

# Jatinder Kaur, M.Sc., Ph.D.

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## Present position

- Associate Professor

## Contact Details

☎ 020-67656194

✉ jatinder.kaur@fergusson.edu

## Work Experience

- Teaching: 18 years
- Research: 12 years

## Course(s) Taught

- Organic Chemistry
- Analytical Chemistry
- Inorganic Chemistry
- Nuclear Chemistry
- Industrial Chemistry

## Field of Specialization/Areas of Interests

- Organic Chemistry
- Coordination Chemistry

## Education

- **Ph.D. (Chemistry):** 2015 to 2020  
**Title of the Thesis:** “Synthesis, characterization and DNA cleaving activity of Ruthenium and Copper complexes with aroylhydrazones”  
**University:** Savitribai Phule Pune University Name of University  
**Year of Award:** 2020
- **Master of Science (Organic Chemistry):** 2004  
**University/Institute:** Fergusson College, Savitribai Phule Pune University, Pune
- **Bachelor of Science (Chemistry):** 2002  
**University/Institute:** Nowrosjee Wadia College, Savitribai Phule Pune University, Pune

## Member of College Committees/ Professional Bodies and Others

### College Level

- College Development Committee
- Examination Committee
- Student Development Board
- Internal Committee
- NAAC, 4<sup>th</sup> Cycle, Criteria I

### Others

BOS, Chemistry, Fergusson College

## Employment History

**Organization :** Fergusson College

**Role :** Teacher

**Duration :** 2004 till date

## Research Projects

Title of the Project	Name of Funding Agency	Amount (Rs)	Duration (Year) (From To)	Type (Minor/Major)	Outcome
Nickel based bimetallic nano particles and their nano composites for C-C coupling	UGC-WRO	85000/-	2013-2015	Minor	Nanoparticles and their nanocomposite synthesized and investigated for Suzuki coupling
Synthesis of Aroyl Hydrazones and their Metal complexes and Evaluation of their anticancer activities.	BCUD	21000/-	2015-2017	Minor	Hydrazones synthesized and biological activity investigated Paper presentation in conference

## Research Publications in National and International Journals

1. **Jatinder Kaur**, Madhura Damle, Hemant Mande, Prasanna Ghalsasi, Rajendra Kondedeshmukh, Parbati Bandyopadhyay, Rajeev Chikate. Ruthenium (II) complexes of aroylhydrazones: structural, electrochemical and electrostatic interactions with DNA. Journal of Coordination Chemistry 70(10), **2017**, 1667-1682. <https://doi.org/10.1080/00958972.2017.1307344>
2. **Jatinder Kaur**, Tanmayee Chikate, Parbati Bandyopadhyay, Soumya Basu, Rajeev Chikate. Cu (II) complexes of hydrazones-NSAID conjugates: synthesis, characterization and anticancer activity. Journal of Coordination Chemistry (Taylor Francis), 73 (23) **2020**, 3186-3202. <https://doi.org/10.1080/00958972.2020.1843160>
3. **Jatinder Kaur**, Parbati Sengupta, Samrat Mukhopadhyay. Critical Review of Bioadsorption on Modified Cellulose and Removal of Divalent Heavy Metals (Cd, Pb, and Cu) Industrial & Engineering Chemistry Research 61(5), **2022**, 1921-1954. <https://doi.org/10.1021/acs.iecr.1c04583>

### Participation in Conferences/Symposia/Workshop:

1. Poster Presentation- “Mixed Ligand Ruthenium (II) complexes of aroylhydrazones, electrochemical and electrostatic interactions with DNA”, International Conference at Abeda Inamdar College, Pune, India, January 2016.
2. Poster Presentation – “Synthesis and biological evaluation of hydrazone ligands and Ru (II) complexes as DNA cleaving agents” at 18<sup>th</sup> National Symposium at NIST Chandigarh, India, February 2016.
3. Invited to participate in Resource Generation Camp for Chemistry, Olympiad HSC, HBCSE-TIFR, Mumbai, India, August 2017.

### Events Organized/Coordinated:

Sr. No	Name of the Event	Name of organizing Institute/ College/ University	Nature of contribution	Dates
1.	Lab Management, Safety & Waste Treatment Workshop Under UGC Stride Component-I	Fergusson College (Autonomous), Pune	Organizer	8 <sup>th</sup> -13 <sup>th</sup> August 2022
2.	Hands on training programme” under DBT Star College Scheme	Fergusson College (Autonomous), Pune	Organizer	09 <sup>th</sup> -13 <sup>th</sup> March 2020
3.	Exhibition cum Poster Competition - To celebrate International Year of Periodic Table-IYPT 2019	Fergusson College (Autonomous), Pune	Organizer	21 <sup>st</sup> -22 <sup>nd</sup> August 2019
4.	Exhibition cum Poster Competition- Chemicon II Spectroscopion	Fergusson College (Autonomous), Pune	Organizer	22 <sup>nd</sup> -23 <sup>rd</sup> December 2016
5.	Exhibition cum Poster Competition-Colors in Chemistry	Fergusson College (Autonomous), Pune	Organizer	16 <sup>th</sup> -17 <sup>th</sup> October 2015