1. Research Project

<table>
<thead>
<tr>
<th>S.No</th>
<th>Title</th>
<th>Agency</th>
<th>Period</th>
<th>Grant / Mobilized (Rs lakh)</th>
<th>Status</th>
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</table>
## 2. Lecture presented in the symposium

<table>
<thead>
<tr>
<th>S.No</th>
<th>Title of the Lecture / Academic Session</th>
<th>Title of Conference / Seminar etc.</th>
<th>Organized by</th>
</tr>
</thead>
</table>
| 1.   | **Invited Lecture**  
Recognition of neutral and anionic substrates by synthetic receptors. | Fourth CRSI (Kolkata Chapter); August 04, 2006 | Department of Chemistry, University of Kalyani |
| 2.   | **Invited Lecture**  
Design and synthesis of artificial receptors in host-guest chemistry | Acharya Prafulla Chandra Ray and Chemistry today 2007, August 02-03, 2007 | Indian Chemical Society and the Department of Chemistry, CU. |
| 3.   | **Invited Lecture**  
Design and synthesis of fluorescent receptors in host-guest chemistry | Sixth CRSI (Kolkata Chapter) symposium, August 02, 2008 | Department of Chemistry, University of North Bengal |
| 4.   | **Invited Lecture**  
| 5.   | **Invited Lecture**  
Design and Synthesis of Task-specific molecules in Supramolecular Chemistry | Royel Society of Chemistry (Eastern India Section) 30th July, 2008 | Royel Society of Chemistry (Eastern India Section); held at Association for the Cultivation of Science, Kolkata |
| 6.   | **Invited Lecture**  
Design and synthesis of hydrogen bonding fluoro receptor for neutral and anionic substrates | Recent Trends in Chemical and Biochemical Research, December 23, 2008. | Department of Chemistry and Biochemistry, Presidency College, Kolkata |
| 7.   | **Dr. Basudev Banerjee Memorial Lecture (2007):**  
| 8.   | **Invited Lecture**  
<table>
<thead>
<tr>
<th></th>
<th><strong>Invited Lecture</strong></th>
<th><strong>A Pathway to Biological Processes</strong>&lt;br&gt;September 24-25, 2010</th>
<th><strong>Department of Chemistry, Hooghly Mohsin College, Chinsurah, Hooghly.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td><strong>Invited Lecture</strong>&lt;br&gt;Recognition and sensing of anionic substrates by designed synthetic receptors</td>
<td>Organic Chemistry-IV (NSOC-IV), held on February 02-03, 2011</td>
<td><strong>Department of Chemistry, Jadavpur University</strong></td>
</tr>
<tr>
<td>11</td>
<td><strong>Invited Lecture:</strong>&lt;br&gt;Task specific molecular design in supramolecular chemistry</td>
<td>UGC sponsored seminar, September 06, 2011</td>
<td><strong>Department of Chemistry, Ramkrishna Mission Vivekananda Centenary College, Rahara</strong></td>
</tr>
<tr>
<td>12</td>
<td><strong>Invited Lecture:</strong>&lt;br&gt;Synthesis of design – based molecules and investigation of their potential in molecular recognition</td>
<td>National seminar on ‘Recent advances in chemical sciences’&lt;br&gt;March 15 – 17, 2012</td>
<td><strong>University of Burdwan</strong></td>
</tr>
<tr>
<td>13</td>
<td><strong>Invited Lecture:</strong>&lt;br&gt;Design – based synthetic molecules in anion and cation recognition</td>
<td>UGC sponsored National Seminar on Journey of Chemistry through life, Feb 23 – 25, 2012</td>
<td><strong>Department of Chemistry, Dr. B. N. Dutta Smiriti Mahavidyalya, Hatgobindapur, Burdwan</strong></td>
</tr>
<tr>
<td>14</td>
<td><strong>Invited Lecture:</strong>&lt;br&gt;Pyridinium – based synthetic receptors in anion sensing</td>
<td>Current Trends in Chemistry, Chemical Research Society of India, Kolkata Chapter, August 8, 2012</td>
<td><strong>Department of Chemical Sciences, IISER Kolkata, Mohonpur Campus, West Bengal, India</strong></td>
</tr>
<tr>
<td>15</td>
<td><strong>Invited Lecture:</strong>&lt;br&gt;Design and synthesis of chemosensors for selective sensing of anions</td>
<td>National conference on Recent Advancement in Chemical Sciences, Nov, 18-19, 2011</td>
<td><strong>Department of Chemistry, J. K. College, Purulia</strong></td>
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<tr>
<td>16</td>
<td><strong>Invited Memorial Lecture Award:</strong>&lt;br&gt;<strong>Professor D. K. Banerjee Memorial Lecture award (seventh), January 12, 2012</strong></td>
<td></td>
<td><strong>Department of Organic Chemistry, Indian Institute of Science, Bangalore</strong></td>
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<tr>
<td>17</td>
<td><strong>Invited Lecture:</strong>&lt;br&gt;Design-based synthetic receptors in anion recognition</td>
<td>UGC sponsored National seminar on Frontier in Chemistry, 4th and 5th December, 2013</td>
<td><strong>Department of Chemistry, M.U.C. Women’s College, Burdwan and Vivekananda Mahavidyalaya, Burdwan.</strong></td>
</tr>
</tbody>
</table>
3. Lecture delivered in Refreshers Course

<table>
<thead>
<tr>
<th>S.No</th>
<th>Programme</th>
<th>Duration</th>
<th>Organized by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UGC sponsored Refresher Course in Biochemistry</td>
<td>September 01 to 21, 2006</td>
<td>UGC Academic College, Burdwan</td>
</tr>
<tr>
<td>2</td>
<td>UGC sponsored 5th Refresher Course in chemistry</td>
<td>August 28 to September 17, 2010</td>
<td>UGC Academic College, Burdwan</td>
</tr>
<tr>
<td>2</td>
<td>UGC sponsored Refresher Course in Chemistry</td>
<td>November 22 to December 11, 2010</td>
<td>UGC Academic College, Calcutta</td>
</tr>
<tr>
<td>3</td>
<td>UGC sponsored Refresher Course on Chemistry: Today and Tomorrow</td>
<td>January 02 to January 22, 2010</td>
<td>Jadavpur University</td>
</tr>
<tr>
<td>4</td>
<td>UGC sponsored Refresher Course on Modern Chemical Sciences: Theories and Applications</td>
<td>January 02 to January 22, 2013</td>
<td>Jadavpur University</td>
</tr>
</tbody>
</table>

4. Teaching

- Reaction mechanism
- Reagent chemistry
- Synthetic chemistry
- Organometallic chemistry
- Supramolecular chemistry

5. Research Interest

Molecular recognition and Supramolecular chemistry

- *Design and synthesis of chemosensors for cations, anions, neutral molecules.*
- *Supramolecular stimuli responsive gel*
- *Chiral recognition*

6. Ph.D awarded

1. Dr. Goutam Masanta; Chembioteck
2. Dr. Tanushree Sen; Assistant Professor, J. K. College, Purulia.
3. Dr. Suman Adhikari; Assistant Professor, Govt. Degree College, Dharmanagar, Tripura (N).
4. Dr. Indrajit Saha; Assistant Professor, Ramkrishna Mahavidyalya, Kailashahar, Tripura.
5. Dr. Avik Ranjan Sarkar; Post Doctoral fellow, Ajou University, Suwon, Korea
6. Dr. Tanmay Sarkar; Post Doctoral fellow

7. Students pursuing Ph.D
1. Debasis Kar (CSIR-SRF, Thesis submitted),
2. Debojyoti Tarafdar (CSIR-SRF),
3. Sk. Sarfaraj Ali (CSIR-JRF),
4. Santanu Panja (CSIR-JRF),
5. Anupam Majumdar (CSIR-JRF),
6. Atanu Panja (CSIR-JRF).

8. List of Publications (h-Index: 19)

2014


6. Azaindole-1,2,3-triazole-conjugate in a tripod for selective sensing of Cl^{-}, H_{2}PO_{4}^{-} and ATP under different conditions, Ghosh, K*.; Kar D, Joardar, S.; Samadder, A., Khuda-Bukhsh, A. R. RSC. Advances, 2014, DOI: 10.1039/C3RA45018J.
2013


2011


2008


2007


2006


2005


2003


2001


2000


1999


1997


1996