



## TEACHER PROFILE/ CV

1. Full name of the faculty member: Dr Dola Pahari

2. Designation: Assistant Professor (Stage III)

3. Department: Chemistry

4. Specialization : Physical Chemistry

5. Contact Information:

*E-mail: [pahari.dola@gmail.com](mailto:pahari.dola@gmail.com), Mobile Number: 9433527292, 8697616887*

6. Academic qualifications

College/ university	Abbreviation of the Degree
Jadavpur University	B.Sc
IIT Kanpur	M.Sc
IACS (Jadavpur University)	Ph.D

7. Post holding after appointment at this institution

Designation	Department	Duration		Institution
		From	To	
Assistant Professor (Stage III)	Chemistry	10.04.2015	Till date	Maharaja Manindra Chandra College

7. Post held before appointment at this institution

Designation	Department	Duration		Institution
		From	To	
Assistant Professor (Stage-I)	Chemistry	2004	2010	Kharagpur College



Assistant Professor (Stage-II)	Chemistry & Biological Chemistry Chemistry	2010	2015	Kharagpur College
Assistant Professor (Stage-III)		2015	2015(9 <sup>th</sup> April)	Kharagpur College

### 8. Research interests: Electronic Structure Theory

### 9. Research Project

(a) *Completed projects : Minor Research Project titled*

*“Development and Application of ab initio theory: the Easy way”*

(b) *Current Project*            *N/A*

### 10. Lectures delivered/paper presentation

Sl.No.	Title of the paper presented	Title of Conference/Seminar	Organized by	Whether International. National/State/Regional/College or University level
01.	Multireference coupled electron pair approximation to study strongly correlated molecular systems	Molecular Organisation and Complexity: A Chemical Perspective	Department of Chemistry, Calcutta University	International
02	Spin Free State Specific Multi	Recent Advances in Selected Topics of	Department of	National



	<b>Reference Coupled Electron Pair (SS-MRCEPA) Approximation like Methods— Development and Application</b>	<b>Chemistry - II</b>	<b>Chemistry, BESU</b>	
<b>03</b>	<b>Spin free multi-reference many-body formalism for quasidegenerate electronic states: Applications to bond breaking in the diatomic systems</b>	<b>Recent Trends of Research in Chemistry</b>	<b>Department of Chemistry, Midnapore College</b>	<b>International</b>
<b>04</b>	<b>Mk-MRCEPA theory and scope of its application in nanoscience,</b>	<b>Recent Trends in Functional Materials in relation and Nano materials and Nanotechnology,</b>	<b>Department of Chemistry, St. Paul's Cathedral Mission College, Kolkata</b>	<i>National</i>
<b>05</b>	<b>Studies Involving an <i>ab initio</i> theory of strongly correlated molecular systems</b>	<b>National Symposium on Facets of Chemistry in Biology (FOCB),</b>	<b>Department of Chemistry, St. Xavier's College (Autonomous), Kolkata</b>	<i>National</i>
<b>06</b>	<b>Application of spin free multi reference many body formalism to quasidegenerate electronic states</b>	<b>International Symposium on Facets of Chemistry in Biology (FOCB- II)</b>	<b>Department of Chemistry, St. Xavier's College (Autonomous), Kolkata</b>	<i>International</i>



## 11. Publications:

### (a) Published paper in Journals

1. "Size extensive State-specific Multi-reference Many-body Approach using Incomplete Model Spaces" (2003) *Chem. Phys. Lett.*, **381**, 223-229.
2. "A State-specific Approach to Multi-reference Coupled Electron-pair Approximation like Methods: Development and Applications" (2004), *J. Chem. Phys.*, **120**, 5968-5986.
3. "An Orbital invariant Coupled Electron-pair like Approximant to a State-specific Multi-reference Coupled Cluster Formalism" (2004), *Chem. Phys. Lett.*, **386**, 307-312.
4. "Computation of Excited States Potential Energy Surface via Linear Response Theories based on State-specific Multi-reference Coupled Electron-pair Approximation like Methods" in *Computational Chemistry: Reviews of Current Trends*, Ed. J. Leszczynski (World Scientific, Singapore, New Jersey) (2005) **121-151**.
5. "Size-consistent State-specific Multi-reference Methods: A Survey of Some Recent Developments" in *Theory and Applications of Computational Chemistry: The First 40 Years*, Ed. C. F. Dykstra, *et. al* (Elsevier) (2005), **581-633**.
6. "Towards the Development and Applications of Manifestly Spin-free Multi-reference Coupled Electron-pair Approximation (MRCEPA) like Methods: A State Specific Approach" (2006) *Theor. Chem. Acc.* **116**, 621-636.
7. "A short journey through non variational multi-reference many body theories" (2016), *Prajnan-O-Sadhona*, p 76-84, Vol 3.
8. "Different variants of single-reference theories in electronic structure theory- their strength and weakness" (2017), *Uttaran*, Vol-5, P 140-142.
9. "A short journey through state-specific multi-reference many body theories" (2017), *IJESI*, P 57-61, Vol-6, Issue 10.

### (b) Articles/Chapters published in books:



1. **Pahari & Pahari, Problems on Physical Chemistry (thoroughly Revised, Enlarged and updated second edition: February 2015)**