Dr. Guruprasad M. S.

A dynamic and visionary Ph.D. candidate in the area of synthesis and applications of prospective organic compounds. Successfully worked with multiple interdisciplinary groups. Strong education/research professional with Ph.D. from CSIR-NIIST, Trivandrum, India.

14, "SHUBHAM" III Floor, I Cross, I Stage, Teacher's Colony, Kumaraswamy Layout, Bengaluru, Karnataka- 560 078, India.

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🛅 GURUPRASAD MS, Ph.D. I

https://orcid.org/0000-0001-7570-887X

https://scholar.google.com/citations?user=YFJS_pYAAAAJ&hl=en



PROFESSIONAL EXPERIENCE

Feb. 2023-Till Date Assistant Professor

Department of Chemistry, Dayananda Sagar College of Arts, Science and Commerce (DSCASC), Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru- 560 111. Karnataka, India

https://www.dscasc.edu.in/

Topics Taught

- ✓ Chemical Thermodynamics
- ✓ Reaction Kinetics
- ✓ Electrochemistry
- ✓ Quantum Chemistry
- ✓ Surface Chemistry and Catalysis
- ✓ Chemical Periodicity
- ✓ Non-transition Elements Chemistry
- ✓ Coordination Chemistry
- ✓ Organometallic Chemistry
- ✓ Bioinorganic Chemistry
- ✓ Natural Product Chemistry
- ✓ Instrumental Methods of Chemical Analysis
- ✓ Analytical and Separation Techniques
- ✓ Nature of Bonding in Organic Molecules
- ✓ Stereochemistry
- ✓ Reactive Intermediates

RESEARCH EXPERIENCE

Aug. 2014-Jan. 2022 Ph. D. Research Fellow

CSIR-National Institute for Interdisciplinary Science and Technology, Trivandrum, Kerala-695 019, India. https://www.niist.res.in

Area of Interest

- Near-Infrared Organic Dyes
- ✓ Ultrafast Dynamics of Photofunctional Materials
- ✓ Bulk-heterojunction based Organic Optoelectronics

Main Activities and Responsibilities during Ph. D.

- ✓ Design and synthesis of novel near-infrared (NIR) responsive squaraine based compounds for organic optoelectronic applications.
- ✓ Electrochemical, steady-state and time-resolved photophysical characterization of the synthesized materials.

EDUCATIONAL QUALIFICATIONS

Qualification awarded Ph.D. in Chemical Sciences

Aug. 2014-Jan. 2022

CGPA: 8.08/10 (Distinction)

Subject Specificity: Organic Synthesis, Ultrafast Spectroscopy and Organic

Optoelectronics

Principal Investigator: Dr. V. Karunakaran

Thesis Titled: "Aminoanthracene Appended Unsymmetrical Squaraine Derivatives: Synthesis and Ultrafast Time-Resolved Photophysical Characterization for NIR

Photodetectors"

School/Institution Photosciences and Photonics Section, Chemical Sciences and Technology Division,

CSIR-NIIST, Trivandrum, Kerala-695 019, India. https://www.niist.res.in

Qualification awarded

M. Sc. in Industrial Chemistry

June 2010- June 2012

CGPA: 7.45 /10 (Distinction, 2nd University Ranker)

Thesis "Simultaneous Determination of Dopamine and Ascorbic Acid at Cetyl Pyridinium

Bromide (CPB) Modified Carbon Paste Electrode-A Cyclic Voltammetric Study"

School/Institution Dept. of Industrial Chemistry, Kuvempu University, Shankaraghatta, Karnataka-577 451

India. http://www.kuvempu.ac.in

Principal subjects: Analytical and Separation Techniques, Advanced Organic and Medicinal Chemistry, Advanced Spectroscopic Techniques, Chemical Process Principles, Polymer

Chemistry and Technology, Organometallic and Bio-inorganic Chemistry.

Qualification awarded

B.Sc. in Chemistry, Botany and Biotechnology

June 2007- June 2010

CGPA: 9.06/10 (Distinction, 3rd Ranker)

School/Institution Sahyadri Science College, Kuvempu University, Shivamogga, Karnataka- 577 203, India.

https://www.kussc.ac.in/

Principal subjects: Bachelor's level Chemistry, Botany and Biotechnology

PUBLICATIONS

1. Neelambra, A. U.; Govind, C.; Devassia, T. T.; **Somashekharappa, G. M.**; Karunakaran, V. *Phys. Chem. Chem. Phys.* **2019**, 21, 11087-11102 (**IF = 3.67**).

2. **Somashekharappa, G. M.**; Govind, C.; Pulikodan, V.; Paul, M.; Namboothiry, M. A. G.; Das, S.; Karunakaran, V., *J. Phys. Chem.* C **2020**, 124, 21730-21739 (**IF = 4.12**).

3. **Somashekharappa, G. M.**; Paul, M.; Govind, C.; Mathew, Ranimol.; Karunakaran, V., *J. Phys. Chem. B* **2022**, 126, 4509–4519 (**IF = 2.99**).

4. **Somashekharappa, G. M.**; Paul, M.; Karunakaran, V., Manuscript to be submitted to *J. Photochem. Photobiol. A* (**IF = 4.29**).

List of Posters/Oral Talks Presented in International Conferences

1. Poster Presentation: **Somashekharappa, G. M.**; Govind,C.; Karunakaran, V., and Das, S., International Conference on Advanced Functional Materials (**ICAFM-2019**). CSIR-National Institute for Interdisciplinary Science and Technology, Trivandrum, Kerala-695 019, India, December, 9-10, 2019.

- Oral Talk: Somashekharappa, G. M.; Govind, C.; Pulikodan, V.; Paul, M.; Namboothiry, M. A. G.; Das, S.; Karunakaran, V., International Conference on Materials for the Millennium (MatCon-2021), Cochin University of Science and Technology (CUSAT), Kochi, Kerala-682 022, India, March15-19, 2021.
- Participated: 8th Asia Symposium on Functional Dyes and Advanced Materials (EAS8-2017), CSIR-National Institute for Interdisciplinary Science and Technology, Trivandrum, Kerala-695 019, India, September, 20-22, 2017

AWARDS AND DISTINCTIONS

| May-2010 | Honored with 3 rd rank in B. Sc. Sahyadri Science College, India |
|----------|---|
| May-2012 | Honored with University $2^{\rm nd}$ rank in M. Sc. Kuvempu University, India |
| Jun2013 | Qualified CSIR-Junior Research Fellowship Examination (AIR- 51st) |
| Aug2016 | Obtained CSIR-Senior Research Fellowship |

PERSONAL SKILLS AND PROFICIENCIES

- 1. Languages Known: Kannada, English
- 2. Softwares:

| Microsoft Office | Chemdraw | Origin | SciFinder |
|------------------|----------|---------|-------------|
| Glotaran | Ez Time | ExiPro | iThenticate |
| GAPrep | Rserve | EndNote | |

- **3.** Hands on experience in analytical instruments:
- FTIR Spectrophotometer
- Mel-Temp II Melting Point Apparatus
- UV-VIS Spectrophotometer
- Fluorescence Spectrophotometer
- Time-Correlated Single-Photon Counting Spectrometer (TCSPC)
- Nanosecond Laser Flash Photolysis
- Voltammetric Analyzer
- Zetasizer Nanoseries (Zeta Nano-ZS, Ms. Malvern Instruments)

REFERENCES

Prof. Suresh Das FNA, FASc

Former Director

CSIR-NIIST, Trivandrum & Honorary Professor (Chemistry), IISER-Trivandrum, Maruthamala PO, Vithura, Trivandrum. Kerala-695 551, India

Ph: +91 94477 06202

Email: sureshdas@iisertvm.ac.in

Website: https://www.iisertvm.ac.in/faculty/das

Dr. V. Karunakaran

Principal Scientist

Photosciences and Photonics Section, Chemical Sciences and Technology Division, CSIR-NIIST, Trivandrum, Kerala-695 019, India

Ph: +91 90483 92174

Email: k.venugopal@niist.res.in

Website: https://www.niist.res.in/drkarunakaran-venugopal

I hereby state that the above information is true to the best of my knowledge and belief.