

# CURRICULUM VITAE

## **Dr. Gagan Gupta**

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### **TEACHING EXPERIENCE**

- Guru Kashi University, Talwandi Sabo, 2<sup>nd</sup> September, 2011 to 4<sup>th</sup> August, 2015.
- Giani Zail Singh College of Engg. & Tech., MRSPTU, Bathinda----5<sup>th</sup> August, 2015 to 30<sup>th</sup> June, 2016.
- Akal University, Talwandi Sabo-----20<sup>th</sup> July, 2016 to 6<sup>th</sup> September, 2016.
- Department of Physics, MRSPTU, Bathinda-----7<sup>th</sup> September, 2016—till now.

### **EDUCATIONAL QUALIFICATIONS**

Examination	Specialization	School/College	Board/University	Passing Year	Marks (%)
Ph.D. (Physics)	Theoretical Physics	Centre of Advanced Studies, Department of Physics, Panjab University, Chandigarh	Panjab University, Chandigarh	2011	
M.Sc. (Hons.)	Physics	Centre of Advanced Studies, Department of Physics, Panjab University, Chandigarh	Panjab University, Chandigarh	2005	80
B.Sc. (Hons)	Physics	Centre of Advanced Studies, Department of Physics, Panjab University, Chandigarh	Panjab University, Chandigarh	2003	65
XII	Physics, Chemistry, Biology	D.C. Model Senior Sec. School, FZR	Punjab School Education Board	1999	68
X	Eng., Hindi, Maths, Science, Social Std.	D.C. Model Senior Sec. School, FZR	Punjab School Education Board	1997	90

### **ACADEMIC ACHIEVEMENTS**

1. Awarded State Scholarship during 10+1 and 10+2 on the basis of Merit Position in 10<sup>th</sup> board examinations.
2. National Scholarship holder during M.Sc. Physics (Hons. School) 2003 – 2005.
3. Passed M.Sc. Physics (Hons. School) 2003 – 2005 with distinction and was merit holder.
4. Qualified Ph.D. entrance exam of Panjab University, Chandigarh in 2005 with Second Rank and was awarded fellowship for Ph.D.
5. Awarded UGC-meritorious fellowship from 1 April 2007 to 30 September 2008.
6. Awarded CSIR (SRF) fellowship from 1 October, 2008 to 1 September, 2011.
7. Awarded first prize in Poster Presentation in First Chandigarh Science Congress dated 10-11 March, 2007.
8. Awarded second prize in Oral Presentation in Second Chandigarh Science Congress dated 14-15 March, 2008.
9. Awarded second prize in Poster Presentation in Diamond Jubilee Celebration of Panjab University, Chandigarh dated 28 March, 2008.
10. Awarded third prize in Oral Presentation in Third Chandigarh Science Congress dated 26-28 February, 2009.
11. Member of Academic Council of Guru Kashi University (2011-2015), Talwandi Sabo.
12. Member of Board of Studies of Guru Kashi University (2011-2015), Talwandi Sabo.
13. Appreciation Award on International Women's Day, 2013 by Vice Chancellor (Retd. IAS), Guru Kashi University, Talwandi Sabo.

14. Member of Academic committee of Guru Gobind Singh college of Engg. and Tech., GKU, Talwandi Sabo (2011-2015).
15. Member of Grievance Redressal Committee of Guru Kashi University (2014-2015), Talwandi Sabo.
16. Member of Editorial board of Indian Journal of research in Engineering and Technology (2011-2015), GKU, Talwandi Sabo.
17. Member of Editorial board for the Physical Sciences of WYNO academic Journal.
18. Member of Board of studies of Department of Physics, MRSPTU, Bathinda.
19. Member of Board of Control of Department of Physics, MRSPTU, Bathinda.
20. IQAC Department coordinator for Department of Physics, MRSPTU, Bathinda.
21. NSS Department coordinator for Department of Physics, MRSPTU, Bathinda.

#### **Lifetime Memberships**

1. ISTE (Indian Society for Technical Education) L.M. No.: LM 79769,
2. IPA (Indian Physics Association) M.No. CHA/LM/12638.
3. PAS (Punjab Academy of Sciences) M.No.: L - 1236.
4. IASTA (Indian Aerosol Science and Technology Association).

#### **Ph.D/ M.Phil students guided or under guidance**

M.Phil students guided = 03

One Ph.D student under guidance

#### **M.Sc. (Physics) students guided or under guidance**

Guided = 11 Students

Under Guidance = 01

#### **Ongoing Project**

##### **Co-Investigator**

Methodology to estimate aerosol density of particulates via simultaneous measurement of number and mass concentration, BRNS-DAE, Bombay, India.

#### **LIST OF PUBLICATIONS**

##### **REFERRED INTERNATIONAL JOURNALS**

1. Sahijpal S., Soni P. and Gupta G. 2007. Numerical simulations of the planetary differentiation of accreting planetesimals with  $^{26}\text{Al}$  and  $^{60}\text{Fe}$  as the heat sources. *Meteoritics and Planetary Science*, 42, 1529-1549.
2. Sahijpal S. and Gupta G. 2009. The plausible source(s) of  $^{26}\text{Al}$  in the early solar system: A massive star or the X-wind irradiation scenario? *Meteoritics and Planetary Science*, 44, 879-890.
3. Gupta G. and Sahijpal S. 2010. Differentiation of Vesta and the parent bodies of other achondrites. *Journal of Geophysical Research-Planets*, 115, E08001.
4. Sahijpal S. and Gupta G. 2011. Did the carbonaceous chondrites evolve in the crustal regions of partially differentiated asteroids? *Journal of Geophysical Research Planets*. 116, E06004.
5. Sahijpal S. and Gupta G. 2013. Numerical simulation of the Galactic Chemical Evolution: The revised solar abundance. *Meteoritics and Planetary Science*, doi:10.1111/maps.12123.
6. Kaur A. and Gupta G. 2013. Object extraction from still image. *International Journal on Advances in computing and communication Technologies*, Volume 2, Issue1, 312-319.
7. Kaur H. and Gupta G. 2013. Comparative study of automated testing tools: Selenium, Quick Test Professional and Test complete. *International Journal of Engineering Research and Applications*. Volume 3, Issue 5. 1739-1743.
8. Kaur H. and Gupta G. 2014. Software Testing Tool: Selenium, *International Journal of Engineering and Management Research*. Volume 4, Issue 4. 236-239.

9. Sharma V. and Gupta G. 2017. Effect of initial chondritic composition on the differentiation of the planetesimals in the early solar system, *International Journal of Latest Technology in Engineering, management and Applied Science*, Volume 6, Issue 6, 213-218.
10. Sharma V. and Gupta G. 2017. Review of metal contamination in ground water in different states of India. *International Journal of Latest Technology in Engineering, Management and Applied Science*, Volume 6, Issue 6, 224-226.
11. Gupta. G and Sharma V. 2017. Five year study of particulate matter during Diwali in Amritsar, Punjab. *International Journal of Advance Research in Science and Engineering*, Volume 6, Issue 1, 1149-1152.
12. Sharma V. and Gupta G. 2017. The particulate matter concentration around the Golden Temple, Amritsar, Punjab. *International Journal of Advance Research in Science and Engineering*, Volume 6, Issue 1, 1145-1148.
13. Singla R., Gupta G. and Kamboj N. (2017) To Detect Heavy Metals Accumulation in Sewage Water Irrigated Green Leafy Vegetables. *International Journal of Advance Research in Science and Engineering*, Volume 6, Issue 1, 1138-1144.
14. Sahijpal S. and Gupta G. 2010. A numerical simulation of the Galactic chemical evolution. Workshop cum training program on *Modern trends in Celestial Mechanics*, organized at Delhi University.

#### **INTERNATIONAL CONFERENCES:**

1. Gupta G. and Sahijpal S. 2007. Planetary differentiation of planetesimals due to radioactive heating. 38<sup>th</sup> *Lunar and Planetary Science Conference*. League City, Texas. Abstract #1191.
2. Sahijpal S. and Gupta G. 2007. Source(s) of the extinct short-lived nuclides: A massive star vs. X-wind irradiation. 70<sup>th</sup> *Annual Meteoritical Society Meeting. Meteoritics and Planetary science*. Tucson, Arizona. Abstract # 5094.
3. Sahijpal S. and Gupta G. 2007. The nature of the massive star that could have injected <sup>26</sup>Al in the early solar system. *Workshop on the chronology of meteorites and the early solar system*. Kauai, Hawai'i. Abstract # 4017.
4. Gupta G. and Sahijpal S. 2008. Differentiation of the planetesimals using <sup>26</sup>Al and <sup>60</sup>Fe as heat sources. *Terrestrial Planets: Evolution through Time*. PRL, Ahmedabad.
5. Sahijpal S. and Gupta G. 2008. Irradiation Production of <sup>26</sup>Al and the Canonical value of <sup>26</sup>Al/<sup>27</sup>Al? 39<sup>th</sup> *Lunar and Planetary Science Conference*. League City, Texas. Abstract #1325.
6. Gupta G. and Sahijpal S. 2009. Planetary Differentiation of Vesta with <sup>26</sup>Al and <sup>60</sup>Fe as heat sources. 40<sup>th</sup> *Lunar and Planetary Science Conference*. Woodlands, Texas. Abstract #1530.
7. Sahijpal S. and Gupta G. 2010. Numerical models for the wide-range of thermal processing of planetesimals and asteroids in the early solar system. 7<sup>th</sup> *Annual meeting of AOGS (Asia Oceania Geosciences Society)*, Hyderabad, India, PS12-A026.pdf.

#### **NATIONAL CONFERENCES AND SYMPOSIUMS:**

8. Gupta G. and Sahijpal S. 2007. Simulations of the irradiation environment prevailing in the early solar system using the *Chandra* X-ray flare observations of low mass protostars. *Young Astronomers Meet 2007*. IIA, Bangalore.
9. Gupta G. and Sahijpal S. 2007. Numerical simulations of the irradiation environment prevailing in the early solar system. *Ist Chandigarh Science Congress*. Chandigarh. VOL. IA, Abstract # 302.
10. Gupta G. and Sahijpal S. 2007. Numerical simulations of the planetary differentiation of the planetesimals in the early solar system. *Ist Chandigarh Science Congress*. Chandigarh. VOL. IA, Abstract # 303 (Awarded 1<sup>st</sup> prize in the entire Physics section).
11. Gupta G. and Sahijpal S. 2008. Sources of the short lived radionuclides in the early solar system. *Young Astronomers Meet 2008*. Mahatma Gandhi University, Kottayam, Kerala.
12. Sahijpal S. and Gupta G. 2008. Astrophysical settings for the birth of our solar system. *CHASCON 2008 2<sup>nd</sup> Chandigarh Science Congress*, Chandigarh (Awarded 2<sup>nd</sup> prize in the entire Physics section).
13. Gupta G. and Sahijpal S. 2008. Source of short lived radionuclides: X-wind irradiation. *CHASCON 2008 2<sup>nd</sup> Chandigarh Science Congress*, Chandigarh.

14. Gupta G. and Sahijpal S. 2008. Origin of the solar system. *Diamond Jubilee National Seminar "Advances in Physics"*. Department of Physics, Centre for Advanced Studies, Panjab University, Chandigarh.
15. Sahijpal S. and Gupta G. 2009. Recreating a genesis: Ten million years before, and during the formation of the solar system. *3<sup>rd</sup> Chandigarh Science Congress*, Chandigarh (Awarded 3<sup>rd</sup> prize in the entire Physics section).
16. Gupta G. and Sahijpal S. 2009. Differentiation of the Vesta. *3<sup>rd</sup> Chandigarh Science Congress*, Chandigarh.
17. Sahijpal S. and Gupta G. 2010. The Galactic Chemical Evolution: The bulk solar isotopic composition. *16<sup>th</sup> National Space Science Symposium*, Saurashtra University, Rajkot, India.
18. Gupta G. and Sahijpal S. 2011. Recreating a genesis: 10 million years before and after the formation of the solar system. 41<sup>st</sup> ISTE Annual National Convention, BBSBCE, Fatehgarh Sahib.
19. Gupta G. and Sahijpal S. 2013. Planetary differentiation of the planetesimals with different initial bulk compositions. 16<sup>th</sup> Punjab Science Congress, Baba Farid University of Health Sciences, Faridkot.

**WORKSHOPS ATTENDED:**

1. Attended Third Astrosat Workshop on Active Galactic Nuclei from 21<sup>st</sup> to 29<sup>th</sup> December, 2005 at Mohanlal Sukhadia University, Udaipur.
2. Attended the workshop on Synthesis of elements from 29<sup>th</sup> April to 13<sup>th</sup> March, 2008 at Kodaikanal, Tamil Nadu.
3. Attended the first part of the X-ray Astronomy School from 1<sup>st</sup> to 7<sup>th</sup> February, 2009 at IUCAA, Pune.
4. Attended IUCAA Introductory Workshop in Astronomy and Astrophysics from 19<sup>th</sup> – 23<sup>rd</sup> November 2009 at Panjab University, Chandigarh.
5. Attended 10<sup>th</sup> Planetary Sciences & Exploration (PLANEX) Workshop from 1<sup>st</sup> – 5<sup>th</sup> February 2010 at Panjab University, Chandigarh.