

**Name** : Dr. Rachana Sharma

**Designation** : Assistant Professor

**Department** : Biochemistry

**Qualification** : M.Sc., Ph.D., CSIR-JRF-NET

**Experience** : Teaching: 3 Years 7 months;

Research 1 post doc (DBT-RA) IIT Madras



**Area of Specialization(s)** : Snake venom pharmacology, Oxidative stress, Cancer biology

**Email (Official ID)** : rachanasharma@drngpasc.ac.in

### Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D	Biochemistry	University of Mysore	2016
M.Sc.,	Biochemistry	University of Mysore	2008
B.Sc..	Chemistry, Botany, Zoology	Mount Carmel college, Affiliated to Bangalore University	2005

### Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
CSIR-JRF NET	Life sciences	Qualified CSIR-JRF-NET joint exam (Junior Research Fellow + National Eligibility Test for lectureship) in 2010, All India Rank being 83.	2010
DBT-RA awardee		Departemnt of Biotechnology, GOI (Government of India)	2018

GATE Qualified	Life sciences	Qualified <b>GATE</b> 2010 & GATE 2011 exams	2010 2011
3 Credit course	Biodiversity	Department of botany, Mount Carmel College, Bangalore	2008
4 Credit course	Biomonitoring	Department of Botany & Environmental Science, Mount Carmel College, Bangalore	2007

### Work Experience

1. Amity University Mumbai, worked as Assistant professor in ASAS (Amity School of Applied Sciences) from February 2019 to September 2021.
2. Indian Institute of Technology- Madras (IIT-M), worked as DBT-Research Associate in Biotechnology department, from January 2018 to December 2018.
3. Karpagam Academy of Higher Studies, Coimbatore; worked as Assistant professor in Biotechnology department, from July 2016 to March 2017.

### Research Publications (Indexed)

#### International

- 1) **Rachana D Sharma**, Katkar GD, Sundaram MS, Paul M, Naveen Kumar SK, Swethakumar, Girish KS, Kemparaju, K (2015). Oxidative stress-induced methemoglobinemia is the silent killer during snakebite: a novel and strategic neutralization by melatonin. Journal of Pineal Research 59, 240-254 (IF: 15.22).
- 2) Katkar GD, Sundaram MS, Naveenkumar SK, **Rachana D Sharma**, Paul M, Vishalakshi GJ, Devaraja S, Girish KS and Kemparaju K (2016). NETosis and lack of DNase activity are key factors in Echiscarinatus venom-induced tissue destruction. Nature Communication 19, 11361 (IF: 14.9).
- 3) Katkar GD, **Rachana D Sharma**, Vishalakshi GJ, Naveenkumar SK, Madhur

G, Thushara RM, Narender T, Girish KS, Kemparaju K (2015). Lupeol derivative mitigates Echis carinatus venom-induced tissue destruction by neutralizing venom toxins and protecting collagen and angiogenic receptors on inflammatory cells. Biochim Biophys Acta, 1850, 2393-2409. (IF: 3.8)

4) **Rachana D Sharma**, Gajanan D. Katkar, Mahalingam S. Sundaram, Basavarajaiah Swethakumar, Girish KS, Kemparaju K (2017). Melatonin inhibits snake venom and antivenom induced oxidative stress and augments treatment efficacy. ActaTropica 169, 14-25 (IF: 3.11).

5) Katkar GD, Sundaram MS, **Rachana D Sharma**, Santhosh MS, Sunitha K, Rangappa KS, Girish KS, Kemparaju K (2014). Melatonin alleviates Echis carinatus venom-induced toxicities by modulating inflammatory mediators and oxidative stress. Journal of Pineal Research, 56 (3), 295-312 (IF: 15.22).

## **Conference**

### **International**

1. **International symposium on Chemical Biology-Drug Discovery.** University Of Mysore, January 9-10, 2014.

### **National**

1. **National Conference on Snakevenom management.** 2<sup>nd</sup> annual conference of Toxicological society of India. University of Mysore. December 10-12, 2012.
2. **One day Symposium on Cell structure and Function.** . University Of Mysore, March 28, 2013
3. **One day National seminar on Chemistry and chemical Biology.** University Of Mysore, May 26, 2015
4. **One day UGC sponsored National seminar on Frontier Innovations in Biochemistry and its interdisciplinary relevance.** Organized by Mahajana college, afflied to University of Mysore. 31<sup>st</sup> march 2015.
5. **National Conference on Cancer Biology.** University of Mysore. November 29-30, 2013.

### **Workshop**

1. **Borderless Biology: From Basics to Business.** University of Mysore. December 13-14, 2012.
2. **Two days brain-storming workshop on Successful facing of competitive examinations.** University of Mysore. February 20-21, 2014.
3. **One day national workshop on Innovation and Intellectual property rights.** Amity University Maharashtra. October 11, 2019

#### **Extra-curricular activities:**

1. Mentor for Amity University campus students selected for esteemed **United Nation Millennium Fellowship** program 2020 and year 2021.
2. Conducted workshops and webinars alongside of Millennium fellows of Amity University Mumbai

#### **Invited talks:**

1. Webinar delivered on the topic “There is no Planet-B” organized by Zoology association of Mount Carmel college, Bangalore, held on 13<sup>th</sup> February 2021.
2. Webinar delivered on the topic “There is no Planet-B” organized by Millennium fellows of Amity University Mumbai, September 20<sup>th</sup> 2020.