

1. Name of the Faculty Member : Dr.GurpreetKaur

2. Designation : Assistant Professor

3. Contact Details:

Chemistry Department

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4. Area of specialization : Theoretical Chemistry

5. Awards and Fellowships

- Junior Research Fellowship by Council of Scientific & Industrial Research (CSIR), India (July 2012–July 2014)
- Senior Research Fellowship by Council of Scientific & Industrial Research (CSIR), India (August 2014–July 2016)

6. Activities other than teaching:

- Member of Guru Gobind Singh Study Circle unit Of G.G.N. Khalsa College
- Affiliate member of International Union of Pure and Applied Chemistry (IUPAC) 2018

7. List of Publications

(1) Vikas and **G. Kaur**, Global reaction route mapping of isomerization pathways of exotic C_6H molecular species, ***The journal of chemical physics***, 2013, 139, 224311.(**impact Factor-2.997**)

- (2) **G. Kaur** and Vikas, Exploring Water Catalysis in the Reaction of Thioformic Acid with Hydroxyl Radical: A Global Reaction Route Mapping Perspective, **Journal of Physical Chemistry A**, 2014, 118, 4019. **(Impact Factor-2.641)**
- (3) **G.Kaur** and Vikas, On the Mechanism of Intramolecular Nitrogen-Atom Hopping in the Carbon Chain of C₆N Radical: A Plausible 3c-4e Crossover π^{\wedge} Long-Bond, **Journal of Computational Chemistry**, 2014, 35, 1568.**(Impact Factor-3.224)**
- (4) **G. Kaur** and Vikas , The mechanism of tautomerisation and geometric isomerisation in thioformic acid and its water complexes: exploring chemical pathways for water migration, **Physical Chemistry Chemical Physics**, 2014, 16, 24401.**(Impact Factor-3.567)**
- (5) **G. Kaur** and Vikas, Exploring the mechanism of isomerisation and water-migration in the water-complexes of aminoacid L-proline: electrostatic potential and vibrational analysis, **RSC Advances**, 2015, 5, 82587. **(Impact Factor-3.094)**
- (6) **G. Kaur** and Vikas, Water-catalysis in the gas phase reaction of dithioformic acid with hydroxyl radical: global reaction route mapping of oxidative pathways for hydrogen abstraction, **RSC Advances**, 2015, 5, 50989.**(Impact Factor-3.094)**
- (7) **G. Kaur** and Vikas, Mechanisms for D–L interconversion in serine, **Tetrahedron Letters**, 56 (2015) 142 **(Impact Factor-2.259)**

- (8) **G. Kaur** and Vikas, Global reaction route mapping of water-catalysed gas phase oxidation of glyoxylic acid with hydroxyl radical, *Theoretical Chemistry Accounts*, (2016) 135, 259. **(Impact Factor-1.598)**
- (9) G. Singh, J. Singh, **G. Kaur**, and J. Singh, Fabrication of silicon embedded isomeric chalcone linkers using [CuBr(PPh₃)₃], *Polyhedron*, 2017, 125, 93–100. **(Impact Factor-2.248)**
- (10) N. Kaur, G. Singh, J. Singh, A. Singh, P. Satija, **G. Kaur** and J. Singh, Molecular keypad controlled circuit for Ce(III) and NO₃⁻ ions recognition by mw synthesized silicon-embedded organic luminescent sensor, *RSC Advances*, 2018, 8, 36445–36452. **(Impact Factor-3.094)**
- (11) G. Singh, **G. Kaur**, and J. Singh, Progressions in hyper-coordinate silicon complexes, *Inorganic Chemistry Communications*, 2018, 88, 11–20. **(Impact Factor-1.795)**
- (12) **G. Kaur**, G. Singh, and J. Singh, Photochemical tuning of materials: A click chemistry perspective, *Materials Today Chemistry*, 2018, 8, 56–84. **(Impact Factor-3.72)**
- (13) P. Kaur, Bajrang, N. Kaur, G. Singh, A. Singh, **G. Kaur**, J. Singh, Selective two way Cd(II) and Co(II) ions detection by 1,2,3-triazole linked fluorescein derivative, *Journal of Photochemistry and Photobiology A: Chemistry*, 2019, 382, 111847 (1-6). **(Impact Factor-3.261)**
- (14) Upma, **G. kaur**, J. Singh, Qualitative water analysis at different locations near village chaheru, Phagwara(Punjab), *Journal of*

The Gujarat Research Society, 2019, 21, 454. (***UGC approved Journal***)

List of book(s)/book chapter

- Book Chapter: Effects of radiation on the environment Book Series: ***Springer*** Series on Polymer and Composite Materials – Radiation Effects in Polymeric Materials. **G. Kaur** and J. Singh, 2019, eBook ISBN: 978-3-030-05770-1. Hardcover ISBN: 978-3-030-05769-5.
- Article in book: Trends and Challenges in chemical Sciences: published by ***G.G.N. Khalsa College*** - Significance of Reaction Mechanism of isomerisation Process and its Theoretical Determination. **G. Kaur**, Vikas, 2018, ISBN No:978-93-85835-57-5
- Article in book: Enhancing Quality in Higher Education Vol.II : Innovative Practices: published by ***G.G.N. Khalsa College***- Landscape of Value based Education. **G. Kaur**, 2019, ISBN No. 978-93-83092-85-2
- Editor of Book: Trends and Challenges in Life Sciences: published by ***G.G.N. Khalsa College***, 2018, ISBN No:978-93-85835-57-5