

### Bio-data

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| Name                          | Dr. Rajesh Ahirwar   |
| Designation                   | Scientist- B   |
| Date of joining ICMR          | 26-12-2016   |
| Educational Qualification     | <ul style="list-style-type: none"> <li>• <b>Ph.D.</b> in Biological Sciences, 2016<br/>CSIR-Institute of Genomics &amp; Integrative Biology, Delhi</li> <li>• <b>M.Sc.</b> in Biotechnology, 2011<br/>Dept of Biotechnology, Himachal Pradesh University, Shimla</li> <li>• <b>B.Sc.</b> in Biotechnology, 2009<br/>Motilal Vigyan Mahavidyalaya, Barkatullah University, Bhopal</li> </ul>  |
| Award/ Fellowship/ Membership | <ul style="list-style-type: none"> <li>• Early Career Research Award, SERB, India (2018)</li> <li>• SERB International Travel Support for symposium "Aptamer-2016" at Oxford, UK</li> <li>• Best Poster Award at International Symposium on Bioengineering 2012, IITG, India</li> <li>• Senior Research Fellowship (2013-2016), CSIR, India</li> <li>• Junior Research Fellowship (2011-2013), CSIR, India</li> <li>• Junior Research Fellowship, DBT- 2011</li> <li>• Graduate Aptitude Test in Engineering (GATE- 2010 &amp; 2011)</li> <li>• JNU Combined Entrance Exam for Biotechnology (CEEB- 2009)</li> <li>• Jawahar Navodaya Vidyalaya Selection Test (JNVST- 1999)</li> <li>• Member of International Society on Aptamers.</li> <li>• Life Member of Indian Science Congress Association.</li> </ul>   |
| Foreign visits                | <ul style="list-style-type: none"> <li>• Speaker in the 3rd Annual Meeting of the International Society on Aptamers (ISOA) "Aptamer-2016" March 4-5, 2016, held at St. Hilda's College, Oxford, UK.</li> </ul>   |
| Thrust Area/ Specialization   | <ul style="list-style-type: none"> <li>• Exposure biology and biomolecular toxicity</li> <li>• Development of Aptamer-based tools for assessment of heavy metal toxicity</li> </ul>  |
| Publications                  | <ol style="list-style-type: none"> <li>1. <b>Ahirwar R</b>, Dalal A, Sharma JG, Yadav BK, Nahar P, Kumar A, Kumar S. An aptasensor for rapid and sensitive detection of estrogen receptor alpha in human breast cancer. <i>Biotechnology and bioengineering</i>, August 21, 2018. <a href="#">Link to article</a></li> <li>2. <b>Ahirwar R</b>, Sharma JG, Nahar P, Kumar S. Immobilization studies of cellulase on three engineered polymer surfaces. <i>Biocatalysis and Agricultural Biotechnology</i>, 2017, 11: 248-251. <a href="#">Link to article</a></li> <li>3. <b>Ahirwar R</b>, Sharma JG, Singh B, Kumar K, Nahar P, Kumar S. A Simple and Efficient Method for Removal of Phenolic Contaminants in Wastewater Using Covalent Immobilized Horseradish Peroxidase. <i>Journal of Materials Science and Engineering B</i>, 2017, 7 (1-2): 27-38. <a href="#">Link to article</a></li> <li>4. Kumar S<sup>†</sup>, <b>Ahirwar R</b><sup>†</sup>, Rehman I, Nahar P. Moderate reagent mixing on an orbital shaker reduces the incubation time of enzyme-linked immunosorbent assay. <i>Analytical Biochemistry</i>, 2017, 528: 53-56. († Equal Contribution). <a href="#">Link to article</a></li> <li>5. Kumar S<sup>†</sup>, Kumar D<sup>†</sup>, <b>Ahirwar R</b><sup>†</sup>, Nahar P. Exploring the flexible chemistry of 4-fluoro-3-nitrophenyl azide for biomolecule immobilization</li> </ol> |

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|                                      | <p>and bioconjugation. Analytical and Bioanalytical Chemistry, 2016, 408(25):6945-56. († Equal contribution). <a href="#">Link to article</a></p> <p>6. <b>Ahirwar R</b>, Vellarikkal SK, Sett A, Sivasubbu S, Scaria V, Bora U, Borthakur BB, Kataki AC, Sharma JD, Nahar P. Aptamer-Assisted Detection of the Altered Expression of Estrogen Receptor Alpha in Human Breast Cancer. PLoS ONE, 2016, 11(4):e0153001. <a href="#">Link to article</a></p> <p>7. Das R H, <b>Ahirwar R</b>, Kumar S, Nahar P. Microwave-Assisted Rapid Enzymatic Synthesis of Nucleic Acids. Nucleosides, Nucleotides &amp; Nucleic Acids, 2016, 35(7): 363-9. <a href="#">Link to article</a></p> <p>8. <b>Ahirwar R</b>, Nahar S, Aggarwal S, Ramachandran S, Maiti S, Nahar P. In silico selection of an aptamer to estrogen receptor alpha using computational docking employing estrogen response elements as aptamer-alike molecules. Scientific Reports, 2016, 6:21285. <a href="#">Link to article</a></p> <p>9. <b>Ahirwar R</b>, Tanwar S, Bora U, Nahar P. Microwave non-thermal effect reduces ELISA timing to less than 5 minutes. RSC Advances, 2016, 6: 20850-20857. <a href="#">Link to article</a></p> <p>10. <b>Ahirwar R</b>, Nahar P. Development of a label-free gold nanoparticle-based colorimetric aptasensor for detection of human estrogen receptor alpha. Analytical and Bioanalytical Chemistry, 2016, 408(1):327-32. <a href="#">Link to article</a></p> <p>11. <b>Ahirwar R</b>, Nahar P. Development of an aptamer-affinity chromatography for efficient single step purification of Concanavalin A from Canavalia ensiformis. Journal of Chromatography B, 2015, 997: 105-9. <a href="#">Link to article</a></p> <p>12. <b>Ahirwar R</b>, Nahar P. Screening and identification of a DNA aptamer to Concanavalin A and its application in food analysis. Journal of Agricultural and Food Chemistry, 2015, 63(16): 4104-4111. <a href="#">Link to article</a></p> <p>13. <b>Ahirwar R</b>, Bariar S, Balakrishnan A, Nahar P. BSA blocking in enzyme-linked immunosorbent assays is a non-mandatory step: A perspective study on mechanism of BSA blocking in common ELISA protocols. RSC Advances, 2015, 5: 100077-100083. <a href="#">Link to article</a></p> <p>14. Das R H, <b>Ahirwar R</b>, Kumar S, Nahar P. Microwave-mediated enzymatic modifications of DNA. Analytical Biochemistry, 2015, 471: 26-28. <a href="#">Link to article</a></p> <p>15. <b>Ahirwar R</b>, Tanwar S, Parween S, Kumar A, Nahar P. Image-based detection of oligonucleotides -a low cost alternative to spectrophotometric or fluorometric methods. Analyst, 2014, 139(9): 2186-2192. <a href="#">Link to article</a></p> |
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Photograph (JPEG format)

