

## TEACHER PROFILE/ CV



1. Full name of the faculty member: <u>Dr. Dola Pahari</u>

2. Designation: Associate Professor

3. Department: CHEMISTRY

4. Specialization (if any): Physical Chemistry

5.Contact Information: Eden Tolly Signature, Flat F1C, 344 M G

Road, Kolkata 700104

Email: pahari.dola@gmail.com

### 6. Academic qualifications

| College/ university                       | Abbreviation of the Degree |
|---|----------------------------|
| Jadavpur <u>niversity</u>                 | B. Sc.                     |
| Indian Institute of Technology - Kanpur   | M.Sc.                      |
| Indian Association For The Cultivation Of | Ph.D                       |
| Science                                   |                            |

### 7. Post holding after appointment at this institution

| Designation                            | Department | Duration |              | Institution                          |
|--|------------|----------|--------------|--------------------------------------|
|  |            | From     | To           |                                      |
| Assistant<br>Professor (Stage-<br>III) | Chemistry  | 2015     | 2018         | Maharaja Manindra<br>Chandra College |
| Associate<br>Professor                 | Chemistry  | 2018     | Till<br>Date | Maharaja Manindra<br>Chandra College |

#### 8. Post held before appointment at this institution



| Designation | Department   | Duration |          | Institution       |
|-------------|--------------|----------|----------|-------------------|
|             |              | From     | To       |                   |
| Assistant   | Chemistry    | 2004     | 2010     | Kharagpur College |
| Professor   |              |          |          |                   |
| (Stage-I)   |              |          |          |                   |
| Assistant   | Chemistry    | 2010     | 2015     | Kharagpur College |
| Professor   | & Biological |          |          |                   |
| (Stage-III) | Chemistry    |          |          |                   |
| Assistant   | Chemistry    | 2015     | 2015(9th | Kharagpur College |
| Professor   |              |          | April)   |                   |
| (Stage-III) |              |          |          |                   |

### 9. Research interests:

**Electronic Structure Theory** 

# 10. Research Project

N/A

# 11. Lecture Delivered/ Paper Presentation

| Title of the paper presented  | Title of Conference/ Seminar<br>and Yesr  | Nature of Participation | Venue  |
|---|---|-------------------------|--|
| Mk-MRCEPA theory and scope of its application in nanoscience                          | Recent Trends in Functional Materials in relation and Nano materials and Nanotechnology, February 4-5, 2016 | Poster                  | Department of Chemistry, St. Paul's Cathedral Mission College, Kolkata |
| Studies Involving an <i>ab initio</i> theory of strongly correlated molecular systems | National Symposium on<br>Facets of Chemistry in<br>Biology (FOCB), February<br>22-23, 2016                  | Poster                  | Department of Chemistry, St. Xavier's College (Autonomous), Kolkata    |



| Application of spin free multi | International Symposium   | Poster | Department of            |
|--------------------------------|---------------------------|--------|--------------------------|
| reference many body            | on Facets of Chemistry in |        | Chemistry, St.           |
| formalism to quasidegenerate   | Biology (FOCB- II)        |        | Xavier's College         |
| electronic states              | January 12, 2017          |        | (Autonomous),<br>Kolkata |
|                                |                           |        |                          |

#### 12. Publications:

- (a) Published paper in Journals:
- 1. Pahari, D., Chattopadhyay, S., Das, S., and Mukherjee, D. (2003): "Size extensive State-specific Multi-reference Many-body Approach using Incomplete Model Spaces" Chem. Phys. Lett., 381, 223-229.
- 2. Chattopadhyay, S., Pahari, D., Mahapatra, U. S. and Mukherjee, D. (2004): "A State-specific Approach to Multi-reference Coupled Electron-pair Approximation like Methods: Development and Applications", J. Chem. Phys., 120, 5968-5986.
- 3. Pahari, D., Chattopadhyay, S., Deb, A., and Mukherjee, D. (2004): "An Orbital invariant Coupled Electron-pair like Approximant to a State-specific Multi-reference Coupled Cluster Formalism", Chem. Phys. Lett., 386, 307312.
- 4. Chattopadhyay, S., Pahari, D., Mahapatra, U. S., and Mukherjee, D. (2005): "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. Leszcynski (World Scientific, Singapore, New Jersey) 121-151.
- 5. Pahari, D., Chattopadhyay, S., Das, S., Mukherjee, D. and U S Mahapatra (2005): "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), 581-633.
- 6. Pahari, D., Ghosh, P., Mukherjee, D. and Chattopadhyay, S. (2006) "Towards the Development and Applications of Manifestly Spin-free Multi-reference Coupled



Electron-pair Approximation (MRCEPA) like Methods: A State Specific Approach" Theor. Chem. Acc. 116, 621-636.

- 7. "A short journey through non variational multi-reference many body heories" (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.

#### Book(s):

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