

CURRICULUM VITAE

Dr. V. C. SAHEER

Assistant Professor, Department of Chemistry,
Government Brennen College, Dharmadam, Thalassery,
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EMPLOYMENT HISTORY

Assistant Professor of Chemistry: (June 2024 onwards)

Post graduate department of Chemistry, Assistant Professor, Department of Chemistry,
Government Brennen College, Kannur 670 106, Kerala, India (Affiliated to Kannur University)

Assistant Professor of Chemistry: (June 2022 – July 2024)

Post graduate and research department of Chemistry, Government Brennen College,
Dharmadam, Kannur 670 106, Kerala, India. (Affiliated to Kannur University)

Assistant Professor of Chemistry: (June 2019 – May 2022)

Department of Chemistry, Krishna Menon Memorial Government Women's College, Kannur –
670004, Kerala, India. (Affiliated to Kannur University)

Assistant Professor of Chemistry: (June 2011 – June 2019)

Department of Chemistry, Government College Madappally, (Affiliated to University of Calicut) India.

RESEARCH PROFILE

Area of Research:

Computational Chemistry, Molecular Dynamics, Chemical Physics, Computational Biology

Visiting Researcher: (Sep 2022 – March 2023)

Department of Physics, Khalifa University, Abu Dhabi UAE: Worked with [Dr. Marko Gacesa](#) on a project related to calculation of scattering cross sections for H colliding with a CO₂ molecule for planetary aeronomy.

Research Collaborators:

1. Prof. Muraleedharan K M, Professor of Chemistry, Indian Institute of Technology Madras, Chennai – 600036, Tel: +91-44-2257-4233, Mob: +91-9840705203, Email: mkm@iitm.ac.in
2. Dr. Marko Gacesa, Assistant Professor of Physics, Department of Physics, Khalifa University, Main Campus, U. A. E, Email: marko.gacesa@ku.ac.ae, Tel: +97123123888
3. Prof. Lakshmi C, Department of Chemistry, National Institute of Technology Calicut, Kozhikode, Kerala India-673601, Email: akshmic@nitc.ac.in, Tel: +91-9746407767

Research Supervisor:

1. University of Calicut, Kerala, India. (See the University order [here](#))
2. Kannur University, Kerala, India (See the University order [here](#))

Publications

1. S. Shurooque Kanneth, **V. C. Saheer** and Lakshmi Chakkumkumarath, *Analyst*, **2024**, DOI:[10.1039/d4an00881b](https://doi.org/10.1039/d4an00881b)
2. Muraleedharan K M, Jais Kurian, Anvesh Ashtam, Akila Kesavan, **Saheer V C**, Dulal Panda, *ChemMedChem*, **2023**. DOI: [10.1002/cmdc.202300081](https://doi.org/10.1002/cmdc.202300081)
3. Marko Gacesa, B Murali Krishnan, **Saheer V C** and Mariam Alraie, Scattering cross sections for O(3P), C(3P), and H colliding with a CO₂ molecule for planetary aeronomy, *EGU General Assembly 2023*, Vienna DOI: [10.5194/egusphere-egu23-13860](https://doi.org/10.5194/egusphere-egu23-13860)
4. T K Jithinraj, V C Saheer and Lakshmi C, *Analyst*, **2023**, DOI: [10.1039/D2AN01525K](https://doi.org/10.1039/D2AN01525K)
5. Muraleedharan K M, Ramshad K, **V C Saheer**, Varsha Kumari, Mohammad Anas, Ashan Manhas, Niti Kumar, *ChemMedChem*, Volume 16, **2021**, Pages 1-12, DOI:[10.1002/cmdc.202100472](https://doi.org/10.1002/cmdc.202100472).
6. K.K. Thasneema, Mohamed Shahin Thayyil, Tancia Rosalin, K.K. Elyas, T. Dipin, Pramod K. Sahu, N.S. Krishna Kumar, **V.C. Saheer**, Mouslim Messali, Taibi Ben Hadda, *Journal of Molecular Liquids*, Volume 307, 112960, **2020**. DOI: [j.molliq.2020.112960](https://doi.org/10.1016/j.molliq.2020.112960)
7. **V.C. Saheer** and **Sanjay Kumar**, *J. Chem. Sci*, DOI: [10.1007/s12039-018-1531-3](https://doi.org/10.1007/s12039-018-1531-3), **2018**
8. Thasneema K. K., M. Shahin Thayyil, Krishna Kumar N. S., Govindaraj G., and **V. C. Saheer**, *AIP Conference Proceedings* 1942, 070031 (**2018**); doi:[10.1063/1.5028829](https://doi.org/10.1063/1.5028829)
9. Thasneema K K, Shabeeba P, Mohamed Shahin T, Pillai Mahadevan P, Krishna Kumar N, Sreekala Govindaraj G, **V.C. Saheer**, Nighil Nath MP, *Journal of Molecular Liquids*, Volume 252, **2018**, Pages 488-494. DOI: [10.1016/j.molliq.2017.12.146](https://doi.org/10.1016/j.molliq.2017.12.146)
10. Divya T T, Ramshad K, **V.C. Saheer**, C Lakshmi, *New J. Chem.*, **2018**, 42, 20227-20238. DOI:[10.1039/C8NJ04479A](https://doi.org/10.1039/C8NJ04479A)

11. **V.C. Saheer** and **Sanjay Kumar** "Ab initio adiabatic and quasidiabatic potential energy surfaces of $H^+ + CO$ system: A study of the ground and the first three excited electronic states", The Journal of chemical physics 144 (2), **2016**, DOI: [10.1063/1.4939674](https://doi.org/10.1063/1.4939674)

CONFERENCE PRESENTATIONS / TRAINING

- ✚ Attended a workshop on "Excited States and Nonadiabatic Dynamics CyberTraining Workshop 2023" on June 11-23, 2023 at [University at Buffalo, SUNY](https://www.buffalo.edu/).
- ✚ Attended a workshop on "[MSSC2021](https://www.mssc2021.org/): Ab initio Modeling in Solid State Chemistry" on September 20-24, 2021 at Imperial College London, UK - Virtual Edition
- ✚ Presented a poster on "Nonadiabatic dynamics of $H^+ + O_2$ system using the lowest four coupled electronic potential energy surfaces" in the Molecular Interaction Dynamics organized by Gordon Research Conferences at Stone-Hill College, Easton, **Massachusetts, USA** during July 8 - 13, 2018. (Attendees list is available at <https://bit.ly/2Aio6Sc>)
- ✚ Presented a poster on "Quantum dynamical studies on elastic and charge transfer processes in $H^+ + O_2$ system" in the [Symposium on Chemical Physics 2015](https://www.symposiumonchemicalphysics.org/) on 6-9 November 2015 at **University of Waterloo, Canada**.
- ✚ Presented a poster on "Adiabatic and Quasidiabatic Potential Energy Surfaces of $H^{++} + CO$ system" in the *Theoretical Chemistry Symposium 2010* during December 8-12 at **IIT Kanpur**
- ✚ Detailed information is available at <https://sites.google.com/view/vcsaheer/conferences>

ACADEMIC QUALIFICATIONS

PhD: Chemistry [Molecular Dynamics] (Jan 2009 – Mar 2011 & Jun 2015 – Jun 2017)

Indian Institute of Technology Madras | Chennai | India

Supervisor: Professor Sanjay Kumar

Thesis Title: *Ab initio* bound-state and nonadiabatic scattering studies of proton collision with CO and O_2 .

MSc: Chemistry (August 2001 – March 2003)

Sir Syed College | Taliparamba | India

BSc: Chemistry (August 1997 – March 2000)

Sir Syed College | Taliparamba | India

TECHNICAL DETAILS

Operating system : Linux (Ubuntu / Fedora), Microsoft Windows
Programming : Matlab, Mathematica, C, C++, Fortran 77, Bash, Python
Chemistry Softwares : Gaussian®, GAMESS and Molpro®, Libra
Familiar Dynamics Codes : Molscat, MCTDH, VCC-RIOS, NAMD, LAMMPS, GROMACS

PERSONAL DETAILS

Home Address : Darul Aman, Kottali-P.O, Kannur-670005, Kerala, India
Gender : Male
Nationality : Indian
Languages : Malayalam, English (Reading, Writing and Speaking)
Hindi, Arabic (Reading and Writing)
Hobbies : Computer, reading, swimming, badminton & football etc.

REFERENCES ON REQUEST

Prof. Sanjay Kumar

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