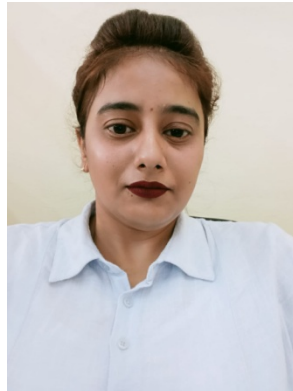


PROFORMA FOR FACULTY PROFILE



1. Name of the Faculty : Dr. Shehla

2. Contact Details: 9779556865 shehla786punjab@yahoo.com

3. Qualifications: PhD

4. Teaching Experience:

Government Mohindra College Patiala	Assistant Professor	14/11/2022	till now
Chandigarh University	Assistant Professor	22/10/2021	13/11/2022
Rayat Bahra University	Assistant Professor	12/02/21	19/10/2021
Punjabi University Patiala	Research Scholar	2015-2019	

5. Research Experience:

- MA/MSc Dissertations/MPhil Dissertation/ PhD Dissertation
Supervised: M.Sc. students guided to publish papers
- Areas of Specialization : Experimental Atomic Physics



6. Publications

- **Papers in international Journals**

Physical parameters for proton induced K-, L-, and M-shell ionization processes, **Shehla**, Sanjiv Puri, **Radiation Physics and Chemistry** 127 (2016) 194-203.

Measurements of the line resolved M-shell X-ray production cross sections for ^{79}Au , ^{82}Pb and ^{83}Bi by 100 keV/u proton, C, N, O ions, **Shehla**, Ajay Kumar, C. Bagdia, Anil Kumar, D. Misra, Sanjiv Puri and L.C. Tribedi, **Nuclear Instruments and Methods in Physics Research Section B** 399 (2017) 74–82.

Low-energy proton induced M X-ray production cross sections for ^{70}Yb , ^{81}Tl and ^{82}Pb , **Shehla**, A. Mandal, Ajay Kumar, M. Roy Chowdhury, Sanjiv Puri, L.C. Tribedi, **Nuclear Instruments and Methods in Physics Research Section B** 426 (2018) 34-40.

M X-ray production cross-sections in ^{79}Au and ^{83}Bi induced by 50-300 keV protons, Anuvab Mandal, **Shehla**, Madhusree Roy Chowdhury, Ajay Kumar, Sanjiv Puri, and Lokesh C. Tribedi, **Eur. Phys. J. D** 72 (2018)120.

Low energy Carbon ion induced M X-ray relative intensities for ^{70}Yb , ^{82}Pb and ^{83}Bi , **Shehla**, Ajay Kumar, Anil Kumar, Deepak Kumar, Sanjiv Puri, **Nuclear Instruments and Methods in Physics Research Section B** 458 (2019) 130-135.

A Review, Tabulation and Parameterisation of M-series X-ray Production Cross sections for Proton and Helium Ion Impact, Balwinder Singh, **Shehla**, and Sanjiv Puri, **J. Phys. Chem. Ref. Data**.50, 043106 (2021).

Effect of wave function on the proton induced L XRP cross sections for



^{62}Sm and ^{74}W , **Shehla**, Rajnish Kaur, Anil Kumar and Sanjiv Puri, **AIP Conf. Proc.** 1675, 030091 (2015).

X-ray production cross sections at incident photon energies across the M_i ($i=1-5$) edges of ^{90}Th , Rajnish Kaur, **Shehla**, Anil Kumar and Sanjiv Puri, **AIP Conf. Proc.** 1675, 030090 (2015).

Parameterization of Proton Induced M_i ($i=1-5$) sub-shell X-ray Production Cross Sections, **Shehla**, Rajnish Kaur, Anil Kumar and Sanjiv Puri, **International Journal of Pure and Applied Physics** 13 (2017) 205-208.

A review, tabulation of the Antimicrobial Effect of Silver Nanoparticles, **Shehla** 2022 **IOP Conf. Ser.: Mater. Sci. Eng.** 1248 012110.

To investigate the universal behavior of 4He^{+q} ion induced M X-ray production cross sections, Balwinder Singh, Shehla and Sanjiv Puri, **AIP Conf. Proc.** 2352, 050003-1–050003-4

b) Conferences Proceedings

Low velocity O^{6+} ion induced M_j sub-shell X-ray production cross sections for ^{79}Au , ^{82}Pb and ^{83}Bi . **Shehla**, Ajay Tomar, Anil Kumar, Chandan Bagdia, Lokesh C Tribedi and Sanjiv Puri. **21st National Conference on Atomic and Molecular Physics**, 3-6 January 2017, eBook of Abstracts, PS-1-41, Page no. 97.

Cross sections for production of the M_j ($j=1-5$) subshell X-rays of ^{79}Au , ^{82}Pb and ^{83}Bi produced by 100 keV proton impact. **Shehla**, Ajay Tomar, Anil Kumar, Chandan Bagdia, Lokesh C Tribedi and Sanjiv Puri. **21st National**

Conference on Atomic and Molecular Physics, 3-6 January 2017, eBook of Abstracts, PS-3-37, Page no. 169.

M-shell X-ray Production Cross sections by Proton Impact of $_{81}\text{Tl}$. **Shehla**, A. Mandal, Ajay Kumar, M. Roy Chowdhury, Anil Kumar, L. C. Tribedi, Sanjiv Puri, **21st National Symposium on Radiation Physics**, March 5-7, 2018, Abstract Book, CP 10.6, and Page no. 164.

Parameterization of Proton Induced K-Shell X-Ray Production Cross Sections for $Z= 22-40$. **Shehla** and Sanjiv Puri, **21st National Symposium on Radiation Physics**, March 5-7, 2018, Abstract Book, CP 10.8, Page no. 166.

M X-ray production cross sections by 100-250 keV proton Impact of $_{70}\text{Yb}$. **Shehla**, A. Mandal, Ajay Kumar, M. Roy Chowdhury, L. C. Tribedi and Sanjiv Puri, **13th Asian International Seminar on Atomic and Molecular Physics**, December 03-08, 2018 , eBook of Abstracts PB 41, Page no. 153.

M X-ray relative intensities for $_{70}\text{Yb}$ by C ion impact. **Shehla**, Ajay Kumar, Anil Kumar, D. Swami and Sanjiv Puri, **22nd National Symposium on Radiation Physics (NSRP-22)**, November 08-10, 2019, JNU New Delhi, India.

Parameterization of Proton Induced K X-Ray Production Cross Sections for $Z= 42-70$. **Shehla**, Balwinder Singh and Sanjiv Puri, **22nd National Symposium on Radiation Physics (NSRP-22)**, November 08-10, 2019, JNU New Delhi, India.

Low energy N^{5+} ion induced Mj sub-shell X-ray production cross sections for $_{79}\text{Au}$, $_{82}\text{Pb}$ and $_{83}\text{Bi}$. **Shehla**, Ajay Kumar, Anil Kumar, C. Bagdia, L.C. Tribedi and S. Puri, **22nd National Symposium on Radiation Physics (NSRP-22)**, November 08-10, 2019, JNU New Delhi, India.

To investigate the universal behavior of $_{4}\text{He}^{q+}$ ion induced M X-ray production cross sections. Balwinder Singh, **Shehla** and Sanjiv Puri,

5th National e-Conference on Advanced Materials and Radiation Physics (AMRP-2020), 09-11 November, 2020.

M X-ray production cross-sections in ^{82}Pb and ^{83}Bi induced by nitrogen ions, Balwinder Singh, **Shehla**, Anil Kumar, Deepak Swami, Ajay Kumar and Sanjiv Puri, **7th International Conference on Ion Beams in Materials Engineering and Characterization (IBMEC 2022)- 16-19 November-2022.**

Measurements of the line resolved M-shell X-ray production cross sections for ^{79}Au and ^{81}Tl by $\text{N}^{\text{q}+}$ ion beam, Balwinder Singh, **Shehla**, Anil Kumar, Deepak Swami, Ajay Kumar and Sanjiv Puri, **NAARRI international conference on radioisotopes and radiation technologies NICSTAR-2023, during January 9-12, 2023.**

A review and tabulation for XRP cross sections for Oxygen and Silicon ion impact, Vasu Khurana, **Shehla**, **7th International Conference on Ion Beams in Materials Engineering and Characterization (IBMEC 2022)- 16-19 November-2022.**

List of Conferences/ Summer school Attended

4th National Conference on Advanced Materials and Radiation Physics (AMRP-2015) held at Sant Longowal Institute of Engineering and Technology, Longowal, Sangrur, March 13-14, 2015. (Poster presentation)

One day Seminar on Fullbright-Nehru Fellowship Opportunities for Research and Professional Development in USA held at Punjabi University, Patiala, April 5, 2016.



Two Days National Conference on Research Trends in Physics and Electronics (NPE-2016) held at S.G.G.S. Khalsa College, Mahilpur, Hoshiarpur, November 25-26, 2016. (Poster presentation)

21st National Conference on Atomic and Molecular Physics (NCAMP- XXI) held at Physical Research Laboratory, Ahmedabad, January 3-6, 2017. (Poster presentations)

TIFR School on Advances in Atomic Collisions, held at HBCSE campus, TIFR, Mumbai, March 05-18, 2017.

21st National Symposium on Radiation Physics (NSRP-21) held at RRCAT, Indore, March 5-7, 2018. (Poster Presentation)

13th Asian International Seminar on Atomic and Molecular Physics (AISAMP 2018), Organized by Tata Institute of Fundamental Research (TIFR) & Indian Institute of Technology Bombay (IITB) December 03-08, 2018. (Poster presentations).

22nd National Symposium on Radiation Physics (NSRP-22), held at JNU New Delhi, November 08-10, 2019. (Poster presentations).

E-School on “ECR Ion Source Technology: Opportunities and Future Challenges”, November 05-06, 2020.

List of FDP's/Short term Courses(STC)

Faculty Development Programme (GURU-DAKSHTA) on “Implementation of National Education Policy 2020: Role of Faculty in Higher Education Institutions”, 20-24 December 2021 at Chandigarh University.



Nanomaterials and their green applications (ICT-172), STC, organized by NITTTR Chandigarh from 28 March- 1 April, 2022.

One Week Faculty Development Program on the theme "MATERIALS CHARACTERIZATION THROUGH DFT AND SPECTROSCOPIC TECHNIQUES" (via Virtual Mode) from June 6th, 2022 to 10th June, 2022, Organized by Department of Physics, University Institute of Sciences (UIS), Chandigarh University.

INTERNATIONAL FACULTY DEVELOPMENT PROGRAM (IFDP) 2022 from 4th July to 9th July 2022 at Chandigarh University.

One Week Faculty Development Program on the theme "Smart Material Processing and Applications" from 25-29 July, 2022, NITTTR, Chandigarh.