

Biodata

Name	Dr. Parag V. Adhyapak 
Designation	Scientist C
Educational qualification	M.Sc from University of Pune, Pune. Ph.D from University of Pune, Pune.
Research area	Nanomaterials, Polymer nanocomposites, Ceramic Oxides, Sensors, Photonic materials, Super capacitors, Single crystals and Catalysts.
Recognised Awards/Honors/Fellow	<ul style="list-style-type: none"> • Indian Council of Chemist's YOUNG SCIENTIST AWARD - 2005 at BIT Ranchi (2005). • First Prize in Oral Presentation at Research Seminar on <i>Advances in Chemistry</i> held at Department of Chemistry, Pune University (2009) • First Prize in Poster Presentation at Raman Memorial Conference held at Department of Physics University of Pune (2011) • First Prize in Oral Presentation at 1st International Symposium on Physics and Technology of Sensors (ISPTS) held at YASHADA, Pune (2012) • Elected fellow of Maharashtra Academy of Sciences (2016) • Life Member of Indian Council of Chemists. • Member of American Nano Society. • Indian Council of Chemists Dr. Arvindkumar Memorial Award - 2017 received at Visakhapatnam on 26 December (2017) • Selected member of The National Academy of Sciences, India (NASI) (2019)
Projects	<p>Ongoing:</p> <ol style="list-style-type: none"> 1. Digitalization and Quantification Studies of High Sensitive Indigenous NO_x Sensor and its Optical Calibration (PN/SP/077) (Sponsored by ISRO, Outlay: Rs. 32.83 lakhs). 2. Development of Smart Parking Management System using Sensors, IoT and GIS (PN/SP/078) (Sponsored by DST (NRDMS), Outlay: Rs. 39.78 lakhs (In collaboration with CDAC, Hyderabad). <p>Completed:</p> <ol style="list-style-type: none"> 1. Synthesis and characterization of conducting polymer/nanostructured WO₃ hybrid for low temperature NO_x detection (PN/SP/058) (Sponsored by ISRO, Outlay: Rs. 14.41 lakhs).
Publications/Patents (Past 5 years only) Provide Google	<ol style="list-style-type: none"> 1. Unique N doped Sn₃O₄ nanosheets as an efficient and stable photocatalyst for hydrogen generation under sunlight, S Balgude, Y Sethi, A Gaikwad, B Kale, D Amalnerkar, P. V. Adhyapak*,

scholar link	<p>Nanoscale 12 (15), 8502-8510, 2020. (IF: 6.970).</p> <ol style="list-style-type: none"> 2. Sunlight driven highly efficient degradation of methylene blue by CuO-ZnO nanoflowers, Satish P Mardikar, Sulabha Kulkarni, Parag V Adhyapak, Journal of Environmental Chemical Engineering, 8 (2020), 102788 (IF: 4.01) 3. Facile synthesis of SnO₂@ carbon nanocomposites for lithium-ion batteries, AA Ambalkar, RP Panmand, UV Kawade, YA Sethi, SD Naik, MV Kulkarni, P. V. Adhyapak, B. B. Kale New Journal of Chemistry 44 (8), 3366-3374, (2020). (IF: 3.069). 4. Effect of casting solvent on the structure development, electrical, thermal behavior of polyvinylidene fluoride (PVDF)–carbon nanofiber (CNF) conducting binary and hybrid, BTS Ramanujam, PV Adhyapak, S Radhakrishnan, R Marimuthu, Polymer Bulletin, 1-17, (2020). (IF: 1.858) 5. Nanocomposite of polypyrrol and silica rods-gold nanoparticles core-shell as an ammonia sensor, Vaibhav Khambalkar, Shobha Birajdar, Parag Adhyapak, Sulabha Kulkarni, Nanotechnology (IOP Science), (10):105501.(2019). (IF: 3.4) 6. Nanostructured WO₃/graphene composites for sensing NO_x at room temperature, Parag V. Adhyapak*, Amruta D. Bang, Pooja More and N. R. Munirathnam, RSC Advances, 8, 34035–34040. (2018) (IF: 2.9) 7. Sn₃O₄ microballs as highly efficient photocatalyst for hydrogen generation and degradation of phenol under solar light irradiation Sagar Balgude, Yogesh Sethi, Bharat Kale, Dinesh Amalnerkar, Parag Adhyapak, Materials Chemistry and Physics, 221, 493-500 (2019). (IF: 2.21) 8. Synthesis and characterization of Abhraka (mica) bhasma by two different methods, Parag Adhyapak Shailesh Kantak, Nilima Rajurkar, Journal of Ayurveda and Integrative Medicine, https://doi.org/10.1016/j.jaim.2018.11.003 (2019). 9. ZnO decorated Sn₃O₄ nanosheet nano-heterostructure: a stable photocatalyst for water splitting and dye degradation under natural sunlight, SD Balgude, YA Sethi, BB Kale, DP Amalnerkar, PV Adhyapak*, RSC advances 9(18), 10289-10296, (2019). (IF: 3.049). 10. Ruthenium-decorated vanadium pentoxide for room temperature ammonia sensing, SN Birajdar, NY Hebalkar, SK Pardeshi, SK Kulkarni, PV Adhyapak*, RSC Advances 9(49), 28735-28745, (2019). (IF: 3.049) 11. Single-Stroke Synthesis of Tin Sulphide/Oxide Nanocomposites Within Engineering Thermoplastic and Their Humidity Response, Dattatraya Adkar, Parag V. Adhyapak, Uttamrao Mulik, Sandesh Jadkar, Katia Vutova, Dinesh Amalnerkar, Journal of Nanoscience and Nanotechnology, 18, 3441-3447 (2018). 12. Thickness-dependent humidity sensing by poly (vinyl alcohol) stabilized Au–Ag and Ag–Au core–shell bimetallic nanomorph resistors, Parag Adhyapak, Rohini Aiyer, Sreekantha Reddy
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13. Nanostructured WO₃/graphene composites for sensing NO_x at room temperature, **Parag V. Adhyapak**, Amruta D. Bang, Pooja More and N. R. Munirathnam, RSC Advances, 8, 34035–34040. (2018) (IF: 2.9)
14. Influence of Erbium doping on hydrothermally synthesized ZnO Nanostructures and their enhanced gas sensing properties, **Parag V. Adhyapak**, L. Deepika Bharatula, Amruta Rathi, Sunjae Jang, Taesung Kim, Dinesh Amalnerkar, Current smart Materials, 2(2) (2017).
15. Sonochemically generated Cerium doped ZnO nanorods for highly efficient photocatalytic dye degradation Satish Meshram, **Parag Adhyapak**, S. K. Pardeshi, Imtiaz Mulla, D.P.Amalnerkar, Powder Technology 318, (2017) 120-127. (IF: 3.413)
16. Synthesis and deposition of nanostructured SnS for semiconductor-sensitized solar cell, S. S. Hortikar, V. S. Kadam, A. B. Rathi, C. V. Jagtap, H. M. Pathan, I. S. Mulla and **P. V. Adhyapak***, Journal of Solid State Electrochemistry, 21, (2017) 2707 (IF: 2.531)
17. Removal of Methylene Blue Dye from Aqueous Solution by Using Cestrum nocturnum Leaves, as a Low Cost Adsorbent, D. J. Borkar, N. S. Rajurkar, **P. V. Adhyapak**, Journal of Chemical, Biological and Physical Sciences JCBPS; Section D; May 2017 – July, 2017, Vol. 7, No. 3; 512-525: (IF: 1.933)
18. Synthesis and Dielectric Properties of Glycine Doped Bisthiourea Zinc and Cadmium Succinates, MN Raste, **PV Adhyapak**, SK Pardeshi, Advanced Science, Engineering and Medicine 9 (12), 991-999. (IF: 0.39)
19. Synthesis and Spectroscopic Investigations of 1,2-Dibromoethane Linked Ferrocene Grafted Hydroxyl Terminated Polybutadiene.; Jagtap, R. M.; Kshirsagar, D. R.; Shende, A. P.; Khire, V. H.; Adhyapak, P. V.; Pardeshi, S. K, Advanced Science, Engineering and Medicine 9 (8), 635-639. (IF: 0.39)
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21. Novel Adsorbent: Barleria Cristata Leaves for Removal of Methylene Blue Dye, D.J.Borkar, N. S. Rajurkar and **P.V. Adhyapak**, Journal of Applicable Chemistry, 5 (5): 1064-1074, 2016 (IF: 1.211)
22. Elemental Profile and Hb Content in Whole Blood of Adolescents from Baramati Region, Pune, Maharashtra, Rashmi S. Kumar, N.S. Rajurkar and **P. V. Adhyapak**, Journal of Applicable Chemistry, 2016, 5 (4): 886-893(IF: 1.211)
23. Cu doped ZnO microballs as effective sunlight driven photocatalyst,

- SP Meshram, **PV Adhyapak**, DP Amalnerkar, IS Mulla, *Ceramics International* 42 (6), 7482-7489 (2016) (IF: 3.450)
24. Hydrothermally synthesized tungsten trioxide nanorods as NO₂ gas sensors, VB Patil, **PV Adhyapak**, PS Patil, SS Suryavanshi, IS Mulla, *Ceramics International* 41(3) (2015) 3845-3852. (IF: 3.450)
 25. Mn-Loaded Mesoporous Silica Nanocomposite: A Highly Efficient Humidity Sensor, Vijay K Tomer, Surender Duhan, **Parag V Adhyapak**, Imtiaz S Mulla, *Journal of American Ceramic Society*, 98 (3) (2015) 741-747. (IF: 3.094)
 26. Effect of Cu Incorporation on Electrical Properties of CdS Thin Films Prepared by Using Ultrasound Assisted Chemical Bath Deposition Technique, **P. V. Adhyapak**, M. V. Mirkale, D. P. Amalnerkar, S. P. Meshram, and I. S. Mulla, *Journal of Nanoengineering and Nanomanufacturing*, Vol. 5, (2015)1–6.
 27. Influence of Ce³⁺ on Optical and Photocatalytic Properties of Zinc Oxide Nanoparticles Synthesized by Hydrothermal Route, **Parag V. Adhyapak**, Satish P. Meshram, Dinesh P. Amalnerkar, and Imtiaz S. Mulla, *Journal of Nanoengineering and Nanomanufacturing*, Vol. 5, (2015) 11–17.
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 33. Synthesis of burger/donut like V and W doped ZnO and study of their optical and gas sensing properties, **Parag V Adhyapak***, Satish P Meshram, Aarti A Pawar, Dinesh P Amalnerkar, Uttam P Mulik, Imtiaz S Mulla, *Ceramics International*, 40 (8) (2014)12105–12115. (IF: 3.450)
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	<p>Adhyapak*, S Duhan, IS Mulla, Microporous and Mesoporous Materials, 197 (2014)140–147 (IF: 4.182)</p> <p>35. A facile green synthesis of silver nanoparticles using Psoralea Corylifolia L. seed extract and their In-Vito antimicrobial activities, S. D. Danai-Tambhale, Parag V Adhyapak*, International Journal of Pharma and Bio Sciences 5 (1), (2014) 457 – 467. (IF: 7.446)</p> <p>36. Effect of chemical composition of $Sr_xCa_{1-x}Fe_2O_4$ ($0.0 \leq x \leq 1.0$) catalyst and alkali towards efficient and selective epoxidation of styrene, RY Pawar, PV Adhyapak, SK Pardeshi, Applied Catalysis A: General 478 (2014) 129-137 (IF: 4.630)</p> <p>37. Coriandrum sativum seed extract assisted in situ green synthesis of silver nanoparticle and its anti-microbial activity, GM Nazeruddin, NR Prasad, SR Prasad, YI Shaikh, SR Waghmare, Parag Adhyapak, Industrial Crops and Products, 60 (2014) 212–216. (IF: 4.191)</p> <p>38. Nanostructured Cu_xS embedded engineering thermoplastic for room temperature humidity sensing, Dattatraya Adkar, Abhay Hake, Parag Adhyapak, Uttamrao Mulik, Sandesh Jadkar and Dinesh Amalnerkar, Mater. Focus, 3, (2014) 401-409</p>
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