

STAFF PROFILE



- 1) Name : **Dr.R.Sankaranarayanan**
- 2) Designation: **Assistant Professor**
- 3) Department: **Physics**
- 4) Qualifications: Academic: **M.Sc. Ph.D.** Additional: None
- 5) Experience (in years): Teaching: **13 Years** Research: **25 Years**
- 6) Area of Specialization: **X-ray Crystallography**
- 7) Contact: E-mail: **sankarmku@gmail.com** Mobile Number: **9442903427**
- 8) Grants Received (Conference/Workshop/Seminar/any other): **Nil**

Event Title	Agency	Fund Received	Date

- 9) Project Completed: **Nil**

Project Title	Agency	Fund Received	Duration

- 10) Project ongoing : **Nil**

Project Title	Agency	Fund Received	Duration

- 11) Research Guidance: **Nil**

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.		
M. Phil.		

- 12) Research Publications:

	International	National
Total Number of Publications	22	01

List of International Publications:

- Mohana Parvatha Varddhini, S., **Sankaranarayanan, R.**, Udayakumar, M. & Thamocharan, S. (2015), Identification of Potential Inhibitors of CysteinyI tRNA Synthetase from Mycobacterium leprae TN strain through in silico virtual screening *Res. Journal of Pharmaceutical, Biol., Chem Sci.* (RJPBCS), 6(3), 1737 – 1743.
- Vishnupriya, R., Suresh, J., Sivakumar, S., Ranjith kumar & **R.Sankaranarayanan**, (2013), Synthesis, Spectroscopic & Docking Studies of Naphthyl substituted Di-Spiro octahydroindolizine. *Physical Review & Research International*, 3(4), 479-489.

3. Chim, N., Habel, J.E., Johnston, J.M., Krieger, I., Miallau, L., **Sankaranarayanan, R.**, Morse, R.P., Bruning, J., Swanson, S., Kim, H., Kim, C.Y., Li, H., Bulloch, E.M., Payne, R.J., Manos-Turvey, A., Hung, L.W., Baker, E.N., Lott, J.S., James, M. N., Terwilliger, T.C., Eisenberg, D.S., Sacchettini, J.C & Goulding, C.W. (2011). The TB structural genomics consortium: A decade of progress. *Tuberculosis*. 91(2):155-172. (Review Article)
4. **Sankaranarayanan, R.**, Cherney, M.M., Garen, C.R., Garen, G., Niu, C., Yuan M. & James, M.N. (2010). The Molecular Structure of Ornithine acetyltransferase from *Mycobacterium tuberculosis* bound to Ornithine, a Competitive Inhibitor. *J. Mol. Biol.* 397, 979-990.
5. **Sankaranarayanan, R.**, Garen,C.R., Cherney, M.M., Yuan, M., Lee, C. & James, M.N. (2009). Preliminary X-ray crystallographic analysis of ornithine acetyltransferase (Rv1653) from *Mycobacterium tuberculosis*. *Acta Cryst.* **F65**, 173-176.
6. **Sankaranarayanan, R.**, Cherney, M.M., Cherney, L.T., Garen, C.R., Moradian, F. & James, M.N. (2008). The Crystal Structures of Ornithine Carbamoyltransferase from *Mycobacterium tuberculosis* and Its Ternary Complex with Carbamoyl Phosphate and L Norvaline Reveal the Enzyme's Catalytic Mechanism. *J. Mol. Biol.* 375, 1052-1063.
7. Witholt, S.J., **Sankaranarayanan, R.**, Garen, C.R., Cherney, M.M., Cherney, L.T.& James, M.N. (2008). Expression, purification, crystallization and preliminary X-ray analysis of Rv3117, a probable thiosulfate sulfurtransferase (CysA3) from *Mycobacterium tuberculosis*. *Acta Cryst.* **F64**, 541-544.
8. Kaushal, P. S., **Sankaranarayanan, R.** & Vijayan, M. (2008). Water - mediated variability in the structure of relaxed-state haemoglobin. *Acta Cryst.* **F64**, 463-469.
9. Vijayakakshmi, L., Krishna, R., **Sankaranarayanan, R.** & Vijayan, M. (2008). An Asymmetric Dimer of β -lactoglobulin in a Low Humidity Crystal Form. Structural Changes that Accompany Partial Dehydration and Protein Action. *Proteins: Structure Function and Bioinformatics*,71,241-249
10. **Sankaranarayanan, R.**, Biswal, B.K. & Vijayan, M. (2005). A new relaxed state in horse methemoglobin characterized by crystallographic studies. *Proteins: Structure, Function and Bioinformatics*, 60, 547-551.
11. Murillo, A.C., Alber, T.C., Baker, E.N., Berger, J.M., Cherney, L.T., Cherney, M.M., Eisenberg, D., Garen, C.R., Hung, L.W., Ioerger, T.R., Jacobs, W.R., James M.N.G., Kim, C., Kriger, I., Li, H., Lott, J.S., **Sankaranarayanan, R.**, Segelke, B.W., Terwilliger, T.C., Wang, F. & Sacchettini, J.C. (2007). High Throughput Crystallography of TB Drug Targets. *Infectious Disorder – Drug Targets*, 7, 127-139 (Review article).
12. Saraswathi, N.T., **Sankaranarayanan, R.** & Vijayan, M. (2002). Effect of stabilizing additives on the structure and hydration of proteins: a study involving monoclinic lysozyme. *Acta Cryst.* **D58**, 1162-1167.
13. **Sankaranarayanan, R.**, Yogavel, M., Velmurugan, D., Srinivasan, P.C., Shanmuga Sundara Raj, S. & Fun, H.-K. (2003). 2-[2-(5-Ethoxy-4-methoxy-2-nitrophenyl)vinyl]-1H-indole. *Acta Cryst.* **E59**, o672-o674

14. **Sankaranarayanan, R.**, Yogavel, M., Velmurugan, D., Sekar, K., Babu, G., Perumal, P.T., ShanmugaSundaraRaj, S. & H.-K. Fun (2003). 8-Chloro-4-[1(phenylsulfonyl)indol-3-yl]-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline. *Acta Cryst.* E59, o49-o51.
15. **Sankaranarayanan, R.**, Yogavel, M., Velmurugan, D., Sekar, K., Srinivasan, P.C., Shanmuga Sundara Raj, S. & Fun, H.-K. (2003). 1,2-Bis[1-phenylsulfonyl-3-(phenylthio)indol-2-yl]ethene. *Acta Cryst.* E59, o99-o101.
16. **Sankaranarayanan, R.**, Velmurugan, D., Shanmuga Sundara Raj, S., Fun, H.-K., Rao, S.N., Kannadasan, S. & Srinivasan, P.C. (2001). N-Methyl-N-(1-phenylsulfonylindol-2-ylmethyl)aniline. *Acta Cryst.* C57, 569-571.
17. **Sankaranarayanan, R.**, Velmurugan, D., Shanmuga Sundara Raj, S. & Fun, H.-K. (2001). 5-Amino-4-(4-diethylaminophenyl)-2-(4-hydroxyphenyl)-7-(pyrrolidin-1-yl)-1,6-naphthyridine-8-carbonitrile. *Acta Cryst.* C57, 726-727.
18. **Sankaranarayanan, R.**, Velmurugan, D., Shanmuga Sundara Raj, S., Fun, H.-K., Babu, G. & P.T.Perumal (2000). 4-[1-(Phenylsulfonyl)indol-3-yl]-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline. *Acta Cryst.* C56, 475-476.
19. **Sankaranarayanan, R.**, Shanmuga Sundara Raj, S., Velmurugan, D. & H.-K. Fun (1999). 1,2,3,4,5,6,7,8-Octahydro-3,3,6,6-tetramethylacridine-1,8-dione. *Acta Cryst.* C55, 1513-1514.
20. **Sankaranarayanan, R.**, Shanmuga Sundara Raj, S., Velmurugan, D., Fun, H.-K., Raghukumar, V. & Ramakrishnan, V.T. (1999). 5-Amino-4-(4-methoxyphenyl)-2-phenyl-7-(pyrrolidin-1-yl)-1,6-naphthyridine-8-carbonitrile. *Acta Cryst.* C55, 1670-1672.
21. **Sankaranarayanan, R.**, Banumathi, S., Velmurugan, D., Rafi, Z.A. & Ramasubbu, N. (1999). The crystal and molecular structure of 9-(3-Pentyl)-3,4,6,7,9,10-hexahydro-1,8-(2H,5H)-acridine-dione. *Cryst. Res. Technol.* 34, 1081-1087.
22. **Sankaranarayanan, R.**, Velmurugan, D., Murugan, P. & Ramasubbu, N. (1998). 1,2,3,4,5,6,7,8,9,10-Decahydro-3,3,6,6-tetramethyl-1,8-dioxo-10-vinylacridin-9-ylmethyl acetate. *Acta Cryst.* C54, 1534-1535.

List of National Publications:

1. Minimala N.S, **Sankaranarayanan R**, Aafrin Hazaana S, Conductivity Studies in Poly Methyl Methacrylate Based Solid Polymer Electrolytes Complexed with Different Chloride Salts (2022), SNC *Journal of Academic Research in Humanities and Sciences* (SJARHS), Volume No.9, issue No.1,116-120.

13) Chapters in Books: Nil

14) Other Publications (Proceedings): None

15) Books Published: Nil

16) Presentation in Seminar / Conference:

International	:	Nil
National	:	01

1. Presented a poster entitled “Investigation of PVA Based Solid Polymer Electrolyte Complexed with Potassium Chloride Salt in *Two Day International Conference on Smart Materials and Biomolecules ICSMB’23* organized by Department of Physics, The American College, Madurai, Tamil Nadu, India *during 9 to 10th January, 2023.*

17) Participation in Conference : Nil

18) Participation in Seminar : **18**

19) Participation in Workshop : 01

1. Participated in One day workshop on “Activity Based Teaching and Class Room Management” organized by IQAC, Saraswathi Narayanan College, Madurai. On 17th August, 2019.

20) Participation in Orientation Programme/ Induction Programme/ Short term Courses:

Orientation Programme : **01**

1. Participated in UGC sponsored **Orientation Programme** organized by UGC-HRDC, Madurai Kamaraj University, Madurai from **10th to 30th October, 2019.**

Refresher Course : **02**

1. Attended online “Two Weeks **Refresher Course** in Physics organized by the Ramanujan College, University of Delhi, New Delhi from **27th February to 13th March, 2023**
2. Attended online “Two Weeks **Refresher Course** in Physics organized by the Ramanujan College, University of Delhi, New Delhi from **27th October to 10th November, 2021**

21) Participation in Faculty Development Programme: **04**

1. Participated in Online Six days Faculty Development Programme on “Recent Developments in Material Science-21” from 16th to 22nd, June, 2021.
2. Participated in one day Faculty Development Programme on “Learning Outcomes Based Curriculum Frame work – LOCF” organized by the Deans of Academic affairs, Saraswathi Narayanan College, Madurai on 4th March, 2021.
3. Attended Two weeks Faculty Development Programme on “Managing online Classes and Co-creating MOOCs:2.0” organized by the Ramanujan College, University of Delhi, New Delhi from 18th to 30th May, 2020.
4. Participated in One day Faculty Development Programme organized by IQAC, Saraswathi Narayanan College, Madurai on 21st December, 2018.

22) Conference/ Seminar/ Workshop Organized : Nil

23) Invited Speaker/ Session Chair – Conference/ Seminar/ Workshop: **05**

1. Delivered a talk on “Quo Vadis: Journey of our Universe” in a webinar organized by The Standard Fireworks Rajaratnam College for Women, Sivakasi on 24th February, 2021.
2. Delivered a talk on “Discovery of Gravitational Waves and its Implications” in a seminar organized by A.K.D.Dharama Raja Women’s College, Rajapalayam, Tamil Nadu on 28th September, 2019.
3. Resource Person in In-service training programme for Science Teachers, organized by the PG and Research Department of Botany, Saraswathi Narayanan College, Madurai from 18th to 22nd February, 2019.
4. Delivered a talk on “Higher Education in India- Physics Perspective” in a seminar organised by the office of the Director of Self-finance, Saraswathi Narayanan College, Madurai on 6th April, 2018.
5. Resource Person in Young Students Scientist Programme organized by Department of Botany in collaboration with Tamil Nadu State Council for Science and Technology, Chennai during 05th – 19th, May, 2017.

24) Other Co-curricular / Administrative Responsibilities: **1. Dean Industrial Relations**
2. IQAC member

25) Member in Board of Studies: Nil

26) Editorial/ Review Board Member: Nil

27) Membership in Professional Bodies: Life member in Indian Crystallographic Association

28) Awards received : Nil

29) Consultancy : Nil

30) Patents : Nil

31) Any other information : None

* Note : Please provide the total Numbers and details for each metrics