

**Dr.J. SRIDHAR**

Assistant Professor, Department of Biotechnology (DDE)  
 UGC-Commonwealth Fellow-UK, Madurai Kamaraj University  
 Madurai – 625021 Tamil Nadu

Email: jsridhar@mkuniversity.ac.in (off)  
 srimicro2002@gmail.com (personal)

Phone: 0452-2459195 (Off); 9751648767(Mobile)

<https://www.scopus.com/authid/detail.uri?authorId=16234722600>

<https://vidwan.inflibnet.ac.in/profile/177575>

<https://scholar.google.ca/citations?user=2Op478cAAAAJ&hl=en>

**1. Personal Details**

Date of Birth & Age : 12/06/1981  
 Gender & Marital Status : Male, Married  
 Community : Sengunthar  
 Nationality : Indian  
 Place of Birth : Manampathy, Kanchipuram District

**2. Educational Qualifications****2.1. Academic**

Degree/ Examination	Name of the Exam	University/ Institute	Year of Passing	Percentage / Grade	Main Subject
Under Graduate	BSc/BA/BCom etc. Degree	University of Madras/Sri Sankara College, Kanchipuram	2002	67	Microbiology
Teacher Education	BEd / MEd				
Post Graduate	MSc/MA/MCom etc. Degree	Bharathidasan University/Department of Microbiology	2004	7.58 CGPA with Distinction	Microbiology
NET	CSIR-UGC/ NET/ NET-LS				

**2.2. Research**

Degree	Name of the University	Title of the Thesis	Date of Submission	Date of Award
PhD	Madurai Kamaraj University/School of Biotechnology	“Studies on Rnome and Associated Proteins”	17.08.2009	16.09.2010
MPhil				
DSc/DLitt				

### 3. Post-Doctoral/ Research Associate / Industrial Experience

Name of the University / Institute / Industry	Period of Work	Nature of Work
Max Planck Institute for Infection Biology, Berlin, Germany	December 2009 to October 2010	Non coding RNA and pathogenesis of <i>Salmonella</i> spp.
Austrian Academy of Sciences	October 2010 to February 2011	<i>Polynucleobacter</i> spp. genomics

### 4. Professional Experience

No	Name of the University / Institution	Position Held	From (Date)	To (Date)
1	Centre of Excellence in Bioinformatics, School of Biotechnology, Madurai Kamaraj University	Research Fellow	01/12/2004	31/08/2007
2	Commonwealth Scholarship Commission, UK tenable at University of Leicester	Commonwealth Split-Site Doctoral Fellow	01/10/2007	13/04/2009
3	Coordinator, Centre of Excellence in Bioinformatics, School of Biotechnology, Madurai Kamaraj University	Senior Research Fellow	01/09/2007	30/11/2009
4	Max Planck Institute of Infection Biology, Berlin, Germany	Post Doctoral Fellow	01/12/2009	31/10/2010
5	Austrian Academy of Sciences, Austria	Post Doctoral Scientist	01/11/2010	31/01/2011
6	Coordinator, UGC-Networking Resource Centre in Biological Sciences, Madurai Kamaraj University	Project Faculty	03/02/2011	06/12/2013
7	Madurai Kamaraj University, Department of Biotechnology (DDE)	Assistant Professor	06/12/2013	Till date

### 5. Teaching (List all the courses taught (semester-wise) – MPhil, PG and UG)

No	Year	Semester	Course Code	Course Title	Hours per Week
1	2022-23	PG: II	BBB	BIOPHYSICS AND BASIC	Four

				<b>BIOINFORMATICS</b>	
2	2011-2019	PG: II	<b>GEN14 32C</b>	<b>PROTEOMICS AND BIOINFORMATICS</b>	Four
3	2011-2019	PG: II	<b>GEN14 35E</b>	Lab in Bioinformatics	Two
4	2011-2019	PG: III	<b>GEN14 36E:</b>	<b>COMPUTATIONAL GENOMICS</b>	Four
5	2013-2021	UG:I-VI	<b>UMBIOI-VIII</b>	<b>BSc., Microbiology</b>	TWO
6	2013-2021	UG:I-VI	<b>UMBIL1-L4</b>	<b>BSc., Microbiology</b>	TWO

## 6. Design/Development of New Curricula and Courses

No	Description	Organization for which it was Developed	Level(PG/UG)
1	Advance Diploma in Bioinformatics	Madurai Kamaraj University	Advance Diploma

## 7. Creation of ICT Mediated Teaching-Learning Pedagogy

### 7.1. SWAYAM / MOOCs

No	Description	Organization for which it was Developed	Level(PG/UG)

### 7.2. E-Contents

No	Description	Organization for which it was Developed	Level(PG/UG)

### 7.3. Development of other ICT Mediated Teaching-Learning Pedagogy

No	Description	Organization for which it was Developed	Level(PG/UG)

## 8. Research Specialization / Field of Research

- Genome Informatics
- Non-coding RNA Biology
- Next Generation Sequencing and Data Analysis
- Food analysis for Endocrine disrupting chemicals
- Seaweed essential oil for therapeutic applications

## 9. Research Publications

Type	International	National
Papers Published in UGC-CARE Listed Journals	42	
Papers in Refereed Journals (Not mentioned above)		4
Books Published (chapters)		
Books Edited		
Contributions to Book Chapters	4	3
Editor of Conference/Seminar Proceedings		
Papers Published in Conference/Seminar Proceedings		3
Papers Presented in Conferences/Seminars	15	
Conference/Seminar/Workshop Attended	30	
Deposits in CCDC, PDB, etc.		

## 10. Citation Metrics

Cumulative Impact Factor (Recent Annual JCR)	145
Total Citations (Scopus/Web of Science)	400
h-Index (Scopus/Web of Science)	16
g-Index (Scopus/Web of Science)	11
i10 Index (Scopus/Web of Science)	22

## 11. Details of Patents

1. --

## 12. Research Guidance/Supervision

Degree / Programme	Completed	Submitted	Ongoing
PhD (Full-time)			
PhD (Part-time)	2	-	3
MPhil Research Project (Full-time)			
MPhil Research Project (Part-time)			
MSc Projects/Dissertation	7	-	1
MSc Internships/Summer or Winter Projects			

## 13. Funded Research Projects

### 13.1. Ongoing

No	Title of the Project	Funding Agency	Period / Duration	Total Grants Sanctioned (Rs)
1	<b>Construction of machine learning based standalone suite and web-server for viral read detection and variant differentiation from NGS/RNA-SEQ data</b>	RUSA, MKU	Two Years	Group project, 72 Lakhs

### 13.2 Completed

No	Title of the Project	Funding Agency	Duration and Month & Year of Completion	Total Grants Received (Rs)	No of Papers out of Project
1	Construction of computational platform for the identification of non-coding small RNAs and small ORFs in bacteria	DBT, Govt. of India	2012-2015 (PI)	19.0	2
2	Analysis and identification of prophage mediated genome evolution in <i>Salmonella</i> spp.	UGC, Govt. of India	2012-2015 (PI)	10.3	1
3	Networking project on <i>Brucella</i> spp. genomics	DBT, Govt. of India	2012-2019 (Co-PI)	120.0	7

### 14. Reviewer in Journals

Name of the Journal	Publisher	No of Papers Reviewed
JBSD	Taylor & Francis	5
PLoS One	PLoS group	3
JoVE	My JOVE corp.	1
Environmental Advances	Science Direct	1
PLoS Global Public Health	PLoS	1
Frontiers in Veterinary Sciences	Frontiers	1
Journal of Cardiovascular Development and Disease	MDPI	1
Cell Biochemistry and Biophysics	Springer Nature	1
Computers in Biology and Medicine	Springer	1
Genomics	Elsevier	1
Pharmaceutical Sciences	TUOMS PRESS	1
medRxiv	Qeios	1
Frontiers in Microbiology	Frontiers	1
PLoS ONE	PLoS	1
Mitochondrial DNA Part A	Taylor & Francis	1
Computers in Biology and Medicine	Elsevier	1
Gene Reports	Elsevier	1
PeerJ	PeerJ	1
Molecular OMICS	RSC	1
Frontiers Microbiology	Frontiers	1
Journal of Biomedical Informatics	Science Direct	1
....etc.,		

## 15. Research Collaborations

Name of the Collaborator	Institute	Collaboration Details
Dr. N. Sabarinathan	National Centre for Biological Sciences, Bengaluru	TCGA/TCPA analysis
Prof. K. Sekar	Indian Institute of Science, Bengaluru	Webserver, Computational tool/software development and hosting
Prof. Sanjeev Kumar singth	Alagappa University	QSAR analysis using Schroedinger
Dr. Kalyanasundaram	Periyar University	Thin film evaluation and antibacterial material selection
Dr. Mathavan	Thiruvalluvar University, Vellore	Sensor for alloxan detection
Dr. Martin Britto Doss	Sacred Heart College, Tirupatthur	Shock wave project

## 16. Countries Visited

Name of the Country	Period	Purpose
United Kingdom	2006-2009	Part of PhD research carried out in the Department of Infection, Immunity and Inflammation, University
Singapore	2009	Presentation in International Conference on Bioinformatics-2009
Germany	2009-2010	Post Doctoral Fellow in Max Planck Institute for Infection Biology, Berlin, Germany
Austria	2010-2011	Post Doctoral Fellow in Austrian Academy of Sciences, Mondsee, Austria
Malaysia	2012	Presentation in International Conference on Bioinformatics-2009

## 17. Honours / Awards / Recognitions

Name of the Honours / Awards / Recognition	Awarding Agency	International / National / State / Institute Level
❖ Mentor DBT-STAR college scheme, PSGR Krishnammal college, Coimbatore (2019-22)	DBT	National
❖ Fellow of the Antiviral Research Society of India (2018)	AVRS	STATE
❖ Max Planck Society Germany	MPG, Max	International

<p>travel subsistence allowance (2013)</p> <ul style="list-style-type: none"> <li>❖ Nominated for participation in "Otto Warburg Summer School on Next Generation Sequencing and its impact on Genetics" at Max Planck Institute for Molecular Genetics, Berlin, Germany, August 19-26, 2013</li> <li>❖ DBT-CTEP International Travel grant tenable at Germany (2013)</li> <li>❖ UGC-DSKothari Post Doctoral Fellowship (2013)</li> <li>❖ ICMR travel grant – Govt. of India tenable at <b>Malaysia</b> (2011)</li> <li>❖ Post Doctoral Fellowship – Austrian Academy of Science, <b>Austria</b> (2010-2011).</li> <li>❖ Post Doctoral Fellowship – Max Planck Institute for Infection Biology, Berlin, <b>Germany</b> (2009-2010).</li> <li>❖ UGC-Commonwealth Split-site Doctoral award – Commonwealth Scholarship Commission, <b>United Kingdom</b> (2007-2009).</li> <li>❖ DST-ITS International travel grant – Govt. of India tenable at <b>Singapore</b> (2009).</li> <li>❖ Recipient, Junior and Senior Research Fellowship – DBT Govt. of India (2004–2009).</li> </ul>	<p>Planck Society</p> <p>Max Planck Institute for Molecular Genetics, Berlin</p> <p>DBT-CTEP</p> <p>UGC</p> <p>ICMR</p> <p>OEAW</p> <p>MPG</p> <p>CSC, UK</p> <p>DST-ITS</p> <p>DBT</p>	<p>International</p> <p>National</p> <p>National</p> <p>National</p> <p>International</p> <p>International</p> <p>International</p> <p>National</p> <p>National</p>
---	---	---

### 18. Conferences / Seminars / Workshops Organized

Level	Conference Title	Date(s)	Place	Role Played	Funding
	Summer school on "Comparative genomics and its applications in drug discovery"	May 31- June13, 2011	NRCBS-MKU	Organizing secretary	UGC-MHRD
	First 'On Site' workshop on "Computational genomics and its applications"	September 20-30, 2011	Sri Venkateswara University, Tirupati, A.P.	Convener	UGC-MHRD

	Second 'On Site' workshop on "Advances in Computational genomics"	February 13-20, 2012	Yogi Vemana University, Kadapa	Convener	UGC-MHRD
	Third 'On Site' workshop on 'Recombinant DNA technology and Bioinformatics'	September 24-October 5, 2012	Thiruvalluvar University, Vellore	Organizing Secretary	UGC-MHRD
	First DBT-Brucella genomics workshop	July 08-12, 2013,	Department of Genetics, MKU	Course Co-ordinator	DBT

### 19. Invited Lectures / Resource Person

No	Institute / Organizer	Name of the Conference / Seminar / Workshop	International / National / State / Institute Level	Date(s)
		<ul style="list-style-type: none"> <li>❖ Delivered a invited lecture on "Initiatives by Government of India for Women Entrepreneurs" organized by YWED, SFR College, Sivakasi on July 2, 2021.</li> <li>❖ Delivered a invited lecture on "Evolution of the SARS-CoV2 Virus" in the webinar organized by the Youth Red Cross Association of Govindanar Aditanar College for Women, Tiruchendur on 21.05.2021</li> <li>❖ Delivered a invited lecture on "Highthroughput Data Analysis using Bioinformatics Tools" in the Faculty Development Programme on "Hands on Training on Computational Biology" organized by St. Mary's College, Thoothukudi and Rani Anna Government College for Women, Tirunelveli on 11.05.2021</li> <li>❖ Delivered a invited lecture on "Advance Bioinformatics Techniques for Biologists" in the association meeting organized by the Department of Botany, Rani Anna Government College for Women, Tirunelveli on 30.04.2021</li> <li>❖ Delivered a invited lecture on "Gender Specific Initiatives by Government of India for Women Empowerment" in Referresher course on "Gender Studies" organized by UGC-Human Resource Development Centre, Madurai Kamaraj Unviersity, Madurai-625021</li> <li>❖ Delivered a invited lecture on "Bioinformatics Techniques applied in Modern Biology" in the Faculty Development Programme conducted by V.V.V. College, Virudhunagar 13.03.2021.</li> <li>❖ Delivered a invited lecture on "COVID 19 combating strategies" in the webinar organized by Tamilnadu Psychology Association (TNPA), Chennai</li> <li>❖ Delivered a lecture on Soft computing and artificial intelligence applications in Genome Biology, in the National workshop on "<b>Artificial Intelligence in Genomic Analysis</b>", PSGR Krishnammal College for Women, Coimbatore Feb 3-4, 2020</li> </ul>		



- ❖ Delivered a invited lecture on “**Next Generation Sequencing**” under DBT Star College Scheme, organized by Department of Computer Science, PSGR Krishnammal College for Women, Coimbatore (20.09.2019).
- ❖ Delivered a lecture on “**Identification of silver stress responsive small RNAs in Bacillus cereus**” in the three day workshop on “Bioinformatics and Metagenomics” organized by the Department of Microbiology, Periyar University, Salem (10.09.2015).
- ❖ Delivered a invited lecture on “**Biological Data Mining and Analytics**” under DBT Star College Scheme, organized by Department of Computer Science, PSGR Krishnammal College for Women, Coimbatore (29.09.2018).
- ❖ Delivered a lecture on “**Computational protein design and protein-ligand interaction studies for the improvement of organophosphorus degrading potential of Organophosphorus hydrolase from *Deinococcus radiodurans***” in the national conference on Recent advances in antiviral drug design, discovery and development, June 8-9, 2018 held at Cherran college of Pharmacy, Coimbatore.
- ❖ Delivered a lecture on “**Genomics**” in Thiagarajar college, Madurai on 18.09.2018
- ❖ Delivered a lecture on “**Bioinformatics for Biologists**” in the UGC sponsored seminar by the Department of Botany, SVN College, Nagamalai, Madurai on 07.02.2018.
- ❖ Invited lecture on “**Brucella genomics**” in the DBT sponsored Brucella Bioinformatics workshop held in School of Biological Sciences, MKU on December 5, 2017.
- ❖ Invited talk on “**Evolutionary dynamics and genomics of Dengue virus serotypes prevalent in India**” delivered at National seminar on “Recent advances in antiviral drug design and discovery against emerging and re-emerging viral diseases”, October 24-25, 2017
- ❖ Invited lecture on “**Bioinformatics for Biologists**” delivered at ‘**Refresher course on Biology for college/University teachers**’ conducted by UGC-Academic Staff College, Madurai Kamaraj University, Madurai, November 20, 2013
- ❖ Key note lecture on “**Soft computing techniques applied in Biology**” delivered at the CSIR sponsored international conference on “Applied soft computing techniques” (ICASCT) conducted by Kalasalingam University, Krishnankoil, April 22-23, 2017.
- ❖ Invited lecture on “**Bioinformatics for marine sciences**” delivered at 35<sup>th</sup> Winter School on “Protein purification technology & Coral reef monitoring techniques” conducted by NRCBS, Madurai Kamaraj University on March 14, 2017.

	<ul style="list-style-type: none"> <li>❖ Oral presentation on “<b>Identification and molecular differentiation of PaV1 and Vibrio. spp</b>prevalence in the spiny lobsters of gulf of mannar” delivered at 3<sup>rd</sup> AFSA Conference on “Food Safety and Security”, conducted by KIIT University, Bhubaneswar, September 15-17, 2016.</li> <li>❖ Invited talk on "Identification of silver stress responsive small RNAs in Bacillus cereus" was delivered at DST-SERB sponsored National Conference on "Recent advances in Industrial Biotechnological skills development", at Thiagarajar college, Madurai from 30-3-2015 to 31-03-2015.</li> <li>❖ Preliminary talk on "Bioinformatics tools for Metagenomics and Bioinformatics" was delivered at the workshop on Advanced Molecular Techniques held in Periyar University, September 11, 2015.</li> <li>❖ Invited lecture on ‘Non-coding RNAs in Prokaryotes’ delivered at ‘Advances in Non-coding Genomics’ conducted by Institute of Bioinformatics and Applied Biotechnology, Bangalore, September 13-14, 2013</li> </ul>
--	---

## 20. Professional Development Programs / Faculty Development Programs Organized

Name of the Program	Role	Place	Date(s)	Funds in Rs & Sponsor
First DBT-Brucella genomics workshop	Course Co-ordinator	School of Biological Sciences, MKU	July 08-12, 2013, Department of Genetics, MKU	DBT

## 21. Professional Development Programs / Faculty Development Programs Attended

Name of the Program	Place	Date(s)		Sponsor
Otto Warburg Summer School on Next Generation Sequencing and its impact on Genetics	Max Planck Institute for Molecular Genetics	August 19, 2013	August 26, 2013	Max Planck Institute for Molecular Genetics
The Warwick Practical Proteomics’	Waters India Ltd & Warwick University	October 16, 2012	October 19, 2012	Waters India Ltd & Warwick University
<b>Transcriptomics</b> workshop	European Bioinformatics Institute, Hinxton, Cambridge, UK	January 28, 2008	January 30, 2008	European Bioinformatics Institute, Hinxton, Cambridge, UK
EBI-Master level training	European	March 21,	March 22,	European

	Bioinformatics Institute, Hinxton, Cambridge, UK	2009	2009	Bioinformatics Institute, Hinxton, Cambridge, UK
Satellite meetings and SIGS, INCOB 2009	National University of Singapore & APBioNet	September 7-2009	September 11, 2009	National University of Singapore & APBioNet
Indo-US workshop on Biocomputing	National Institute of Technology, Calicut	September 12, 2011	September 13, 2011	National Institute of Technology, Calicut
DBT sponsored training programme on “Whole genome sequencing and annotation”	IISR, Calicut	February 21, 2012	February 25, 2012	IISR, Calicut
WORTIC-WOBIC-2007	National Facility for marine cyanobacteria, BDU	March 19, 2007	March 30, 2007	National Facility for marine cyanobacteria, BDU
Training on Animal cell Culture	King Institute of Preventive Medicine, Chennai	June 1, 2003	June 30, 2003	King Institute of Preventive Medicine, Chennai

## 22. Administrative Experiences

Role Played	Responsibilities	Period (from ... to)
<ul style="list-style-type: none"> <li>➤ Observer for regular MKU examinations conducted in Madonna college, Viraganoor, Madurai (2020)</li> <li>➤ Served as Technical Committee Member to apply for course approval from UGC-DEB (2019-20)</li> <li>➤ Committee member for the merger of EDPs in DDE and Additional Controller of Examinations office through automation (2019-20)</li> <li>➤ Committee member for the implementation DDE online admission portal (2019)</li> <li>➤ Nominated as a warden for Kavimani Hostel, Madurai Kamaraj University (2015 – 2016).</li> <li>➤ Inspection committee member for Community college, Bodi (2019)</li> <li>➤ Appointed as an Expert, for the UGC sponsored Community college courses conducted by C.P.A. College, Bodinayakkanur (February 15, 2019).</li> <li>➤ Nominated as Head-in-Charge, Department of Biotechnology (DDE), Madurai Kamaraj University from 28-12-2017 onwards.</li> <li>➤ Acted as a “Coordinator” for the Lesson Despatch section, DDE from 2019 to May 2022.</li> <li>➤ Nominated as observer to conduct the Non-semester examinations of April 2017 at Thiruvannamalai examination centre from 25-05-2017 to 27-06-2017.</li> <li>➤ Nominated as observer to conduct the Non-semester examinations of November 2017 at Theni Examination centre</li> </ul>		

### 23. Membership in Academic Bodies

Name of the University / Institute / College	Type of Membership	Duration / Period
Community College sponsored by UGC, CPA college, Bodinayakkanur	BoS Member	2019-2022
Doctoral Committee Member for PhD/Periyar University	External Member	2018-2021

### 24. Membership in Recognised Professional Bodies

Name of the Professional Body	International / National	Type of Membership
❖ Life Member- Antiviral Research Society of India (AVRS)	National	Life Member
❖ Life member – Biotech Research Society of India (BRSI) Member – International Society for Computational Biology (ISCB)	National	Life Member
❖ Member – APBionet	International	Annual Member
❖ Member – Society of Biological Chemists in India (SBCI)	National	Annual Member

### 25. Languages Known

Languages	Read	Write	Speak
Tamil	Yes	Yes	Yes
English	Yes	Yes	Yes

### 26. Competence in Computer Applications

#### **Expertise in Bioinformatics software/web-server development:**

The PI (Dr. J. SRIDHAR) has expertise in constructing variety of computational tools (standalone and web servers) for genome analysis. He has developed a computational tool sRNAscanner for small RNA prediction in pathogen genomes and published (Sridhar et al., 2010). He has developed a computing for the comparative identification of putative small RNA locations in bacteria called as PsRNA (Sridhar et al., 2010: Genomics Proteomics

Bioinformatics 8: 127-134). Subsequently he has developed an intergenic explorer Junker for the analysis of intergenic regions (Sridhar et al., 2011: Genomics Proteomics Bioinformatics 9: 179-182). He has involved in developing databases sRNABase (Sathesh et al., 2009) and Brucellabase (Sankarasubramanian et al., 2016). Recently the PI has developed software called as PanGeT: Pangenomics tool to compute the pangenome of 'N' number of genomes in a single command (Yuvaraj et al., 2017: Gene 600: 77-84). Most of the tools and web servers are hosted and maintained in the Bioinformatics centre at Indian Institute of Science, Bengaluru.

#### Expertise in NGS data analysis:

PI has acted as one of the investigator the DBT Networking Project on “Brucella genomics” and analyzed the NGS data for partnering labs in India. It has resulted in the publication of seven Whole Genome Sequences and published in reputed journals which were deposited in NCBI-SRA. Dr. J. Sridhar has also acted as a PI for the UGC sponsored major research project on “Phage mediated genome evolution in *Salmonella* spp.”

The PI has published research articles on waste water based epidemiology for monitoring and surveillance on emerging and re-emerging viruses (Sridhar et al., [Case Studies in Chemical and Environmental Engineering](#), 2022 Dec; 6: 100241).

The PI is also nominated as a course coordinator for the Advance Diploma in Bioinformatics course in MKU which helps to acquire expertise in this field from time to time.

#### **27. Involvement in Extension Activities other than Academic Works**

- Acted as Judge for ‘Veetukoru Vignani’ programme organized by Puthiyathalaimurai television network (2017).
- Served as a polling officer in General elections for Lokh Sabha 2019
- Served as a presiding officer in local body elections Tamilnadu Dec 2019
- Invigilator for TNPSC CCSE-IV 2018 held in MKU

#### **28. Any Other Relevant Information**

I am planning to establish “Centre for Genome Informatics” in Madurai Kamaraj University to reinstate the Bioinformatics/Computational research atmosphere in the campus. I request the administration to create such centre to facilitate the effective conduct of “Advance Diploma in Bioinformatics” in near future.

## Details of Publications

### 1. Book Chapters:

1. A book chapter on “The Small RNAs of *Salmonella*” by Jayavel Sridhar, Kai Papenfort and Jorg Vogel, in “*Salmonella: From Genome to Function*” (2010) edited by Steffen Porwollik. Publisher: Horizon Press, USA ISBN: 978-1-904455-73-8.
2. Laboratory Manual on “Comparative Genomics and Proteomics in Drug Discovery” by P. Gunasekaran, R. Murugesan, J. Sridhar and A. Mahalakshmi published by UGC-NRCBS, MKU (2011).
3. Laboratory Manual on “Computational genomics and its applications” by P. Gunasekaran, R. Murugesan, J. Sridhar and A. Mahalakshmi published by UGC-NRCBS, MKU (2011).
4. Laboratory Manual on “Advances in Computational genomics” by J. Sridhar *et al.*, published by UGC-NRCBS (2012).
5. Laboratory Manual on ‘Brucella genomics’ by Rajendhran, Sridhar, et al., (2013) published by Department of Genetics, MKU.
6. A Book chapter entitled as “*UV-B stress induced antiviral response through photolyase-An interaction assessment with virulence proteins of Cyamopsis tetragonoloba leaf curl Virus*” in Recent trends in Microbial diversity and bioprospecting, published by Westville publishing House, New delhi (2014).
7. A Book chapter entitled as “Advanced natural/synthetic composite materials for marine applications: A review”, CRC Press (Accepted)
8. A Book chapter entitled as “Polyester based Bio composites for marine applications”, CRC Pres (Accepted)
9. A book chapter entitled as “Suitability of biocomposites in marine applications”, Springer (Accepted).

## 5. Research Publications

List of publications by Dr. J. Sridhar affiliated to Madurai Kamaraj University			
S. No	Authors & Title	Name of the Journal	Volume/Page/Year
1	Jayavel Sridhar <sup>S,#</sup> , Rahul Parit <sup>#</sup> , Govindaraju Boopalakrishnan, M Johni Rexliene, Rajkumar Praveen, Viswanathan Balaji Importance of wastewater-based epidemiology for detecting and monitoring SARS-CoV-2	Case Studies in Chemical and Environmental Engineering (Elsevier)	2022, 6, 100241
2	<a href="#">A. Sivakumar</a> , <sup>a</sup> <a href="#">A. Rita</a> , <sup>a</sup> <a href="#">S. Sahaya Jude Dhas</a> , <sup>b</sup> <a href="#">K. P. J. Reddy</a> , <sup>c</sup> <a href="#">Raju Suresh Kumar</a> , <sup>d</sup> <a href="#">Abdulrahman I. Almansour</a> , <sup>d</sup> Shubhadip Chakraborty, <sup>e</sup> <a href="#">K. Moovendaran</a> , <sup>f</sup> <a href="#">Jayavel Sridhar</a> <sup>g</sup> and <a href="#">S. A. Martin Britto Dhas</a> Dynamic shock wave driven simultaneous crystallographic and molecular switching between $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> and Fe <sub>3</sub> O <sub>4</sub> nanoparticles – a new finding <sup>†</sup>	Daltons Transactions [IF: 4.39]	2022, 51, 9159-9166
3	Rajkumar Praveen, Johni Rexliene, Ashwini Karuppaswamy, Murugesan Rajeshkannan, Viswanathan Balaji, Jayavel Sridhar* Insights from the molecular docking aided interaction analysis of HfQ with small RNAs	Bioinformation	2022, 18 (4), 425-431
4	Chandrasekaran Kumar, Dhinakarasamy Inbakandan, <a href="#">Jayavel Sridhar</a> , Thirugnanasambandam Rajendran, Subashni	Journal of King Saud University- Science	101909 (2022)

	<b>Bhoopathy, Gopal Dharani, Ramalingam Kirubagaran, Seyed Ajmal Khan</b> Complete sequence and characterization of the <b>Mobula tarapacana</b> (Sicklefin Devilray) mitochondrial genome and its phylogenetic implications		
5	<b>M. Rajesh Kannan<sup>a</sup>, B. Ramkumar<sup>a</sup>, N. Sivakumar<sup>b</sup>, J.Sridhar<sup>c</sup> and C.M. Ramakritinan<sup>a*</sup>.</b> <b>MOLECULAR IDENTIFICATION OF CORAL ENDOSYMBIONTS OF VEEDHALAI AND MANDAPAM COASTS IN PALK BAY, BASED ON SMALL SUBUNIT rDNA.</b>	Bioinformation	2022 (Accepted)
	<a href="#">Computational studies on new Leishmanial drug targets against Quercetin</a> <b>Kanagaraj Jyothi, V Sivaranjani, U Pavithra, Sridhar Jayavel, Lakshmanan Muthulakshmi</b>	Indian Journal of Biochemistry and Biophysics (IJBB) [IF: 1.5]	59, 9: 909-917
6	Proximate composition and fatty acid profile of <b>Himantura marginata</b> (Blackedge whipray) liver oil <b>C. Kumar1 · D. Inbakandan1 · J. Sridhar2 · R. Thirugnanasambandam1 · B. Subashni1 · G. Dharani3 · Meivelu Moovendhan4 · S. Ajmal Khan5</b>	Biomass conversion and Biorefinery [IF: 4.987]	<a href="https://doi.org/10.1007/s13399-021-01984-y">https://doi.org/10.1007/s13399-021-01984-y</a> (2021)
7	<a href="#">Deriving tropical gynocious inbred backcross lines from exotic pickling cucumber using marker assisted backcross breeding</a> G <b>Boopalakrishnan, Sridhar</b>	Scientia Horticulturae [IF: 3.463]	288 2021/10/15



	Jayavel, Tusar Kanti Behera, Anilabha Das Munshi, Shilpi Kumari, Sachin Kumar		
8	Fabrication of Ag/Ag <sub>2</sub> O incorporated Graphitic carbon nitride based ZnO nanocomposite for enhanced Z-scheme photocatalytic performance of various organic pollutants and bacterial disinfection S Vignesh, P Eniya, M Srinivasan, JK Sundar, H Li, S Jayavel,	<a href="#">Journal of Environmental Chemical Engineering</a> [IF: 5.909]	Available online 7 July 2021, 105996 (2021)
9	Rahul Parit and Jayavel Sridhar. Association of ACE inhibitors and angiotensin type II blockers with ACE2 overexpression in COVID-19 comorbidities: A pathway-based analytical study	European Journal of Pharmacology [IF 3.17]	<a href="https://doi.org/10.1016/j.ejphar.2021.173899">https://doi.org/10.1016/j.ejphar.2021.173899</a>
10	Boopalakrishnan G, Sridhar J, Behera TK, Munshi AD, Choudhary H, Singh A. Mapping and linkage analysis of epistatic QTLs for gynoecious trait ( <i>F</i> ) in cucumber ( <i>Cucumis sativus</i> L.)	The Journal of Horticultural Science and Biotechnology [IF 1.4]	<a href="https://doi.org/10.1080/14620316.2020.1855084">https://doi.org/10.1080/14620316.2020.1855084</a> (2020)
11	Sundar A, Shankar A, Sridhar J, Muthulakshmi L. Encapsulation of Amphotericin B into Quercetin Based Silver Nanoparticles: Preparation, Characterization and Preliminary Investigation of Antiparasitic Activity	International Conference on Nanomedicine,	63-71
12	Murthy AP, Duraimurugan K, Sridhar J, Madhavan J. Application of derivative voltammetry in the quantitative determination of alloxan at single-walled carbon nanotubes modified electrode	Electrochimica Acta [IF: 6.9]	<a href="#">Volume 317</a> , 10 September 2019, Pages 182-190
13	Gayathri M, Sridhar J.	Bioinformatics	<a href="https://doi.org/10.602">https://doi.org/10.602</a>

	Transcriptome based Identification of silver stress responsive sRNAs from <i>Bacillus cereus</i> ATCC14579	[IF: 0.6]	<a href="#">6/</a> 97320630015474
14	Rexliene J, Sridhar J. Genetic diversity and evolutionary dynamics of dengue isolates from India.	VirusDisease [IF: 1.3]	1-6, 2019
15	Manoharan Prabu, Jayavel Sridhar Computational protein design and protein-ligand interaction studies for the improvement of organophosphorus degrading potential of <i>Deinococcus radiodurans</i> .	Journal of Molecular Graphics and Modelling [IF: 2.453]	83:12-16, 2018
16	V Shanmugam, AL Muppudathi, S Jayavel, KS Jeyaperumal Construction of high efficient g-C3N4 nanosheets combined with Bi2MoO6-Ag photocatalysts for visible-light-driven photocatalytic activity and inactivation of bacterias	Arabian Journal of Chemistry [IF: 5.16]	<a href="#">Volume 13, Issue 1, January 2020, Pages 2439-2455</a>
17	Karpagam Rathinasamy, Balasubramaniam Ashokkumar, Jawaharraj Kalimuthu, Sridhar Jayavel. Unraveling the lipid and pigment biosynthesis in <i>Coelastrella</i> sp. M-60: genomics-enabled transcript profiling.	<i>Algal Research</i> [IF: 5.014]	29: 277-289, 2018
18	<a href="#">Process optimization and production kinetics for cellulase production by <i>Trichoderma viride</i> VKF3</a> VK Nathan, ME Rani, G Rathinasamy, KN Dhiraviam, S Jayavel	<i>SpringerPlus</i>	3 (1), 1-12, 2014
19	KN Dhiraviam*, Suganthana B, Sridhar J. Indole Alkaloids as New Leads for the Design and Development of Novel DPP-	<i>Curr. Bioinformatics</i> [IF: 2.068]	12, 2017

	<b>IV Inhibitors for the Treatment of Diabetes</b>		
20	<b>Yuvaraj I<sup>1</sup>, Sridhar J<sup>2</sup>, Michael D<sup>1</sup>, Sekar K<sup>3</sup>. PanGeT: Pan-genomics tool</b>	<b>Gene [IF: 2.319]</b>	<b>2017 5;600:77-84. doi: 10.1016/j.gene.2016.11.025</b>
21	<b>Gunasekaran, D, Sridhar J. et al., (2017) Modelling and structural analysis of nAchR variants revealed the mechanisms to snake toxins.</b>	<b>J. Bio. Mol. Struct. &amp; Dynamics [IF: 3.392]</b>	<b>2017 Jul 15:1-18.</b>
22	<b>Udayakumar S. Vishnu<sup>1</sup>, Jagadesan Sankarasubramanian<sup>1</sup>, Paramasamy Gunasekaran<sup>1</sup>, Jayavel Sridhar<sup>2</sup> and Jeyaprakash Rajendhran<sup>1</sup>. Omics” of Brucella: Species specific sRNA-mediated gene ontology regulatory networks identified by computational biology.</b>	<b>OMICS [IF: 2.37]</b>	<b>2016 20(6):375-85</b>
23	<b>BrucellaBase: genome information resource Jagadesan Sankarasubramanian, Udayakumar S Vishnu, LKM Abdul Khader, Jayavel Sridhar, Paramasamy Gunasekaran, Jeyaprakash Rajendhran</b>	<b>Infection, Genetics and Evolution [IF: 3.342]</b>	<b>2016 43: 38-42</b>
24	<b>Ashok, G., Sridhar, J. and Sivakumar, N. (2016). Draft Genome Sequence of Carotenoid producing Yellow Pigmented Planococcus maritimus MKU009.</b>	<b>Journal of Genomics, 4: 23-25</b>	<b>2016</b>
25	<b>Kamaldeen Nasrin Nisha, Jayavel Sridhar, Perumal Varalakshmi and Balasubramaniam Ashokkumar. Draft Genome Sequence of Paracoccus sp. MKU1, a New Bacterial Strain Isolated from an Industrial Effluent with Potential for</b>	<b>Journal of Genomics</b>	<b>2016 4:13-5.</b>

	<b>Bioremediation</b>		
26	<b>J Sankarasubramanian, US Vishnu, V Dinakaran, <u>J Sridhar</u>, ... Computational prediction of secretion systems and secretomes of Brucella: identification of novel type IV effectors and their interaction with the host</b>	<b>Molecular BioSystems [IF: 3.781]</b>	<b>2015, 12, (1), 178-190</b>
27	<b>Udayakumar S Vishnu, Jagadesan Sankarasubramanian, <u>Jayavel Sridhar</u>, Paramasamy Gunasekaran, Jeyaprakash Rajendhran. Identification of Recombination and Positively Selected Genes in Brucella</b>	<b>Indian journal of microbiology [IF: 0.988]</b>	<b>2015, 4: 384-391</b>
28	<b>Rajeswari Shome, Natesan Krithiga, BS Padmashree, Jagadesan Sankarasubramanian, Udayakumar S Vishnu, <u>Jayavel Sridhar</u>, Paramasamy Gunasekaran, Jeyaprakash Rajendhran, Habibur Rahman. Draft genome sequence of Brucella abortus S99: designated antigenic smooth reference strain used in diagnostic tests in India.</b>	<b>Genome announcements [IF0.877]</b>	<b>2014, 2: e00824-14</b>
29	<b>Draft genome sequence of Brucella abortus virulent strain 544" by Dhirendra Kumar Singh, Ashok Kumar, Ashok Tiwari, Jagadesan Sankarasubramanian, Udayakumar Vishnu, Jayavel Sridhar, Paramasamy Gunasekaran, and Jeyaprakash Rajendhran (genomeA00419-15)</b>	<b>Genome announcements [IF: 0.877]</b>	<b>00419-15 (2015)</b>
30	<b>K GokulRaj, N Sundaresan, EJ Ganeshan, P Rajapriya, J Muthumary, J. Sridhar ..</b>	<b>Bioinformatics, [IF: 0.6]</b>	<b>2014, 10 (6), 320</b>

	<a href="#"><u>Phylogenetic reconstruction of endophytic fungal isolates using internal transcribed spacer 2 (ITS2) region.</u></a>		
31	<a href="#"><u>Pan-Genome of Brucella Species</u></a> J Sankarasubramanian, US Vishnu, J Sridhar, P Gunasekaran, ...	Indian Journal of Microbiology, [IF: 0.988]	2014, 1-14
32	<a href="#"><u>R Shome, N Krithiga, RB Muttannagouda, BM Veeregowda, S Swat, J. Sridhar...Draft genome sequence of Brucella melitensis strain ADMAS-G1, isolated from placental fluids of an aborted goat</u></a>	Genome announcements IF: 0.877]	2014, 1 (5), e00809-13
33	Sridhar, J. Narmada, S. Sabarinathan, R., Ou, H-Y. Deng, Z. Sekar, K. Rafi, Z.A and Rajakumar, K. sRNAscanner: a transcriptional signal-based bio-computational method for the detection of non-coding small RNAs in bacterial genomes.	PLoS ONE (PLoS, USA) [IF: 3.24]	2010, (8):e11970.
34	Ganesh Babu, M.M., Sridhar, J. and Gunasekaran, P (2011). Global transcriptome analysis of <i>Bacillus cereus</i> ATCC 14579 in response to silver nitrate stress.	Journal of Nanobiotechnology (BioMed Central) [IF: 10.435]	2011, 9: 49.
35	Sridhar, J., Sabarinathan, R., Gunasekaran, P. and Sekar, K. (2013). Comparative genomics reveals 'novel' Fur regulated sRNAs and coding genes in diverse Proteobacteria.	GENE (ELSEVIER, USA) [IF: 2.319]	516(2):335-44
36	Sridhar, J and Rafi, Z.A. Small RNA identification in <i>Enterobacteriaceae</i> using synteny and genomic backbone retention	OMICS (Marrie Ann Liebert Publications, USA) [IF 2.37]	2007, Vol. 11: 74-99.
37	Sridhar, J. Sekar, K and Rafi Z. A. CsrA interacting	Archives of Microbiology	2009, Vol. 191: 451-459.

	small RNAs in <i>Haemophilus</i> spp genomes: A theoretical analysis.	(Springer, Germany) [IF: 2.552]	
38	Sridhar, J. Sathesh Kumar, S and Rafi, Z.A. Small RNA identification in <i>Enterobacteriaceae</i> using synteny and genomic backbone retention II	OMICS (Marrie Ann Liebert Publications, USA) [IF: 2.37]	2009, Vol. 13, 261-284.
39	Sridhar, J and Rafi, Z.A. Identification of novel genomic islands associated with small RNAs.	<i>In Silico Biology</i> (IOS Press, Netherlands)	2007, Vol. 7:601-611.
40	Sridhar, J and Rafi, Z.A. Functional annotations in bacterial genomes based on small RNA signatures,	<i>Bioinformatics</i> (Biomedical Informatics India) [IF: 0.6]	2008, Vol. 2:284-295.
41	Sathesh-Kumar, S. Sridhar, J and Rafi, Z.A. sRNABase: A web resource for small RNAs in <i>Enterobacteriaceae</i> .	<i>In Silico Biology</i> (IOS Press, Netherlands)	2010, Vol. 10: 155-61.
42	Sridhar, J. Sowmiya, G. Sekar, K and Rafi, Z.A. PsRNA: A COMPUTING ENGINE FOR THE COMPARATIVE IDENTIFICATION OF PUTATIVE SMALL RNA LOCATIONS WITHIN INTERGENIC REGIONS.	Genomics Proteomics and Bioinformatics (ELSEVIER, USA) [IF: 7.691]	2010, Vol. 8: 127-134.
43	Nitin, P., Sridhar, J., <i>et al.</i> , (2012) Computational Studies on molecular interactions of 6-thioguanosine analogs with Anthrax Toxin Receptor 1.	<i>Interdisciplinary Sciences: Computational Life Sciences</i> (Springer, Germany) [IF: 0.223]	2012, 4: 1-7.
44	Vinoth, D., Sridhar, J., <i>et al.</i> , (2012) Modeling and structural analysis of cellulases using <i>Clostridium thermocellum</i> as template.	Bioinformatics (Biomedical Informatics, India) [IF: 0.6]	8: 22
45	Sridhar J, <a href="#">Sabarinathan R</a> , <a href="#">Balan SS</a> , <a href="#">Rafi ZA</a> , <a href="#">Gunasekaran P</a> , <a href="#">Sekar K</a> . JUNKER: an intergenic explorer for bacterial genomes	Genomics Proteomics Bioinformatics (ELSEVIER, USA) [IF: 7.691]	2012, 9: 179-82.
46	Bindal, A.K. Sabarinathan, R. Sridhar, J. Sherlin, D	<i>Lecture Notes in Bioinformatics</i>	2010, 6282: 132–143

	and Sekar, K. An algorithm to find all identical motifs in multiple biological sequences.	(Springer, Germany) [IF: 1.36]	
47	Sujatha, K., Mahalakshmi, A., Sridhar, J. and Gunasekaran, P <i>Pseudomonas sp.</i> as a source of Medium Chain Length Polyhydroxyalkanoates-(mcl-PHAs) for Controlled Drug delivery – A Perspective.	International Journal of Microbiology (Hindawi, USA),	2012, 317828 Epub 2012 Feb 8.
48	Sridhar, J., Gunasekaran, P. (2013) Computational small RNA prediction in bacteria	Bioinformatics and Biology insights (Libertas Academia, New Zealand), IF: 2.063	7: 83-95
49	Assraf, S.S., Mahalakshmi, A., Sridhar, J. and Gunasekaran, P. (2013). Computational and functional characterization beta-lactum resistance in <i>Zymomonas mobilis</i> .	Biologia (Czech), IF: 1.24	68/6: 1
50	Sridhar, J and Kavitha, K. sRNA associated Genomic Islands in <i>Salmonella</i> spp. Proceedings of International Symposium on Bio-computing-Feb.2010	ACM Digital library (USA)	2010, Article No. 29 ISBN:978-1-60558-722-6
51	Sridhar, J. Current trends and the future of prokaryotic sRNA identification.	Biotech International (Belgium)	2010, pp 10-11.
52	Sridhar, J and Gunasekaran, P. Computational genomics to diagnostics: Detection of <i>Salmonella</i> spp and human adapted serovars Typhi and Paratyphi 'A'.	Proceedings of the Indo-US workshop on Biocomputing-2011	2011, pp 130-135.
53	Baskar, S., Sridhar, J et al., Prevalence and divergence of clock genes in model eukaryotes.	Int. J. Cur. Tr. Res	2013, 2 (1): 141-146
54	Rajeswari Shome <sup>1</sup> , Krithiga N <sup>1</sup> , Muttannagouda RB <sup>1</sup> , Veeregowda BM <sup>1</sup> , Sahay Swathi <sup>1</sup> , Shome BR <sup>1</sup> ,	Genome Announcements (ASM) [IF: 0.88]	2013 vol. 1no. 5 e00809-13

	<b>Udayakumar Vishnu<sup>2</sup>,  Jagadesan  Sankarasubramanian<sup>2</sup>,  Jayavel Sridhar<sup>2</sup>,  Paramasamy  Gunasekaran<sup>2</sup>, Habibur  Rahman<sup>1</sup> and Jeyaprakash  Rajendhran<sup>2#</sup> Draft genome  sequence of <i>Brucella  melitensis</i> ADMAS-G1  isolated from placental  fluids of aborted goat</b>		
55	<b>SARGASSUM–A  RESOURCE OF  NECESSITY  Citations: 1</b>	<b>Shanlax  International  Journal of Arts,  Science and  Humanities</b>	<b>5 (4), 163-171</b>