

**BIO-DATA (Long-Format)**

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1. Name : Dr. Rajiv Mall
2. Designation : Assistant Professor
3. Department : Chemistry
4. Date of Birth : MARCH 17<sup>th</sup>, 1987
5. Address for : Akalpur Road Phillaur, Distt-Jalandhar

**Correspondence**

Mobile : +919780622150  
E-mail : [rajivmall@pbi.ac.in](mailto:rajivmall@pbi.ac.in)

6. Areas of Specialisation : Organic Chemistry
7. Educational Qualifications :

1. UGC-NET Qualified in the Year 2012 (63/898 Rank)
2. Ph.D. completed from Punjabi University Patiala in the Year 2014
3. M.Sc. (Chemistry) with 69.5% from Punjabi University Patiala in the Year 2009
4. B.Sc. (Medical) with 62.75% from Punjab University Chandigarh in the Year 2007

**8. Details of Experience:**

S. No.	Name of the Inst./Employer	Position Held	Duration	Major Job Responsibilities and Nature of Experience
1.	Punjabi University, Patiala	Assistant Professor	4 <sup>th</sup> March, 2014 – Till date	Teaching and Academic

**9. Published Work (Please specify numbers only):**

- a. Research Papers
  - i) International = 12 + 04 (Communicated)
- b. Oral Presentations at Conference/Seminar Presentation = 02
- c. Session Chair at Conference/Seminar Presentation = 01
- d. Conference/Seminar Presentation = 03 (International) and 12 (National)
- e. Book Chapter : 01 (International)
- f. Patents :
  - i) Original : 02 (filed)

**10. RESEARCH GUIDANCE (04): M.Phil Guided \_\_\_\_\_04\_\_\_\_\_**

Sr. No.	NAME	TITLE	YEAR
1.	Jeewanjot Kaur	“NOVEL AND SELECTIVE PEROXISOME PROLIFERATOR ACTIVATED RECEPTOR $\gamma$ MODULATORS: DESIGN SYNTHESIS AND DOCKING STUDIES”	2016
2.	Gurmeet Singh	“DESIGN SYNTHESIS AND DOCKING STUDIES OF NOVEL PEROXISOME PROLIFERATOR ACTIVATED RECEPTOR $\alpha$ AND $\gamma$ PARTIAL AGONISTS”	2016
3.	Kirandeep Kaur	“SYNTHESIS AND DOCKING STUDIES OF NOVEL HETEROCYCLYL LIGANDS IN MANAGEMENT OF TYPE-II DIABETES MELLITUS”	2018

4.	Kamaldeep Kaur	“SYNTHESIS AND DOCKING STUDIES OF CHROMONE BASED LIGANDS IN THE MANAGEMENT OF TYPE-II DIABETES MELLITUS”,	2018
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### 11. List of Papers/Courses taught at P.G. and U.G. Level

S. No.	Paper	Class
1.	Applied Chemistry Theory and Practical	B.Tech. 1 <sup>st</sup> Year
2.	Organic Chemistry-I	M.Sc. Chemistry 1 <sup>st</sup> Sem
3.	Organic Chemistry-II	M.Sc. Chemistry 2 <sup>nd</sup> Sem
4.	Chemistry of Natural Products	M.Sc. Chemistry 3 <sup>rd</sup> Sem
5.	Chemistry (Theory and Practical)	M.Sc. Hons. (FYIC) Botany
6.	Chemistry (Theory and Practical)	MD-FYIPG program in Physical and Chemical Sciences
7.	Organic Photochemistry and Pericyclic Reactions	M.Sc. Chemistry 3 <sup>rd</sup> Sem
8.	Heterocyclic Chemistry	M.Sc. Chemistry

### 12. Technical Proficiency

Basic Computer Knowledge such as Microsoft office and Knowledge of Chemistry Softwares such as ChemSketch, Chemdraw, Sybyl, Knowledge of internet

### 13. RESEARCH PUBLICATIONS:

#### LIST OF PATENT (Published)

- Application No.:** 201611030034

**Country:** India

**Published:** 09 March, 2018

**Complete Specification:** 2 September, 2016

**Inventors:** Raman K. Verma, Rajiv Mall and Amanjot Singh

**Title:** *Novel indole derivatives as anti-diabetic agents and method thereof.*
- Application No.:** 201611030905

**Country:** India

**Published:** 30 March, 2018

**Complete Specification:** 4 September, 2017

**Provisional Specification:** 9 September, 2017

**Inventors:** Raman K. Verma, Rajiv Mall and Amanjot Singh

**Title:** *Novel benzimidazole derivatives as anti-diabetic agents and method thereof.*

#### RESEARCH PAPER PUBLISHED IN INTERNATIONAL JOURNALS (12)

- Varinder Singh, Amanjot Singh, Gagandeep Singh, Raman K. Verma and **Rajiv Mall\*** Benzoxazolyl linked benzylidene based rhodanine and analogs as novel antidiabetic agents: synthesis, molecular docking, and in vitro studies. *Medicinal Chemistry Research* **30** (2021), 1905–1914.

2. Gagandeep Singh, Amanjot Singh, Varinder Singh, Raman K. Verma, Jyoti Tomar & **Rajiv Mall\***, Synthesis, molecular docking,  $\alpha$ -glucosidase inhibition, and antioxidant activity studies of novel benzimidazole derivatives. *Medicinal Chemistry Research* **29** (2020), 1846-1866.
3. **Rajiv Mall\***, Amanjot Singh, Gagandeep Singh, Varinder Singh, Raman K. Verma, Indolyl Linked *Meta*-Substituted Benzylidenes as Novel Ligands: Synthesis, Biological Evaluation, and Molecular Docking Studies. *Journal of Heterocyclic Chemistry* **56** (5) (2019), 1542-1552.
4. Gagandeep Singh, Amanjot Singh, Raman K. Verma, **Rajiv Mall\***, Uzma Azeem Synthesis, biological evaluation and molecular docking studies of novel benzimidazole derivatives. *Computational Biology and Chemistry* **72** (2018), 45-52.
5. Jeewanjot Kaur · Amanjot Singh · Gagandeep Singh · Raman K. Verma · **Rajiv Mall\***. Novel indolyl linked *para*-substituted benzylidene based phenyl containing thiazolidinediones and their analogs as  $\alpha$ -glucosidase inhibitors: synthesis, *in vitro* and molecular docking studies. *Medicinal Chemistry Research* **27** (3) (2018), 903-914.
6. Varinder Singh, Amanjot Singh, Gagandeep Singh, Raman K. Verma and **Rajiv Mall\***. Novel benzoxazole derivatives featuring rhodanine and analogs as antihyperglycemic agents: synthesis, molecular docking and biological studies. *Medicinal Chemistry Research* **27** (3) (2018), 735-743.
7. Amanjot Singh, Raman K Verma, Anurag Kuhad and **Rajiv Mall\***. Novel indole-2-carboxylic acid linked 3-phenyl-2-alkoxy propanoic acids: Synthesis, molecular docking and *in vivo* antidiabetic studies. *Med. Chem. Res.* **26** (2017), 745-759.
8. Raman K Verma, **Rajiv Mall** and Amanjot Singh. Indolyl Linked *meta*-Substituted Benzylidene Based Novel PPAR Ligands: Synthetic and Docking Studies. *Med. Chem. Res.* **24** (2015), 1396-1407.
9. Raman K Verma, **Rajiv Mall**, Prithwish Ghosh and Vijay Kumar. Design and Synthesis of Benzimidazole Linked *meta*-Substituted Benzylidenes/ Benzyls as Biologically Significant New Chemical Entities. *Synth. Commun.* **43** (2013), 1882-1895.
10. Amanjot Singh, Gagandeep Singh, Raman K. Verma and **Rajiv Mall\***. METHYL CHROMONYL LINKED BENZYLIDENES AS NOVEL PARTIAL PPAR $\gamma$  AGONISTS: SYNTHESIS, CHARACTERIZATION AND DOCKING STUDIES. *International Journal of Advanced Research* **4** (2016), 574-582.
11. Gagandeep Singh, Amanjot Singh, Raman K. Verma and **Rajiv Mall\***. SYNTHESIS, CHARACTERIZATION AND DOCKING STUDIES OF CHROMONYL LINKED *meta*-SUBSTITUTED BENZYLIDENES AS BIOLOGICALLY SIGNIFICANT PARTIAL PPAR $\gamma$  AGONISTS. *International Journal of Current Research* **8** (2016), 32506-32511.
12. Gagandeep Singh, Amanjot Singh, Varinder Singh, Raman K. Verma and **Rajiv Mall\*** NOVEL BENZIMIDAZOLE DERIVATIVES AS PARTIAL PPAR $\gamma$  AGONISTS: SYNTHESIS, CHARACTERIZATION AND DOCKING STUDIES *WORLD JOURNAL OF PHARMACY AND PHARMACEUTICAL SCIENCES* **5** (2016), 1080-1091.

#### **BOOK (01)**

1. Nidhi Gupta and **Rajiv Mall**, APPLIED CHEMISTRY, **KALYANI PUBLISHER** (ISBN: 978-93-272-8615-1)

#### **BOOK CHAPTER (01)**

1. Muthuraman A, Kaur P, Boparai PS, Kaur M, **Mall R**. Mitochondrial dysfunction: A key player in the pathogenesis of neurodegeneration associated neuropathic pain syndrome. V. Vijaya Padma Eds.

Mitochondrial Diseases and Therapy, SM Group Open Access eBooks Publishers, TX 75039, USA, 2015. (MDT-15-03). [www.smgebooks.com](http://www.smgebooks.com).

#### **INTERNATIONAL CONFERENCES (PAPER PRESENTATION) (04)**

1. INTERNATIONAL CONFERENCE ON INNOVATIONS IN CHEMISTRY FOR SUSTAINABLE DEVELOPMENT (ICSD-2011) Organized by dept. of Chemistry, Panjab University Chandigarh on 01-03 December 2011.
2. CHEMICAL CONSTELLATION CHEMINAR-2012  
Theme: Chemistry for sustainable Development and Innovations (An International Conference) Organized by dept. of Chemistry, Dr. B R Ambedkar National Institute of Technology Jalandhar.
3. UGC-UKIERI INTERNATIONAL SEMINAR "NANOTHERAPEUTICS & CRYSTAL ENGINEERING: CHALLENGES AND FUTURE PERSPECTIVES" Organized by Dept. of Pharmac. Sci. and Drug Research Chemistry, Punjabi University Patiala.
4. 13<sup>th</sup> in series and 1<sup>st</sup> International Conference on "Recent Advances in Chemistry (CRAC-2023)" held at Department of Chemistry, Punjabi University, Patiala-147002 (February 23-24, 2023).

#### **NATIONAL CONFERENCES (PAPER PRESENTATION) (13)**

1. National Symposium on Emerging Trends in Chemistry (NSETC-10) at Department of Chemistry, Punjabi University, Patiala-147002 (February 15-16, 2010).
2. National Seminar on Recent Advances in Chemistry and their Impact on Environment (NSRACE-11) at Department of Chemistry, Punjabi University, Patiala-147002 (February 15-16, 2011).
3. RACENT ADVANCES IN CHEMICAL AND ENVIRONMENT SCIENCES at Department of Chemistry, MULTANI MAL MODI COLLEGE, PATIALA-147002 (February 28- March 1, 2011).
4. Impact of Science and Technology on societal Development at SHAHEED UDHAM SINGH Group of institution, TANGARI, Maholi : Punjab (November 3-5, 2011).
5. National Seminar on Chemistry: An Inter Disciplinary Science (NSCIDS-2012) at Department of Chemistry, Punjabi University, Patiala-147002 (February 15-16, 2012).
6. RACENT ADVANCES IN CHEMICAL AND ENVIRONMENT SCIENCES at Department of Chemistry, MULTANI MAL MODI COLLEGE, PATIALA-147002 (March 03, 2012).
7. NEW FRONTIERS IN CHEMISTRY Department of Chemistry, Punjabi University, Patiala-147002 (February 15-16, 2013).
8. National seminar on New Paradigm in Chemical Sciences-2014 at Department of Chemistry, Punjabi University, Patiala-147002 (February 13, 2014).
9. National Seminar on Chemistry for a Better Tomorrow: Current Trends and Challenges March 08, 2014 held at Mata Gujri College, Sri Fatehgarh Sahib.
10. UGC SPONSORED NATIONAL SEMINAR EMERGING PARADIGMS IN PHARMACEUTICAL SCIENCES 26 MARCH, 2014 Organized by Dept. of Pharmac. Sci. and Drug Research Chemistry, Punjabi University Patiala.
11. NATIONAL CONFERENCE NFCS-01 NOV. 15, 2014 held at PG DEPARTMENT OF CHEMISTRY KHALSA COLLEGE PATIALA.
12. NEW PARADIGM IN CHEMICAL SCIENCES: SYNTHETIC AND ANALYTICAL PERSPECTIVES -2016 held at Department of Chemistry, Punjabi University, Patiala-147002 (February 04-05, 2016).

13. UGC Sponsored 9<sup>th</sup> National Conference on Recent Advances in Chemical, Biological and Environmental Sciences at MULTANI MAL MODI COLLEGE, PATIALA-147002 (February 09-10, 2018).

14. 10<sup>th</sup> National Conference on "CHEMICAL AND ENVIRONMENTAL SCIENCES: INNOVATIONS AND ADVANCES- 2018 (CES: IA-2018)" held at Department of Chemistry, Punjabi University, Patiala-147002 (February 15-16, 2018).

#### **WORKSHOP ATTENDED (03)**

1. Practical Aspects on the Importance of Patents in Research (PAIPR-2013) held on February 12, 2013 at Punjabi University Patiala.

2. 7 Days National Workshop on "FINANCIAL, LEGAL AND SOCIAL AWARENESS AMONG TEACHERS" held on January 09, 2018 to January 15, 2018 at Women's studies centre, Punjabi University Patiala.

3. 7 Days short term course on "Smart Materials and Nanotechnology" held on December 02, 2019 to December 06, 2019 (one week) at Basic and Applied Sciences Department, Punjabi University Patiala.

#### **SESSION CHAIR (03)**

1. New Paradigm in Chemical Sciences: Synthetic and Analytical Perspective- 2017 (NPICS: SAP-2017) held at Department of Chemistry, Punjabi University, Patiala-147002 (February 09-10, 2017).

2. 10<sup>th</sup> National Conference on "CHEMICAL AND ENVIRONMENTAL SCIENCES: INNOVATIONS AND ADVANCES- 2018 (CES: IA-2018)" held at Department of Chemistry, Punjabi University, Patiala-147002 (February 15-16, 2018).

3. 13<sup>th</sup> in series and 1<sup>st</sup> International Conference on "Recent Advances in Chemistry (CRAC-2023)" held at Department of Chemistry, Punjabi University, Patiala-147002 (February 23-24, 2023).

#### **ORAL PRESENTATIONS AT NATIONAL CONFERENCES (02)**

1. 10<sup>th</sup> National Conference on "CHEMICAL AND ENVIRONMENTAL SCIENCES: INNOVATIONS AND ADVANCES- 2018 (CES: IA-2018)" held at Department of Chemistry, Punjabi University, Patiala-147002 (February 15-16, 2018)

2. National seminar on "Responsible Research And Innovations In Science & Technology" (RRIST-2017) held at P.G. Department of Chemistry, Guru Nanak College, Budhlada, Distt. Mansa (March 18, 2017).

**Date: 20/09/2023**



**(Signature of the Teacher)**