



*The Heritage Institution(140 Glorious years)*

# **KANYA MAHA VIDYALAYA (AUTONOMOUS) JALANDHAR (Pb.)**

**Ranked Top College of Punjab  
Top National and State Rankings  
(Times of India Group, Outlook Magazine, India Today-2022, 2023 & 2024)**

**Star College status by DBT, Govt. of India  
Re-Accredited 'A' Grade by UGC –NAAC  
Awarded Status of College with Potential for Excellence by UGC – Cycle II  
Awarded DDU KAUSHAL KENDRA by UGC  
CURIE & FIST Grants by DST Govt. of India**

**First & Only Autonomous Women College of Punjab**

# Introduction to KMV

**The Heritage Institution**







**A Legacy of 140 Years**





**The Founder Father, Lala Dev Raj ji, the  
visionary leader & crusader established  
Bal Shiksha Vidyalaya in 1886**



# Etched in Stone



Dr. Rajendra Prasad (First President of Independent India) with Rai Bahadur Badri Das (Former President, College Managing Committee) and Acharya Km. Lajjawati (Former Principal) during his visit to the College



Sarpapalli Dr. Radhakrishnan (President of India) laying the foundation stone of college building. Seen with him are Principal Acharya Lajjawati, Rai Bahadur Badri Das Ji and Sardara Singh (Construction Supervisor)



Sh. Fakhruddin Ali Ahmed (President of India) felicitating a student during the Annual Prize Distribution of the College



Dr. A.P.J. Abdul Kalam (President of India) interacting with the students of Kanya Maha Vidyalaya



# Etched in Stone



Pt. Jawahar Lal Nehru (1st Prime Minister of Independent India) in the College campus with the Principal Acharya Lajjawati ji



Sh. Morarji Desai (Prime Minister of India) being introduced to the members of the staff by Principal Acharya Lajjawati ji



Mrs. Indira Gandhi (Prime Minister of India) being greeted by the teaching staff of the College



Mrs. Indira Gandhi (Prime Minister of India) being greeted by the teaching staff of the College



Sh. Atal Bihari Vajpayee (Prime Minister of India) during the traditional Welcome celebration 'Saraswati Puja' with Sh. Chander Mohan, President, KMV Managing Committee, Sh. Alok Sondhi, Secretary, KMV Managing Committee (left), Sh. Narendra Sood and Principal Dr. Kanta Ratna (Right)



# A Participant in Freedom Struggle

**Declaration of Poorna Swaraj  
A Historic Moment for KMV Students**



**KMV was the leading light & torch bearer  
during the Indian struggle for independence**





# Perceptions of International & National Dignitaries about KMV



KMV embodies the kind of holistic education that some of us write about and aspire to, but never quite manage to achieve

-- **Roger Nunn**

American University of Sharjah  
UAE



It is a culture of care and inclusiveness that is being developed in KMV amid high academic standards. I am positive these students will become the best examples of cultured, enlightened global citizens.

-- **Prof. Edward Downes**  
Dept. of Communications  
Boston University, USA



Words cannot describe my feelings of joy and accomplishment each time I visit KMV Jalandhar. With each visit, I gain more respect for your work and community. I treat this campus as my second home- thank you for welcoming me into your family with open arms, heart and mind.

---**Prof. John Battaglini**  
Boston University, USA



Kanya Maha Vidyalaya is acting like a Light House for many other institutions and society, at large. It was an honour and pleasure to attend the Convocation function at this old and solid institution. I am sure you are ensuring the bright future of your students. My compliments to you all for all the efforts made. I am positive that your alumni will create history.

--**Gen. V.K. Singh**  
Union Minister of State, New Delhi



This is the most impressive campus that combines the best practices of academia and human development. You not only meet the best international standards of education but add value for all to learn from the inspirational leadership.-

--**Dr. Maria Zlaveta**  
Dept. of English, Boston University  
USA



This is a unique space---with a totally dynamic leader & visionary; we take back a great deal of precious learnings & incredible awakenings.

--**Dr. Meenakshi Gopinath**  
Former Principal, LSSR  
New Delhi, Director, WISCOMP



# S. Bhagat Singh Sthal at KMV





# KMV- the Iconic Seat of Women Empowerment

## VISION

*‘To be the flag bearer of Women Empowerment through Higher Education that combines emerging global trends with value-based nurturing of enlightened young women’.*

# MISSION

- ❖ **To make every student globally employable through holistic education and development of right skills**
- ❖ **To emerge as a world class centre of Academic Excellence and Research**
- ❖ **To focus on Personality Development of each student through development of positive attitude, leadership qualities and self-awareness**
- ❖ **To produce young women who, along with being job-skilled, are adept to address the larger issues of life and become effective in building a strong and modern India**
- ❖ **To actively respond to the momentous issues of our society and socio-political environment of the world**
- ❖ **To reach out to the less-privileged and deserving sections of our society and lend a helping hand to them**
- ❖ **To inculcate national spirit and respect for our culture among our students and society at large**



# KMV Heritage in Women Development

*An Estimated*

**4,00,000**

*Women students*

*have been Empowered by*

*KMV and much*

*More as Contribution to*

*Nation Building*



# Personalities Nurtured









**Areas of  
Research at  
KMV**

**Glass  
Science**

**Glasses for Solar  
Technology**

**Glass  
nanocomposites**

**Linear and Non-linear  
optical properties of  
glasses**

**Rare earth doped  
luminescent  
glasses**

**Irradiation effects  
on glasses**

**Terahertz properties  
and Structure  
Correlations**



# List of Equipments available



**PL**  
(Photo-Luminescence Spectrofluorometer)



**DSC**  
(Differential scanning calorimeter)



**FTIR**  
Spectrophotometer



**Muffle furnaces-2**



**Gamma Beta Spectrometer**



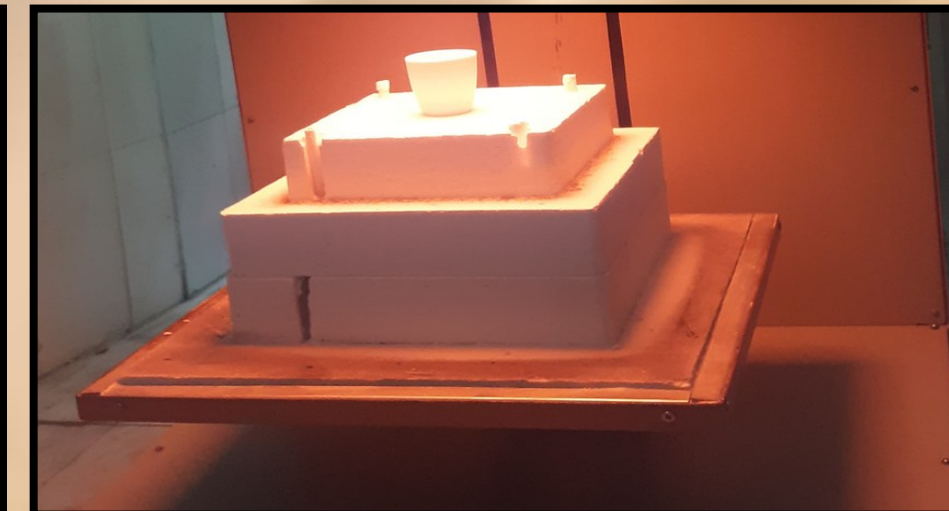
**UV-VIS**  
Spectrophotometer



**LCR**



**Lapping-Polishing Machine**



**Automatic Bottom Loading Furnace**



# Research Workplace





# 30 Labs for Pure Sciences







**Projects funded by Government**



# Ongoing Research Projects

Sr. No.	Name of the Principal Investigator	Name of funding agency	Government/ Non Government	Title of Project	Year of award	Duration and Amount sanctioned	Status of project (Completed/In progress)
1	Dr. Gopi Sharma (PG Department of Physics)	Science & Engineering Research Board (SERB)	Government	Non linear optical properties & terahertz studies of Germanium oxide based glass nanocomposites for optical applications	2022	26,07,264/- Three years	Ongoing
2	Dr Neetu Verma (PG Department of Physics)	Board of Research in Nuclear Science (BRNS)	Government	Preparation and characterization of environmental safe radiation shielding window glasses	2023	25,47,100/- Three year	Ongoing
3	Dr. Sandeep Kaur (PG Department of Physics)	DST Kiran Wise PDF	Government	Development and characterization of environmental safe Cd free quantum dots in glass matrix for solar panels	2024	32,36,400/- Three year	Ongoing



# Research Projects Completed

Project Name	Name of Principal Investigator	Agency	Amount	Year
Rare earth doped tellurite and borate glass nanocomposites for photonic applications	Dr. Neetu Chopra	Department of Science and Technology, New Delhi	Rs. 32,54,020/-	2016
Optical and non-linear optical properties of nano patterned novel glasses	Dr. Gopi Sharma	Science & Engineering Research Board, New Delhi	Rs. 36,46,388/-	2014
Nano structured molecular sensor based upon doped/undoped ZnO films prepared by different techniques.	Dr. Sonik Bhatia	University Grant Commission, New Delhi	Rs. 10,00,000/-	2014
Gamma irradiation effect on alkali borate glasses for shielding and reactor applications: structural, optical and physical analysis	Dr. Neetu Chopra	University Grants Commission, New Delhi	Rs. 1,90,000/-	2012
Nanocrystalline phase in oxyfluoride glasses for scintillator applications	Dr. Gopi Sharma	Department of Atomic Energy, New Delhi	Rs. 18,24,100/-	2012
Rare earth doped glass nanocrystal composites: optical & physical characterization	Dr. Gopi Sharma	University Grant Commission, New Delhi	Rs. 10,90,000/-	2009
Characterization of doped and undoped metal oxide films	Dr. Sonik Bhatia	University Grant Commission, New Delhi	Rs. 1,00,000/-	2008





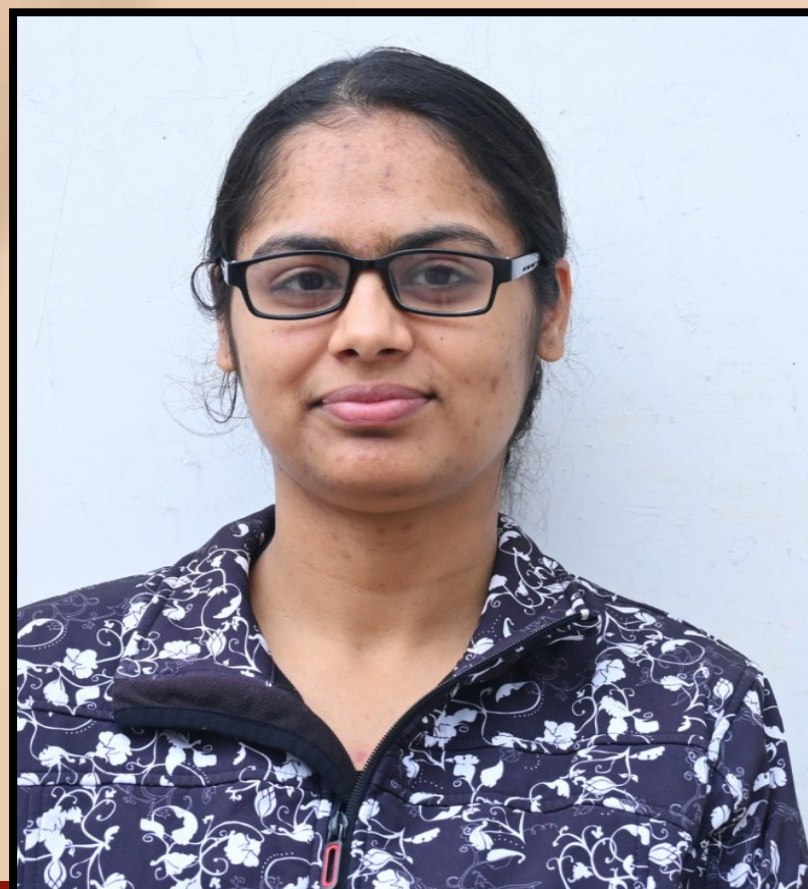
# Research Guidance



# Physics Scholars under different projects Funded by Government of India (4)



**Dr. Sandeep Kaur**  
**WISE-  
PDF**  
**2024-27**



**Ms. Harmanpreet Kaur**  
**Project Assistant,  
DST-SERB**  
**2022-25**



**Ms. Gagandeep Kaur**  
**Project-Assistant**  
**CURIE**  
**2023-25**



**Ms. Anchal Pathania**  
**Project-Assistant**  
**BRNS**  
**2023-26**



# Research Projects-Completed

Publications: 70+



**Dr. Neetu Verma**  
under  
**Dr. Gopi Sharma**



**Dr. Nancy Mahendru**  
under  
**Dr. Gopi Sharma**



**Dr. Ruchika Bagga**  
under  
**Dr. Gopi Sharma**



**Dr. Shivani Singla**  
under  
**Dr. Gopi Sharma**



**Dr. Sandeep Kaur**  
under  
**Dr. Neetu Verma**





# Challenges



1

**Financial support to students**

2

**Funds for professional development**

3

**Maintenance support**

4

**Hiring**



## **Financial Support to Students Required**

- ❖ Selection of Pure Sciences as career need to be encouraged**
- ❖ Large number of students from under-privilege section of society**  
**Psycho-Social Pressures : Students are unable to continue studies**
- ❖ KMV is a Non-Profit institution creating facilities for Research & Development and hiring of faculty needs financial endowments.**



## **Funds for professional development**

- ❖ **To organize various training programs at industry or institution level**
- ❖ **Registration fees for attending Conferences, Seminars, workshops**

## **Maintenance Support**

- ❖ **There is no support to maintain Instruments and Infrastructure**
- ❖ **Maintenance cost is very high**



## Possible Solutions

- ❖ **Attract brilliant minds to Science**
- ❖ **Provide financial support to a large number of students to alleviate economic stress**
- ❖ **Implement industry-oriented work opportunities for students and Paid-Internship in Industries**
- ❖ **Focus on preventing dropouts, especially among girls**
- ❖ **Research requires financial support : both for academic expenses & sustenances**
- ❖ **Hiring of well-qualified Faculty & Operators**



# Prof. Arun Varshneya & Mrs. Darshana Varshneya

## Visit to KMV





*Expected financial support from*

**Industry**

under

**CSR**

**It will significantly promote Women in**

**Science and Glass Research at KMV**

**(Corporate Social Responsibility Number : CSR00045757 )**



*For Unlocking New Pathways to Women Progress in Science*

**Seeking  
Industry  
(AIGMF) Alliances!**





*Gratitude for  
your Vision  
in Nation  
Building*



Presented by :

**Prof. (Dr.) Atima Sharma Dwivedi**  
**Principal**  
**Kanya Maha Vidyalaya (Autonomous)**  
**Jalandhar**



**Kanya Maha Vidyalaya (Autonomous), Jalandhar**  
**[www.kmvjalandhar.ac.in](http://www.kmvjalandhar.ac.in)**