

**Report  
of  
Chemistry Department  
(2020-21)**



**Mehr Chand Mahajan  
DAV College for Women  
Sector-36(Chandigarh)**

[www.mcmdavcw-chd.edu](http://www.mcmdavcw-chd.edu)

**Department Name:** P.G. Department of Chemistry.

**Session:** 2020-21

**Names of Programmes/Courses/ offered:**

- B.Sc. (Medical)
- B.Sc. (Non-Medical)
- B.Sc. (Microbial Food Technology)
- M.Sc. (Chemistry)

**Faculty Publications /Awards/Achievements/Activities:**

**Faculty Publications:**

- **Dr Shefali Dhiman**, Oriental Journal of Chemistry, Biocatalytic oxidation of sulphides to sulphones, 2, 2021, Web of Science, International.
- **Dr Sagarika Dev**, Chemistry Select, Understanding of the kinetic stability of cis-isomer of Azobenzenes through kinetic and computational studies, 2020, 5, Scopus, International.
- **Dr. Madhuri Tanaji Patil**, **Advance Synthesis & Catalysis**, Post-Pictet-Spengler Cyclization (PPSC): A Strategy to Synthesize, Polycyclic  $\beta$ -Carboline-Derived Natural Products and Biologically Active N-Heterocycles, 8, 2020, **International**.
- **Dr. Madhuri Tanaji Patil**, Crystal Growth & Design, Access to Enantiomeric Organic Compounds with Potential for Synthesis via Racemic Conglomerates: Inositol Derivatives as a Case in Point, 6, 2021, **International**, Peer Reviewed.
- **Dr. Qudrat Hundal**, New Horizons A Multidisciplinary Research Journal, Electronic Waste Awareness: A Survey in Chandigarh Tricity, 8, 2020, India, Peer Reviewed, UGC Care Listed, National.
- **Dr. Rishu**, Luminescence, Fluorescence modulation of naphthalene containing salicyl hydrazide-based receptor through aggregation-induced emission enhancement approach: Dual detection of lanthanum and cyanide ions in semi-aqueous medium, 6, 2021, International, Peer Reviewed.
- **Dr. Rishu**, New Horizons A Multidisciplinary Research Journal, Electronic Waste Awareness: A Survey in Chandigarh Tricity, 8, 2020, India, Peer Reviewed, UGC Care Listed, National.
- **Dr. Aanchal Batra**, European Journal of Organic Chemistry, Peer Reviewed, International, 2020, as First Author, Recent Developments in Transition Metal-free Cross-Dehydrogenative Coupling Reactions for C-C bond formation.
- **Dr. Aanchal Batra**, Synthesis, Transition Metal-free Strategies for the synthesis of C-1 aryl substituted Tetrahydroisoquinolines, 1, 2021, Scopus, International, Peer Reviewed.
- **Dr. Aanchal Batra**, Asian Journal of Organic Chemistry, Latest Advancements in Transition-metal-free Carbon-Heteroatom Bond Formation Reactions via Cross-Dehydrogenative Coupling, 3, 2021, Scopus, International, Peer Reviewed.

## Departmental Activities:

- A webinar, “The Third Alphabets of Life and Synthetic Vaccines” on 31/7/2020 by Prof. S. Eswaran, Visiting Professor, Regional Centre for Biotechnology, Faridabad.

**Co-ordinators:** Dr. Shefali Dhiman, Dr. Sagarika Dev, Dr. Qudrat Hundal, Dr. Madhuri Tanaji Patil, Dr. Rishu, Dr. Nisha Dawra, Dr. Aanchal Batra.

- **National Level Online Poster Making Competition on Chemical Squandering and Management on 23<sup>rd</sup> September 2020.**

- **Co-ordinators:** Dr. Shefali Dhiman, Dr. Sagarika Dev, Dr. Qudrat Hundal, Dr. Madhuri Tanaji Patil, Dr. Rishu, Dr. Nisha Dawra, Dr. Aanchal Batra.

- **National Online Power Point Presentation Competition on Chemistry of Cleaning Agents on 30-31<sup>st</sup> March 2021.**

- **Co-ordinators:** Dr. Shefali Dhiman, Dr. Sagarika Dev, Dr. Qudrat Hundal, Dr. Madhuri Tanaji Patil, Dr. Rishu, Dr. Nisha Dawra, Dr. Aanchal Batra, Dr. Yeshbinder, Dr. Manjot, Dr. Rohini

- A webinar on “Save fuel from evaporation, ensure that fuel cap is closed tightly” on 7/6/2021.

- **Co-ordinators:** Dr. Sagarika Dev

- A webinar on “Innovations and IPRs in Chemical Industry” by Mr. Manish Sharma, Senior Manager, Winsome IP Solutions Ltd. on 10/5/2021.

- **Co-ordinators:** Dr. Rishu, Dr. Nisha Dawra

- **Online power point presentations by students of M. Sc Chemistry, Ms. Aanchal Bhalla, Ms. Dipika, Ms. Abhilasha, Ms. Aastha** on occasion of **Online Annual Alumni Meet Sciences** on 23/12/2020.

- **Co-ordinators:** Dr. Nisha Dawra, Dr. Madhuri

## Activities of Faculties:

### ➤ **Dr. Shefali Dhiman**

- Attended a Webinar entitled "Molecular Visualisation Series on Learning Chemistry through ODYSSEY & Spartan Software" Organised by Department of Chemistry, Janta Vedic College, Baraut in collaboration with Wavefunction Inc., USA and Neotel System and Services Wavefunction Inc., USA, 1 day, 9/5/2020.

- Organised and attended a webinar, “The Third Alphabets of Life and Synthetic Vaccines” by Prof. S. Eswaran, Visiting Professor, Regional Centre for Biotechnology, Faridabad, organised by Mehr Chand Mahajan DAV College for Women, Sector-36 Chandigarh, 1 day, on 31/7/2020.

- Attended a UGC-Sponsored Online Refresher Course in Teacher Education: Policies, Procedures and Perceptions (Interdisciplinary), 14 days, 20.02.2021-05.03.2021

- Attended an Online FDP “5-Day Faculty Development Program 'e-Content: Designing and deployment using G Suite” Organised by the Department of Computer Science and Applications, Mehr Chand Mahajan DAV College for Women, Chandigarh, 5 days, 20-24/7/2020

➤ **Dr. Sagarika Dev**

- Organised and attended a webinar, “The Third Alphabets of Life and Synthetic Vaccines” by Prof. S. Eswaran, Visiting Professor, Regional Centre for Biotechnology, Faridabad, organised by Mehr Chand Mahajan DAV College for Women, Sector-36 Chandigarh, 1 day, on 31/7/2020.
- Attended an Online FDP “5-Day Faculty Development Program 'e-Content: Designing and deployment using G Suite” Organised by the Department of Computer Science and Applications, Mehr Chand Mahajan DAV College for Women, Chandigarh, 5 days, 20-24/7/2020

➤ **Dr. Qudrat Hundal**

- Organised and attended a webinar, “The Third Alphabets of Life and Synthetic Vaccines” by Prof. S. Eswaran, Visiting Professor, Regional Centre for Biotechnology, Faridabad, organised by Mehr Chand Mahajan DAV College for Women, Sector-36 Chandigarh, 1 day, on 31/7/2020.
- Attended an Online FDP “5-Day Faculty Development Program 'e-Content: Designing and deployment using G Suite” Organised by the Department of Computer Science and Applications, Mehr Chand Mahajan DAV College for Women, Chandigarh, 5 days, 20-24/7/2020.
- Attended a RUSA Sponsored online Workshop on “Open Educational Resources” 1 day, 22/1/2021.
- Attended an Online Interactive Session, “Bioenergy from Food Waste” Organised by Mehr Chand Mahajan DAV College for Women, Chandigarh, 1day, 6/2/2021.
- Attended a RUSA Sponsored Online Workshop cum Awareness Programme, “The Art of Official Communication: How NOT to Communicate, Organised by Young Communicators Club of Mehr Chand Mahajan DAV College for Women, Chandigarh, 1 day, 18/2/2021.
- Attended a RUSA Sponsored Online Workshop on “Online Assessment Tools: A Step Forward” organised by RUSA, 1 day, 22/3/2021.
- Attended a Workshop cum Awareness Programme “Aacharan” organised to celebrate Happiness at work by Character Building Committee of Mehr Chand Mahajan DAV College for Women, Chandigarh, 1 day, 22.3.2021.
- Attended online refresher course in Teacher Education: Policies, perceptions and procedures from 20.2.2021 to 5.3.2021 sponsored by UGC Human Resource Development Centre, Panjab University Chandigarh.

➤ **Dr. Madhuri Tanaji Patil**

- Organised and attended a webinar, “The Third Alphabets of Life and Synthetic Vaccines” by Prof. S. Eswaran, Visiting Professor, Regional Centre for Biotechnology, Faridabad, organised by Mehr Chand Mahajan DAV College for Women, Sector-36 Chandigarh, 1 day, on 31/7/2020.
- Attended an Online FDP “5-Day Faculty Development Program 'e-Content: Designing and deployment using G Suite” Organised by the Department of Computer Science and Applications, Mehr Chand Mahajan DAV College for Women, Chandigarh, 5 days, 20-24/7/2020.

➤ **Dr. Rishu**

- Organised and attended a webinar, “The Third Alphabets of Life and Synthetic Vaccines” by Prof. S. Eswaran, Visiting Professor, Regional Centre for Biotechnology, Faridabad, organised by Mehr Chand Mahajan DAV College for Women, Sector-36 Chandigarh, 1 day, on 31/7/2020.
- Attended an Online FDP “5-Day Faculty Development Program 'e-Content: Designing and deployment using G Suite” Organised by the Department of Computer Science and Applications, Mehr Chand Mahajan DAV College for Women, Chandigarh, 5 days, 20-24/7/2020
- Attended a Workshop cum Awareness Programme “Aacharan” organised to celebrate Happiness at work by Character Building Committee of Mehr Chand Mahajan DAV College for Women, Chandigarh, 1 day, 22/3/2021.
- Organised and attended a Webinar, Innovations and IPRs in Chemical Industry, organised by Institution’s Innovation Council 3.0, of Mehr Chand Mahajan DAV College for Women, Chandigarh, 1 day, 10/5/2021.

➤ **Dr. Aanchal Batra**

- Organised and attended a webinar, “The Third Alphabets of Life and Synthetic Vaccines” by Prof. S. Eswaran, Visiting Professor, Regional Centre for Biotechnology, Faridabad, organised by Mehr Chand Mahajan DAV College for Women, Sector-36 Chandigarh, 1 day, on 31/7/2020.
- Attended an Online FDP “5-Day Faculty Development Program 'e-Content: Designing and deployment using G Suite” Organised by the Department of Computer Science and Applications, Mehr Chand Mahajan DAV College for Women, Chandigarh, 5 days, 20-24/7/2020
- Attended a Workshop cum Awareness Programme “Aacharan” organised to celebrate Happiness at work by Character Building Committee of Mehr Chand Mahajan DAV College for Women, Chandigarh, 1 day, 22/3/2021.
- Attended a RUSA sponsored online Workshop cum awareness programme on Character Building through education with special reference to National Education Policy 2020 on 25/2/2021, 1 day.
- Attended a RUSA Sponsored Online Workshop on “Online Assessment Tools: A Step Forward” organised by RUSA, 1 day, 22/3/2021.

➤ **Dr. Nisha Dawra**

- Organised and attended a webinar, “The Third Alphabets of Life and Synthetic Vaccines” by Prof. S. Eswaran, Visiting Professor, Regional Centre for Biotechnology, Fairdabad, organised by Mehr Chand Mahajan DAV College for Women, Sector-36 Chandigarh, 1 day, on 31/7/2020.
- Attended an Online FDP “5-Day Faculty Development Program 'e-Content: Designing and deployment using G Suite” Organised by the Department of Computer Science and Applications, Mehr Chand Mahajan DAV College for Women, Chandigarh, 5 days, 20-24/7/2020

- Organised and attended a Webinar, Innovations and IPRs in Chemical Industry, Organised by Institution's Innovation Council 3.0, of Mehr Chand Mahajan DAV College for Women, Chandigarh, 1 day, 10/5/2021.
- Attended a RUSA Sponsored Online Workshop cum Awareness Programme, "The Art of Official Communication: How NOT to Communicate, Organised by Young Communicators Club of Mehr Chand Mahajan DAV College for Women, Chandigarh, 1 day, 18/2/2021.
- Attended a RUSA Sponsored Online Workshop on "Online Assessment Tools: A Step Forward" organised by RUSA, 1 day, 22/3/2021.
- Attended an Online Workshop cum Awareness Programme "Aacharan" organised to celebrate Happiness at work by Character Building Committee of Mehr Chand Mahajan DAV College for Women, Chandigarh, 1 day, 22.3.2021.
- Attended an Online workshop on "Food for mind, body and soul" organised by Character Building Committee of Mehr Chand Mahajan DAV College for Women, Chandigarh, 1 day, 22/4/2021.
- Attended a RUSA Sponsored Online Workshop on "National Education Policy" 1 day, 25/2/2021.
- Attended a RUSA Sponsored online Workshop on "Open Educational Resources" 1 day, 22/1/2021.

### **Students Publications /Awards/Achievements/Activities:**

#### **Student Research Activities:**

S. No	Name of student	Name of project	Name of supervisor	Dates
1.	Harleen Kaur, M. Sc Chemistry	Comparative study of production of biodiesel from natural sources	Dr. Preeti Zade, CSIR NEIST Jorhat, Assam	June 2020- August 2020
2.	Simran Khosla, M. Sc Chemistry	Synthesis of silver nanoparticles by aloe vera extract and their study of anti microbial properties using species Staphylococcus Aureus coil	Dr. K parthipan, CSIR NET Jorhat	June 2020- August 2020
3.	Shagun, M. Sc Chemistry	Energy Materials: Fundamental to Device Fabrication	CSIR- KARAIKUDI	21/6/21- 25/6/21

## **Student Awards:**

- Malika Kamra, M.Sc Chemistry, got Third prize worth Rs. 1000 in “National Online Power Point Presentation Competition on Chemistry of Cleaning Agents” held on 30-31/3/2021.
- Arushi Dhiman, B. Sc I, got consolation prize worth Rs. 500 in “National Level Online Poster Making Competition on Chemical Squandering and Management” held on 23/9/2020.

## **Student Achievements:**

- Parul, B.Sc III, Med, qualified JAM 2021, AIR 1018,
- Pratibha Bhatti (M.Sc. Chemistry), qualified GATE 2021, AIR-5579.
- Pratibha Bhatti (M.Sc. Chemistry), qualified NIPER JEE, 2021.
- Samiksha Sharma, (M.Sc. Chemistry) got 2<sup>nd</sup> rank in Panjab University Ph. D entrance exam 2020.
- Divya Malhan, (M.Sc. Chemistry) got 7<sup>th</sup> rank in Panjab University Ph. D entrance exam 2020.
- Divya Malhan, (M.Sc. Chemistry), GATE 2021, AIR-1907.