**Curriculum Vitae**

**Dr. Bigyan Ranjan Jali, Assistant Professor, Chemistry, VSSUT Burla**

**Research Area: Supramolecular Chemistry**

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| **Permanent Address**  Dr. Bigyan Ranjan Jali  AT-Balabhadrapur, PO-Satapada, Via- Brahmagiri  Puri-752011  Odisha, India, Phone: +91 8249023454  E-mail: [bigyan.Jali7@gmail.com](mailto:bigyan.Jali7@gmail.com)  [brjali\_chem@vssut.ac.in](mailto:bigyan.Jali8@gmail.com) | **Correspondence Address**  Dr. Bigyan Ranjan Jali  Department of Chemistry  Veer Surendra Sai University of Technology Burla, Sambalpur, 768018, Odisha, India  Phone: +91 8249023454  E-mail:brjali\_chem@vssut.ac.in  [bigyan.Jali7@gmail.com](mailto:bigyan.Jali7@gmail.com) |

**Details of Educational Qualification:**

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| **Class** | **Completed Year** | **Div.** | **University/ institute** |
| B. Sc Chemistry Hons | 2007 | First | Utkal University, Bhubaneswar, Odisha, India |
| M. Sc in Chemistry | 2009 | First | Utkal University, Bhubaneswar, Odisha, India |
| Ph. D Supramolecular Chemistry | 2014 |  | Indian Institutes of Technology Guwahati |

**Honours and Awards:**

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| 2009 NET (National Eligibility Test) CSIR, India |
| 2009 GATE (Graduate Aptitude Test in Engineering) MHRD, India |
| 2015 UGC Postdoctoral Fellowship (SC-ST) UGC, India |
| 2019 Bharat Vikash award Institute of self-Reliance Bhubaneswar |
| 2019 Global Outreach Teacher in Chemistry GOREA India |
| 2014 Life Member OCS, Odisha  **Research Grant:**  2017 UGC-START-UP Research Grant (Rs:-10 lakhs) UGC Govt. of India  2019 DST-EMEQ Project Grant (Rs:- 39 lakhs) DST, Govt. of India  2022 DST-Biotechnology Project Grant (Rs:- 10 lakhs) DST, Govt. of Odihsa |

**Teaching Experience:**

* Assistant Professor: Department of Chemistry, VSSUT Burla, Since 2016
* Lecture: Government Polytechnic Gajapati (From 13-10-2015 to 18-10-2016).
* Lecture (Contractual): CIPET Bhubaneswar (From 11-08-2015 to 05-10-2015).
* Lecture (Guest Faculty): PG Department of Chemistry, Berhampur University (From 09-03-2015 to 08-08-2015).
* **Research Credentials : Journals: 30**

**: Journal proceeding: 02**

**: Book Chapters:** 07

**: Conferences:** 25

**Research Publications:**

1. Recent advancement on chromo-fluorogenic sensing of aluminum(III) with Schiff bases. P. Mohanty, R. Behura, V. Bhardwaj, P. P. Dash, S. K. Sahoo and **B. R. Jali**, ***Trends in Environmental Analytical Chemistry***. 34 (**2022**), e00166. **Impact Factor: 13.622**
2. Conformational polymorphs and solvates of 1-(6-aminopyridin2-yl)-3-phenylthiourea. P. Mohanty, A. Mandal. B. Nath and **B. R. Jali***,* ***Journal of Molecular Structure***,1261, **(2022)**,132859. **Impact factor: 3.841**
3. Synthesis and characterization of a novel silver nanoparticles decorated functionalized single-walled carbon nanotubes nanohybrids embedded polyaniline ternary nanocomposites: thermal, dielectric, and sensing properties. L. Shubhadarshinee, P. Mohaptra, **B. R. Jali**, A. K. Barick and P. Mohapatra, ***Polymer-Plastics Technology and Materials***, **2022**. **Impact factor: 2.439**
4. A Schiff base luminescent chemosensor for selective detection of Zn2+ in aqueous medium. R. Behura, P. P. Dash, P. Mohanty, S. Behera, M. Mohanty, R. Dinda, S. K. Behera, A. K. Barick and **B. R. Jali**, ***Journal of Molecular Structure***, 1264, (**2022**), 133310. **Impact factor: 3.841**
5. Fluorescent sensing of water in DMSO by 2,4-dinitrophenyl hydrazine derived Schiff base. R. Behura, S. Behera, P. Mohanty, P. P. Dash, R. Panigrahi, B. S. Mallik, S. K. Sahoo and B. R.Jali, ***Journal of Molecular Structure***, 1251, (**2022**), 132086. **Impact factor: 3.841**
6. Recent Progress in Schiff Bases in Detections of Fluoride Ions. **B. R. Jali** and J. B. Baruah, ***Dyes and Pigments***, 194,(**2021**), 109575. **Impact factor: 5.122**
7. Preparation and characterisation of silver nanoparticles/graphene oxide hybrid nanofiller

reinforced-polyaniline. L. Subhadarshinee, **B. R. Jali**, A. K. Barick and P. Mohapatra, Plastics, Rubber and Composites: ***Plastics, Rubber and Composites: Macromolecular Engineering*** 51, (**2022**), 72. **Impact factor: 1.843**

1. A Brief Review: Antibacterial Activity of Quinone Derivatives. P. Mohanty, S. Sahoo, S. Behera, R. Behura, A. Acharya, D. Biswal, S. K. Suna, R. Sahoo, R. C. Soren and **B. R. Jali, *Biointerface Research in Applied Chemistry***, 12 (**2022**), 3247. **Impact factor: 1.949**.
2. Anti-bacterial activity of Thiazole and its derivatives: A Review. P. Mohanty, S. Behera, R. Behura, L. Sunhadarshinee, P. Mohapatra, A. K. Barick and **B. R. Jali**, Biointerface Research in Applied Chemistry. 12 **(2022)**, **2171. *Biointerface Research in Applied Chemistry***, 12 (**2022**), 3247. **Impact factor: 1.949**.
3. Antibacterial Properties of Quinoline Derivatives: A MiniReview. S. Behera, P. Mohanty, R. Behura, B. Nath, A. K. Barick and B. R. Jali, ***Biointerface Research in Applied Chemistry***, 12 (**2022**), 6078. **Impact factor: 1.949**.
4. Investigation on bindings of a binaphthoquinone derivative with serum albumin proteins by fluorescence spectroscopy. J. B. Baruah and **B. R. Jali**, ***Indian Journal of Chemistry***. 60A (2021) 824. **Impact factor: 0.412**
5. A Mini-Review: Quinones and their Derivatives for Selective and Specific Detection of Specific Cations. **B. R. Jali**, Biointerface Research in Applied Chemistry, 11 (**2021**) 11679. **Impact factor: 1.949**.
6. A comprehensive review on quinones based fluoride selective colorimetric and fluorescence chemosensors. **B. R. Jali**. A. K. Barick, P. Mohapatra and S. K. Sahoo, ***Journal of Fluorine Chemistry*** 244 (**2021**) 109744. **Impact factor: 2.05**
7. Study of Interaction between Bovine Serum Albumin and Dolutegravir Intermediate: Fluorescence and Molecular Docking Analysis. S. Behera, R. Behura, P. Mohanty, M. Sahoo, R. D. Subrahmanya, A. K. Verma and **B. R. Jali**, Biointerface Research in Applied Chemistry, 11 (**2021**) 13102. **Impact factor: 1.949**.
8. Spectroscopic, cytotoxicity and molecular docking studies on the interaction between 2,4-dinitrophenylhydrazine derived Schiff bases with bovine serum albumin. S. Behera, R. Behura, M. Mohanty, R. Dinda, P. Mohanty, Anil K. Verma, Suban K. Sahoo and **B.R. Jali**, ***Sensors International*** 1 (**2020**) 100048.
9. Selective detection of fluoride and hydrogen sulfate anions by pyrimidine-based fluorescence chemosensor. Soumya R Thakur, R Behura, S Behera, R. B. Sayala, A. K Barick, Ramakrishna D S and **B. R Jali**, ***Indian Journal of Chemistry*** 59A (**2020**) 1809. **Impact factor: 0.412**
10. Ultrasonic velocity and allied acoustical parameters of 2, 4-dinitrophenyl hydrazine based Schiff base in DMSO. R. Behura, S. Behera, B. B. Palai, S. Mishra, M. Mishra, S. Behera, G. Nath and **B. R. Jali**, ***Indian Journal of Chemistry*** 59A (**2020**) 1108. **Impact factor: 0.412**
11. A Brief Review: Biological Implications of Naphthoquinone Derivatives. B. R. Jali, R. Behura, Soumya. R. Barik, S. Parveen, Spandan. P. Mohanty and R. Das, ***Research J. Pharm. and Tech***. 11 (**2018**) 3698. **Impact factor: 1.203**
12. A Versatile Molecular Probe of Napthalimide-derivative for Zn (II) Sensor: A Mini-Review. P. P. Das, P. Mohanty, A. K. Barick, P. Mohapatra and **B. R. Jali**, ***TRENDS IN SCIENCES* *Just accepted* 2022.**
13. Quinoline a Versatile Molecular Probe for Zinc Sensor: A Mini Review, P. Mohanty, P. P. Dasha, R. Behura, S. Behera, A. K. Barick, and **B.R. Jali**, ***Letter in Applied Nano-BioScience***, ***Just accepted* 2022.**
14. Polymorphs of aromatic thiolato 1, 2 or 1,4-naphthoquinones. **B. R. Jali**, W.M. Singh, J. B. Baruah, ***CrystEngComm*** 13 (**2011**) 763. **Impact factor: 3.756**
15. Polymorphs and solvates of 2-(1,4-dihydro-1,4-dioxonaphthalen-3- ylthio) benzoic acid. **B. R. Jali**, J. B. Baruah, ***Crystal Growth and Design*** 12 (**2012**) 3114. **Impact factor: 4.010**
16. Fluorescence properties, aluminum ion selective emission changes and self- assemblies of positional isomers of 4-(hydroxyphenylthio) naphthalene-1, 2-diones. **B. R. Jali**, J. B. Baruah, ***Dyes and Pigments***, 110 (**2014**) 56. **Impact factor: 5.122**
17. Substrate selective protein binding of isomers of aromatic carboxylic acid or pyridine tethered-naphthoquinone and their cytotoxicity. **B. R. Jali**, Y.Kuang, N. Neamati, J. B. Baruah, ***Chemico-Biological Interactions***, 214C (**2014**) 10. **Impact factor: 5.168**
18. Recognition of bromide ion by protonated form of 2-(1H-imidazol-2- ylthio)-3- methylnaphthalene-1,4-dione. **B. R. Jali**, J. B. Baruah, ***Chempluschem*** 78 (**2013**) 589-597. **Impact factor: 3.210**
19. Selectivity in changes of fluorescence emission of 1,4-naphthoquinone derivatives by manganese and cadmium ions. **B. R. Jali**, K. Masud, J.B. Baruah, ***Polyhedron*** 51 (2013) 75. **Impact factor: 2.975**
20. Linear to spiral coordination polymers of 1,4-naphthalene di-(2-oxyacetate) of cobalt, manganese and copper. **B. R. Jali** and J. B. Baruah, ***Inorganic Chemistry Communications*** 14 (**2011**) 1440. **Impact factor: 2.495**
21. Synthesis, characterization, and catalytic activity of zinc carboxylate complexes of 2,3-pyridine dicarboxylic acid and (3-oxo-2,3-dihydro-benzo[1,4]oxazin-4- yl)acetic acid. W. M. Singh, **B. R. Jali**, B. Das, J. B. Baruah, ***Inorganica Chimica Acta*** 372 (**2011**)37. **Impact factor: 3.118**
22. 2,4-Diamino-6-phenyl-1,3,5-triazine a systematic cocrystal former with dicarboxylic acids. **B. R. Jali**, J. B. Baruah, ***Journal of Chemical Crystallography*** 43 (**2013**) 531. **Impact factor: 0.582**
23. Iron(II) and manganese(II) complexes of 2-{2-(3-carboxypyridin-2- yl)disulfanyl} pyridine-3-carboxylic acid through C-S bond cleavage. W.M. Singh, **B. R. Jali**, J. B. Baruah, *Journal of Chemical Crystallography* 42 (**2012**) 775. **Impact factor: 0.582**

**Journal Proceeding:**

1. Acoustical studies of Rilpivirine drug in dimethyl sulfoxide. S. Behera, R. Behura, P. Mohanty and **B. R. Jali**, ***Materials Today: Proceedings***, 41 (**2021**) 256.
2. Synthesis and characterization of graphene oxide and graphene from coal. P. Sahoo, L. Subhadarshinee, **B. R. Jali**, P. Mohapatra and A. K. Barick. ***Materials Today: Proceedings***, 56 (**2022**) 2421.

**Book Chapters:**

1. Synthesis, Characterization, Properties, and Applications of Quantum Dots: A Review. S. K. Pradhan, L. Shubhadarshinee, N. Sarkar, **B. R. Jali**, A. K. Barick, Book: Nanoscience and Nanotechnology for Multifunctional Applications, Chapter-6, ISBN-13: 979-8561484759.
2. The Effect of Quarantine and Isolation on COVID-19 in General Population and Impact of Potential Role of Technology in Its Mitigation. **B. R. Jali**, Book:-Application of Artificial Intelligence in COVID-19, Chapter-23. Springer.
3. Quinone tethered silylethers: protein binding and film forming abilities. Book chapter in Silicones and Silicone-Modified Materials VI. ACS Symposium Series. **B. R. Jali**, J. B. Baruah, (2013), 1154, 177-183.
4. Conducting Polymer Composites for Antistatic Application in Aerospace in the Book “Aerospace Polymeric Materials (ISBN: 978-1-119-90489-2)”, Edited by Inamuddin; Altalhi, T.; and Adnan, S.M.; Published by John Wiley & Sons, Inc., New Jersey, USA and Scrivener Publishing LLC, Massachusetts, USA, Chapter 7, Pages 155–187, 29th August, 2022. DOI: 10.1002/9781119905264.ch7. Pradhan, S.P.; Shubhadarshinee, L.; Mohapatra, P.; Mohanty, P.; **Jali, B.R**.; Mohapatra, P.; and Barick, A.K.
5. Graphene-Based Materials for Energy Storage and Conversion Application. Nanostructured Carbon for Energy Generation, Storage, and Conversion (ISBN: 978-1-77491-148-8) of the Series Energy Science AAP Research Notes on Nanoscience and Nanotechnology, Kodolov, V.I.; Mukbaniani, O.; Abraham, A.R.; and Haghi, A.K. (Eds), Apple Academic Press, Inc., Florida, USA, Chapter 2. A. Majhi, L. Shubhadarshinee, P. Mohanty, **B.R. Jali**, P. Mohapatra and A.K Barick.
6. Biodegradable Thermoelectric Materials. N. Sarkar, G. Sahoo, A. Sahoo and **B. R. Jali**, Application of ultrasound for the synthesis of metal oxide nanomaterials with novel morphology. ISBN-13: 979-8561484759. Chapter-6, 18-47.
7. P. Sahoo, L. Shubhadarshinee, P. Mohapatra, P. Mohanty, **B.R. Jali**, P. Mohapatra, and A.K Barick Processing, Morphology, Mechanical and Electrical Properties, and Applications of Thermoplastic Polymer/MXenes Nanocomposites in the Book “MXene Filled Polymer Nanocomposites”, Edited by George, S.C.; Nair, S.T.; and Ponraj, J.S., Published by Taylor & Francis Group, LLC, Florida, USA, Chapter 3, 2022.