudarslal S, Arunan C, Sreejith K

Kannurin, a novel lipopeptide from Bacillus cereus strain AK1: isolation, structural evaluation and antifungal activities. *Journal of Applied Microbiology*, 2013, 115(6):1287-1296, Wiley-Blackwell Publishers, **IF: 3.06** 

# 10. Ajesh K, Sreejith K

Cryptococcus laurentii Biofilms: Structure, Development and Antifungal Drug Resistance. *Mycopathologia*, 2012; 174(5-6): 409-419, Springer–Nature Publishers, **IF: 2.45** 

## 11. Ajesh K, Sreejith K

Peptide antibiotics: An alternative and effective antimicrobial strategy to circumvent fungal infections. *Peptides*, 2009, 30, (5) 999-1006. Elsevier Publishers, **IF: 2.88** 

# 12. Benny PJ., Kurup GM., Sreejith K

Levels of enzymes in tumor bearing mice treated with L- Asparaginase isolated from Aeromonas. *Indian Journal of Clinical Biochemistry*, 1999, Vol. 14 (2), 189-197, Springer–Nature Publishers.

# 13. Benny PJ., Kurup GM., Sreejith K.

Lipid metabolism in tumor bearing mice treated with Aeromonas L - Asparaginase. *Indian Journal of Clinical Biochemistry*, 1997, Vol.12, 108 – 113, Springer–Nature Publishers

# 14. Benny PJ., Kurup GM., Sreejith K and Jayashree G.

Protein and glycoprotein metabolism in tumor bearing mice treated with Aeromonas Asparaginase. *Indian Journal of Biochemistry and Biophysics*, 1996, Vol. 33, 527-530, Scientific Publishers

## **Chapter in Books:**

# 1. Ajesh K, Sreejith K

"Purification and characterization of antifungal lipopeptide from a soil isolated strain of Bacillus cereus". In: Worldwide Research Efforts in the Fighting against Microbial Pathogens: from Basic Research to Technological Developments, Brown Walker Press / Universal Publishers, Inc. USA, 227-231(2013)

#### 2. Shabeer Ali H., Tripathi Renu, Sreejith K.

"Plant Metabolites: Methods for Isolation, Purification, and Characterization" In: Plant Metabolites: Methods, Applications and Prospects, Springer Nature Singapore Pte Ltd. 2020 (in press)

## **GenBank Entries:**

# 1. Palanthara, P. & Sreejith, K. (2019)

Bacillus tequilensis strain PP1 16S ribosomal RNA gene, partial sequence: GenBank: MK648314.1

### 2. Palanthara, P. & Sreejith, K. (2019)

Bacillus subtilis strain PP1 16S ribosomal RNA gene, partial sequence: GenBank: MK649812.1

#### 3. Palanthara, P. & Sreejith, K. (2019)

Bacillus subtilis strain PP2 16S ribosomal RNA gene, partial sequence: GenBank: MK649931.1

#### 4. Ajesh, K. & **Sreejith**, **K**. (2012)

Bacillus cereus strain AKN1 16S ribosomal RNA gene, Partial 1 sequence GenBank: JX512716.1

# **Papers in International Conferences:**

- 1. Shabeerali H & Sreejith K "Isolation of a Lipopeptide Biosurfactant from Bacillus Cereus AK1 that can be used as a Potential Anti-Adhesive Coating Agents for Medical Insertion Materials" 26<sup>th</sup> European Congress of Clinical Microbiology & Infectious Diseases, Amsterdam (Netherlands), April 9-12, 2016
- 2. Ajesh K & Sreejith K "Characterization of Surfactin like antifungal lipopeptide produced by a soil isolate of Bacillus cereus strain AK1", IV<sup>th</sup> Indian Peptide Symposium, Kolkota, February 22-23, 2013
- 3. Sudarslal S, Divya Nair, Ajesh K, Bipin Nair & Sreejith K "Mass spectrometric characterization of lipopeptides from Bacillus cereus-AK1" International Conference on Biotechnology for Innovative Applications, 2013. Kollam, India, Aug10-14, 2013
- **4.** Ajesh K & Sreejith K "Purification and characterization of antifungal lipopeptides from a soil isolate strain of Bacillus cereus" II International Conference on Antimicrobial Research ICAR2012, **Lisbon (Portugal)**, 21-23 November 2012.
- **5.** Sandeep PM & Sreejith K "In *vitro screening of plants for antiandrogenic activity using yeast androgen bioassay"* International Conference on Advances in Biological Sciences (ICABS 2012), March 15-17, 2012, Kannur, India.
- **6.** Alex CV & Sreejith K, "Comparative study of pronuclear and cleavage stage embryos on cryo survival based on different age groups" International Conference on Male Reproduction and Infertility, Indian Institute of Science. Bangalore, India. Sept. 16-18 2005.

## **Papers Presented in National Conferences:**

- Shabeer Ali H & K. Sreejith, Time Kill Kinetics to Demonstrate the Synergistic Effect of a Cyclic Lipopeptide 'Kannurin' in Combination with beta lactams against Staphylococcus. Three Day National Seminar on Recent Advances in Molecular Biology & Biotechnology (RAMBB2018), Kannur University March 14-16, 2018
- Prajosh P & Sreejith K, Isolation and Identification of Biosurfactant Producing Bacillus Sp from Coir Industry Waste.
   Three Day National Seminar on Recent Advances in Molecular Biology & Biotechnology (RAMBB2018), Kannur University March 14-16, 2018.
- Zephyr C. Kottayil, K. Surekha, E. Jayadevi Variyar & K. Sreejith, Molecular studies on Staphylococcal surface protein.
   Three Day National Seminar on Recent Advances in Molecular Biology & Biotechnology (RAMBB2018), Kannur University March 14-16, 2018.
- 4. Jenson Jacob & Sreejith K, Invitro Anti-inflammatory activity of methanolic extract of Mallotus philippensis bark in Lipopolysaccharide induced mouse RAW 264.7 cell lines. Three Day National Seminar on Recent Advances in Molecular Biology & Biotechnology (RAMBB2018), Kannur University March 14-16, 2018.
- 5. Prajosh P., Sreejith K, Isolation and purification of a galactose specific lectin from *Muringa oleifera* and its antimicrobial activities. 30<sup>th</sup> Kerala Science Congress, Thalassery, Kerala, 28-31 January 2018
- Shabeer Ali H., Anagha V.N., Sreejith K, Presence of a neuromuscular blocking agent in non-brown recluse spider nest: A potential drug lead for anesthetic practices. 30<sup>th</sup> Kerala Science Congress, Thalassery, Kerala, 28-31 January 2018
- 7. Zephyr.C. Kottayil., K. Sreejith., E. Jayadevi Variyar & K. Surekha, PCR based cloning of ig binding domains of spa protein from Staphylococcus aureus and its molecular characterization. 30<sup>th</sup> Kerala Science Congress, Thalassery, Kerala, 28-31 January 2018

- 8. Jenson Jacob & Sreejith K, Pharmacological activities of methanolc extract from *Mitracarpus villosus* in the traditional system of herbal medicine. National Syimposium of Biotechnology, Symbiot'14, Manipal Institute of Technology, 11-12 April, 2014
- 9. Sreejith K, "Kannurin: Formation and Biochemical Aspects". National Conference: New Paradigms in Chemistry *Ab Initio-ad Futurum.*, St. Mary's College Sulthan Bathery, Kerala India, 10<sup>th</sup> March 2014.
- 10. Sandeep PM & Sreejith K, In vitro antiandrogenic activity of methanolic extracts of *Embelia ribes* Burm.f and its beneficial role in the treatment of DHT induced PCOS in rats. 26<sup>th</sup> Kerala Science Congress, Wynad, Kerala, 28-31 January 2014
- 11. Shabeer Ali H, Haridas M & Sreejith K, Multi targeted action of a plant derived flavonoid glucoside 'Apigetrin ' in cancer and its structural modification to design a MDM2 topoisomerase duel inhibitor an in silico approach. 26<sup>th</sup> Kerala Science Congress, Wynad, Kerala, 28-31 January 2014
- 12. Jenson Jacob & Sreejith K, Pharmacological activities of methanolic extract from *Mitracarpus villosus* in the traditional system of herbal medicine. 26<sup>th</sup> Kerala Science Congress, Wynad, Kerala, 28-31 January 2014
- 13. Sreejith K., "Poly Cystic Ovary Syndrome: Fight Continues". National Seminar on Potential of Bioinnovation., Govt. Brennen College, Thalassery, Kerala India, 2<sup>nd</sup> January 2014.

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