

## Curriculum Vitae

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**Dr. Vijay Parewa** *M.Sc., Ph.D. MRSC*

**Official Address:**

Organic Synthesis & Green  
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**PRESENT STATUS**

**Assistant Professor** (since 2014), Department of Chemistry, University of Rajasthan, Jaipur.

**POSITIONS SERVED**

❖ **CSIR Research Associate** (2013- 2014), Department of Chemistry, University of Rajasthan, Jaipur

**EDUCATION**

❖ **Ph.D.: Chemistry**, Department of Chemistry, University of Rajasthan, Jaipur

❖ **M.Sc.: Chemistry** (2009, Specialization in **Organic Chemistry**)  
Department of Chemistry, University of Rajasthan, Jaipur

**RESEARCH PROFILE**

*Research  
interest:*

↻ **Structure tailoring and catalytic activity assessment of advanced materials.**

↻ **Focused at accountable attributes for the synthetic organic chemistry in aqueous medium.**

↻ **Diversified synthesis of biologically relevant scaffolds using cleaner chemical processes.**

↻ **Sustainable construction of C-N, C-C and C-O bonds: Synthesis of value added materials.**

↻ **Catalytic C-H activation and functionalization: A complementary tool in the synthesis of novel heterocyclic.**

↻ **Selectivity (regio, chemo, diastereo) based approach for synthesis of novel heterocycles.**

↻ **Moving towards sustainable future of chemistry on the wheels of green technology.**

↻ **Photocatalysis.**

### Research achievements:

- **H-Index = 10; Total I. F. = 93.28.; Citation Factor = 322** (Source: Google Scholar) Total Publications: 23 (As on May, 2019)
- **Supervision of M.Sc. Projects - 06**
- **Supervision of DST inspire student - 04**

### Books/Monographs

Contributed two chapters in International Books entitled “**Green Chemistry: Synthesis of Bioactive Heterocycles**” (2014) published by **Springer Publications**, Germany (ISBN: 978-81-322-1849-4)

&

“**Multicomponent Reactions: Synthesis of Bioactive Heterocycles**” (2016) published by CRC Press, **Taylor and Francis Publications**, United States of America (ISBN 9781498734127 - CAT# K26349).

### Selected publications

● *Imposed hydrophobic interactions by NaCl: Accountable attribute for the synthesis of spiro[acenaphthylene-1,5'-pyrrolo[1,2-c]thiazole] derivatives via 1,3-dipolar cycloaddition reaction in aqueous medium.* Dandia A.; Kumari S.; Bansal S., Sharma A. ; **Parewa V. Green Chem.**, 2016, 18,2488. [**Impact Factor: 9.15**]

● *Step-economic, efficient, ZnS nanoparticle-catalyzed synthesis of spirooxindole derivatives in aqueous medium via Knoevenagel condensation followed by Michael addition.* Dandia, A.; Jain, A. K.; Rathore, K. S. ; **Parewa, V.Green Chem.** 2011, 13, 2135. [**Impact factor: 9.15**]

● *Cu doped CdS nanoparticles: A versatile and recoverable catalyst for chemoselective synthesis of indolo[2,3-b]quinoxaline derivatives under microwave irradiation.* Dandia, A.; Maheshwari, S.; Rathore, K. S. ;**J Parewa, V. Mol. Catal. A: Chems.** 2014, 394, 244. [**Impact Factor: 3.93**]

● *Cobalt doped ZnS nanoparticles as a recyclable catalyst for solvent-free synthesis of heterocyclic privileged medicinal scaffolds under infrared irradiation.* Dandia, A.; Gupta S. L.; Rathore, K. S. ; **Parewa, V. J. Mol. Catal. A: Chem.** 2013, 373, 61. [**Impact Factor: 3.93**]

● *Microwave-assisted Nanocatalysis: A CuO NPs/rGO Composite as an*

*Efficient and Recyclable Catalyst for the Patis-borono-Mannich Reaction.*, Dandia, A.; Bansal S.; Sharma R.; Rathore, K. S.; Parewa, V. 2018, **RSC Adv.**, 8, 30280-30288. [Impact Factor: 3.84]

● *Amidic C-N bond cleavage of isatin: Chemoselective synthesis of pyrrolo[2,3,4-kl]acridin-1-ones using Ag NPs decorated rGO composite as an efficient and recoverable catalyst under microwave irradiation.* Dandia A.; Sharma A.; Kumawat B.; Rathore K. S.; Sharma A. ; Parewa V. **RSC Adv.** 2015, 5, 91888. [Impact Factor: 3.84]

● *An efficient ultrasound-assisted one-pot chemo-selective synthesis of pyrazolo[3,4-b] pyridine-5-carbonitriles in aqueous medium using NaCl as a catalyst.* Dandia, A.; Gupta, S. L.; Parewa, V. **RSC Adv.** 2014, 4, 6908. [Impact Factor: 3.84]

● *Synthesis and characterization of CdS and Mn doped CdS nanoparticles and their catalytic application for chemoselective synthesis of benzimidazoles and benzothiazoles in aqueous medium.* Dandia, A.; Rathore, K. S. ; Parewa, V. **Cata. Commun.** 2012, 28, 90. [Impact factor: 3.69]

● *Microwave-assisted Fe<sub>3</sub>O<sub>4</sub> nanoparticles catalyzed synthesis of chromeno[1,6]naphthyridines in aqueous media.* Dandia, A.; Gupta, S. L.; Sharma, A.; Rathore, K. S.; Sharma, A.; Jain, A. ; Parewa, V. **Cat. Comm.** 2015, 61, 88. [Impact Factor: 3.69]

● *CeO<sub>2</sub>NPs/rGO Composite Catalyzed Chemoselective Synthesis of 2,8 dioxabicyclo[3.3.1]nonanes in Aqueous Medium via Aldol Condensation/ Michael addition/bicyclization Reaction Sequence.*, Dandia, A.; Sharma, A. ; Indora A.; Rathore K. S.; Sharma, A. ; Jain A.; Parewa, V. 2018, **Molecular Catalysis**, 459, 97-105.

● *“On-water” synthesis of 3-substituted indoles via Knoevenagel/Michael addition sequence catalyzed by Cu doped ZnS NPs.* Dandia, A.; Gupta, S. L.; Sharma, A.; Rathore K. S.; Sharma, A. ; Parewa, V. **Tetrahedron Lett.** 2013, 54, 5711. [Impact Factor: 2.38]

● *Ag NPs decked GO composite as a competent and reusable catalyst for ‘ON WATER’ chemoselective synthesis of pyrano[2,3-c:6,5-c']dipyrazol]- 2-ones.* Dandia A.; Gupta S. L.; Indora A.; Saini P.; Rathore K. S. ; Parewa V. **Tetrahedron Letters** 2017, 58, 1170. [Impact Factor: 2.38 ]

● *PC-ZnO Nanocomposites as efficient and reusable catalyst for the synthesis of  $\alpha,\beta$ -unsaturated compounds and aldimines.* Dandia, A.;

Gupta, S. L.; Sharma, A.; Agarwal, N. K. ; Parewa, V. **Cur. Org. Chem.** 2014, 18, 2652. [Impact factor: 2.15]

● “On Water” Sustainable Synthesis of 1,5-Disubstituted Tetrazoles via Ugi-Azide Reaction through Perturbation of Kosmotropes Using NaCl. Anshu Dandia, Shahnawaz Khan, Ruchi Sharma, Sonam Parihar, and Vijay Parewa , **Chemistry Select** 2017, 2, 9684 – 9690. [Impact Factor: 1.5 ]

## R & D Projects

S.N.	Title	Name of funding agency	Duration
1	Appraisal of catalytic activity and structure cuture of nanomaterials towards sustainability	SERB-INDIA	2016-2019
2	Synthesis of highly diverse anticancer N-heterocycles library via multi-component based novel chemical transformations	CSIR-INDIA	2015-2018
3	Exploration of new catalysts and reaction conditions in the synthesis of multifunctional bioactive heterocyclic compounds	UGC-INDIA	2014-2016

## RESEARCH EXPERIENCE

Six years.

## TEACHING EXPERIENCE

Undergraduate level: Five years.

Post graduate level: Five years.

## SOME HIGHLIGHTS:

- ✓ **4<sup>th</sup> most accessed article (January-March 2015):** PC-ZnO Nanocomposites as Efficient and Reusable Catalyst for the Synthesis of  $\alpha,\beta$  - Unsaturated Compounds and Aldimines, **Curr. Org. Chem.** 2014, 18, 2652-2664.
- ✓ **One of the most viewed/ downloaded article (August 2013-April 2014):** "On-water" synthesis of 3-substituted indoles via Knoevenagel/Michael addition sequence catalysed by Cu doped ZnS NPs, **Tetrahedron Lett.** 2013, 54, 5711-5717.

**REVIEWER:**

Polycyclic Aromatic Compounds, RSC Advances, Chemistryselect, New Journal of Chemistry, Nanoscale, Catalysis letter and in many other journals of highly reputed publishing houses

**AWARDS/  
SCHOLARSHIPS**

- ✓ Honoured as “**Member of Royal Society of Chemistry**” (MRSC), London.
- ✓ **Early Career Research Award** (ECRA) by Science and Engineering Research Board, Department of Science & Technology, Government of India in 2016
- ✓ Awarded as **CSIR-RA** by CSIR, New Delhi, Delhi, India
- ✓ **Start-Up Research Grant** by UGC. New Delhi, India (2014-2016)

**SCIENTIFIC  
COMMITTEES**

**Life member, Society of Material Chemistry (SMC), India**

**Life member, Material Research Society of India, India**

**Life member, Indian Science Congress, India**

**Life member, Indian Chemical Society, India**

**Life member, Indian Association of Chemistry Teachers, India.**

**Life member, Society for promotion of education and science, India.**

**ADMINISTRATIVE/  
ACADEMIC  
ASSIGNMENTS**

**UNIVERSITY  
ASSIGNMENTS:**

**As Member:**

- Rashtriya Uchchar Shiksha Abhiyan (RUSA), University of Rajasthan, Jaipur.
- **Election Committee**, University of Rajasthan, Jaipur,

**DEPARTMENTAL  
ASSIGNMENTS:**

**Convener and Member of various important functional committees as:**

- Instrumentation & Planning Committee
- Alumini Association Committee
- Curriculum Development and Admission Committee
- Library Committee
- Credit Monitoring Committee and Awards Committee
- Cultural events and Compilation of Results committee
- Examination Committee, Publishing Committee and Syllabus Committee
- Project Implementation Group under the CAS & FIST Programme, and various other committees at Department of Chemistry, University of Rajasthan, Jaipur.

## ACADEMIC ACTIVITIES

1. Joint Organizing Secretary, International conference on **Frontiers at the Chemistry - Allied Sciences Interface** jointly organized by Department of Chemistry, University of Rajasthan, Jaipur and Indian Society of Chemists and Biologist, Rajasthan chapter and Chemical Research Society of India Rajasthan chapter during December 21-22, **2018**
2. Joint Organizing Secretary, National Conference on **Recent Advances at Interfaces of Physical and Life Sciences** (RAPILS-2018) organised by Department of Chemistry , University of Rajasthan , Jaipur during July 6-7,**2018**
3. Joint Organizing Secretary, **Workshop on “NMR Spectroscopy : Concepts and Applications”**,2018
4. Coordinator, **Frontiers at the Chemistry-Allied Sciences Interface”**, organized by Department of Chemistry, University of Rajasthan, Jaipur during July 22-23, **2017**.
5. Co-organizing secretary ; One day Workshop on **Intellectual Property Rights “Awareness and Training Programme”** (IPRATP-2018) organised by Department of Chemistry ,University of Rajasthan , Jaipur during February 24,**2018**
6. Coordinator, International Conference on **“Frontiers at the Chemistry-Allied Sciences Interface”**, organized by Department of Chemistry, University of Rajasthan, Jaipur during April 25-26, **2016**.
7. Coordinator, National Conference on **“Frontiers at the Chemistry-Allied Sciences Interface”**, organized by Department of Chemistry, University of Rajasthan, Jaipur during March 14-15, **2015**.
8. Co-ordinator, **III<sup>rd</sup> Rashtriya Hindi Vigyan Sammelan** organized by Vigyan Bharti, Rajasthan, **2016**.
9. Co-convener **Rashtriya Hindi Vigyan Sangosthi organized** by Vigyan Parishad Prayag and Department of Chemistry, **2016**.
10. Joint Organizing Secretary, National workshop on **Basic Aspects of Quantum and Theoretical Chemistry and Applications** (BAQTCA 2015) organized by University of Rajasthan during August 17-21,**2015**

**INVITED TALKS  
/PAPERS PRESENTED  
IN INTERNATIONAL  
/NATIONAL  
CONFERENCES**

1. National conference on **Recent Trends and Advancements in Chemical Sciences** organized by Conference Center, University of Delhi, Delhi (India) during March 29-31, **2019**
2. National conference on **Energy and Environment: Perspective & Chanlleges (NCEE-2019)** organized by Department of Chemistry, JNV University, Jodhpur, Rajasthan (India) during March 9-10, **2019**
3. International conference on **Recent Development in Chemical Research (RDCR-2019)** organized by Department of Chemistry, IIS University , Jaipur, Rajasthan (India)during Feb 1-2, **2019**
4. International conference on **Frontiers at the Chemistry - Allied Sciences Interface** jointly organized by Department of Chemistry, University of Rajasthan, Jaipur and Indian Society of Chemists and Biologist Rajasthan chapter and Chemical Research Society of India Rajasthan chapter during December 21-22, **2018**
5. International conference on Materials for Energy Applications organized by S.S. Jain Subodh P.G. (Autonomous) College, Jaipur during December 6-8,**2018**
6. 24<sup>th</sup> ISCB International conference (ISCBC-2018) on Frontier Research in Chemistry and Biology Interface jointly organized by Department of Chemistry, Manipal University,Jaipur and Indian Society of Chemists and Biologist ,Lucknow during January 11-13,**2018**
7. National Conference on **Recent Advances at Interfaces of Physical and Life Sciences (RAPILS-2018)** organised by Department of Chemistry , University of Rajasthan , Jaipur during July 6-7,**2018**
8. National conference on **Recent Trends and Advancements in Enviornmental Issues, Awareness and Health** organized by JECRC University, Jaipur, Rajasthan (India) during November 17-18, **2017**
9. National Symposium on **Global Environment Challenges: Present Scenario** organized by Department of Botany, University of Rajasthan, Jaipur, Rajasthan (India) dated January 17, **2017**
10. International Conference on “**Frontiers at the Chemistry-Allied Sciences Interface**”, organized by Department of Chemistry, University of Rajasthan, Jaipur during July 22-23, **2017**.
11. International Conference on “**Frontiers at the Chemistry-Allied Sciences Interface**”, organized by Department of Chemistry, University

- of Rajasthan, Jaipur during April 25-26, **2016**.
12. III<sup>rd</sup> Rashtriya Hindi Vigyan Sammelan organized by **Vigyan Bharti, Rajasthan** and University of Rajasthan, Jaipur, during December 16-17, **2016**
  13. Rashtriya Hindi Vigyan Sangosthi organized by **Vigyan Parishad Prayag and Department of Chemistry**, University of Rajasthan, Jaipur On March 19, **2016**.
  14. 22<sup>nd</sup> ISCB International Conference on “**Recent Trends in Affordable and Sustainable Drug Discovery and Developments**”, organized by **Indian Society of Chemists and Biologists** during Feb. 6-8, **2016**.
  15. 26<sup>th</sup> **AGM Materials Research Society of India National Symposium on Materials for Inclusive Development** organized by Department of Physics, University of Rajasthan, Jaipur, Rajasthan (India) during Feb 9-11, **2015**
  16. National Conference on “**Frontiers at the Chemistry-Allied Sciences Interface**”, organized by Department of Chemistry, University of Rajasthan, Jaipur during March 14-15, **2015**.
  17. International Conference titled “**New Emerging Trends in Chemistry**” organized by Department of Chemistry, IIS University, Jaipur, 3-4<sup>th</sup> March, **2013**.

**Dr. Vijay Parewa**