

Date - 27 /09/ 2015

## **CURRICULUM – VITAE**

**Name : Dr. Mukesh Kumar**

### **Personal Information:**

Date of Birth: 12 October 1976

Citizenship: INDIAN

Present Position: Assistant Professor

Official Address: Physics Department, Swami Shradhdhanand College  
University of Delhi

Address for Correspondence: 453, Near Gandhi -Nidhi, Mukhmel Pur  
Village, Delhi 110036

Mobile No. 9868104380

E-mail address: physics.ssn@gmail.com

Date of Appointment in the College: 03.08.2005

Total Teaching Experience: 12 Years

Native Place: Delhi

### **Education:**

Examination or Degree	Class or Division	Year	Main Subject(s)	University / Board
<b>Ph.D. PHYSICS</b>	--	<b>2005</b>	<b>Physics</b>	<b>University of Delhi</b>
<b>M.Sc. PHYSICS</b>	<b>1<sup>st</sup></b>	<b>1999</b>	<b>Physics, Computer, Math</b>	<b>University of Delhi</b>
<b>B.Sc. (Hons.) PHYSICS</b>	<b>1<sup>st</sup></b>	<b>1997</b>	<b>Physics, Math, English, chemistry, Computer</b>	<b>University of Delhi</b>


### **M.Sc. Specialization:**

**Computational Physics, Astrophysics & Mathematical Physics**

**Ph. D. Topic : " *New approach to conservation laws in theoretical Mechanics* "**

**Fellowship and Awards:** (including convener/co-convener/member organizing committees etc for International and national conferences/workshops/seminars)

**1. Program Organized :**

January 30, 2015	<b>Exhibition on Renewable Energy Devices</b> at New Campus, Swami Shraddhanand College, University of Delhi	Exhibition Coordinator
January, 2015	One day Physics Induction Program for School Children	<b>Convener,</b> SSNC, Univ. of Delhi
January, 2015	<b>One day Fire and Electrical Safety demonstration workshop for students</b> in association with Tata –Power Ltd (NDPL)	<b>Convener,</b> SSNC, Univ. of Delhi
20 March 2014	One day refresher program on <b>Cosmology and Higgs Mechanism by Prof Patric Das Gupta</b>	Coordinator
Feb 28, 2014	<b>Exhibition on Solar Energy Technologies</b>	Exhibition Coordinator
07-8 Feb 2014	SSNC (Univ. of Delhi) & MGICCC (Govt. of Delhi) joint <b>Workshop on Solar Energy Technologies</b>	Workshop Convener
24.01.2014	SSNC (Univ. of Delhi) & MGICCC (Govt. of Delhi) joint <b>Orientation course on Environmental Sustainability</b>	Course Convener
January 30, 2013	<b>Exhibition on Renewable Energy Devices</b> at New Campus, Swami Shraddhanand College, University of Delhi  <b>Participated by :</b> 	<b>Convener,</b> SSNC, Univ. of Delhi

**2. Short Term Course Organized :**

Year	Training / Courses	Position/ Organizer
Sept 2015 – Nov 2015	<b>Global Information Systems</b>	<b>Co-ordinator</b>
Nov 2014 – Feb 2015	<b><i>Environmental Sustainability : Role of Science &amp; Technology</i></b>	<b>Co-ordinator</b>
Oct 2012 – Jan 2013	<b><i>Environmental Sustainability : Role of Science &amp; Technology</i></b>	<b>Co-ordinator</b>
Sept 2011 – Dec 2011	<b>Energy &amp; Climate Change ( focus on Computational methods)</b>	<b>Co-ordinator</b>

**3. Sport Activities :**

- Organized “ **Intera College Chess Competitions -2** ” at New Campus - SSN College, University of Delhi in Feb 2015.
- Organized “ **Intera College Chess Competitions** ” at New Campus - SSN College, University of Delhi in Feb 2014.

**4. Academic Add-on Activities :**

2013-14	Convener - "Physics society QUIZ : <b>"Great Koan"</b> - three level inter-departmental Physics Quiz coordinator : Feb –March 2014.
2014-15	" Convener - "Physics society QUIZ : <b>"Great Koan"</b> - three level inter-departmental Physics Quiz coordinator : Feb –March 2015.
2015-16	Convener - "Physics society QUIZ : <b>"Great Koan"</b> - three level inter-departmental Physics Quiz coordinator : Sept-2015 –Jan 2016.

### **International /National Positions and/or Awards/ Fellowships**

1. **National Eligibility Test** : NET: JRF & SRF (CSIR –No: 2-40/99(i)-E.U.-II )
2. **GATE – 2002 (Physics)** : AIR-0266

**List of Students Awarded Ph.D./M/Phil.:**                      **NIL**

**List of Students Pursuing Ph.D./M.Phil. :**                      **NIL**

**List if Students guided for /M.Tech./B.Tech/B.Sc./M.Sc./B.A./M.A. Projects etc. .**

**Final year students of B.Sc. (Hons) Physics and B.Sc. Physics Science**

**List of students guided for Summer projects**

<b>Year.</b>	<b>Names of Student</b>	<b>Class</b>	<b>Topic</b>
2015	Sunil	B.Sc.( Physics)3rd year	<b>IMPACT OF DEVELOPMENT ON EARTH'S MOTION</b>
2015	Krishan Kumar	B.Sc.(Physics ) 3rd year	<b>Innovative Energy Generation from Vehicle's Waste Wind</b>
2013	Sagar Dahiya	B.Sc.( Physics)nd year	<b>Vehicle Heat Trapping</b>
2013	Sumit Kumar	B.Sc.( Physical Science) 2nd year	<b>Invisibility of Visible Light</b>
2013	Pranit Malik	B.Sc.( Physics)2nd year	<b>Science of solid waste</b>
2013	Diwakar Paraskar	B.Sc.( Physics)1st year	<b>A new way of energy harvesting : piezoelectricity</b>

### List of Students guided for Innovation Projects

2014-15			2015-16		
S. No.	Names of Student	Class	S. No.		
1	ADITYA DABAS	B.A.( Geography) 2 <sup>nd</sup> yr	1		
2	AMIT	B.A.( Geography) 2 <sup>nd</sup> yr	2		
3	ANKIT	B.A.( Geography) 2 <sup>nd</sup> yr	3		
4	ASHIJIT	B.A.( Geography) 2 <sup>nd</sup> yr	4		
5	NEERAJ SHARMA	B.A.( Geography) 2 <sup>nd</sup> yr	5		
6	NIDHI	B.A.( Geography) 2 <sup>nd</sup> yr	6		
7	ADESH VATS	B.Sc.( Physics ) 2 <sup>nd</sup> yr	7		
8	ASHWANI KUMAR	B.Sc.( Physics ) 2 <sup>nd</sup> yr	8		
9	PRANIT MALIK,	B.Sc.( Physics ) 2 <sup>nd</sup> yr	9		
10	VINAY KUMAR	B.Sc.( Physics ) 2 <sup>nd</sup> yr	10		

REVIEWER INTENATIONAL/National JOURNALS: **NIL**

Member International/National Journal editorial Board etc. **NIL**

### Research Projects/ Innovation Projects Undertaken :

#### (i) Completed

Year	Project Details	Position
Dec 2013 to Feb 2015	Delhi University Innovation Project on <b>Solid Waste Management THROUGH ENHANCING People AWARENESS FOR ENVIRONMENTAL sustainability in Delhi</b>	<b>Faculty Advisor</b>

#### (ii) Ongoing

Year	Training / Courses	Position
Sept 2015 Onwards	Delhi University Innovation Project on <b>Marketing Information System for farmers Using Geospatial Technology</b>	<b>Faculty Advisor</b>

**Research Interest: Energy and Computational Physics**

**Computer Literacy: (Softwares etc. used /working knowledge)**

Software : Ms-DOS, LINUX , WIN 95/98/2000,7,C/C++, Fortran, Reduce , Java, SPSS, LaTeX, MATLAB & Web designing.

Hardware : Installation, Troubleshooting of Windows [client & server], LINUX & Internet.

Maintaining a website on DU people server <http://people.du.ac.in/~mrana>

**Contribution in International Conferences/Seminars/Workshops : NIL**

**Contribution in National Conferences Seminars/Workshops :**

April 9-10, 2012	<b>National Seminar on Electrical Energy: Safety &amp; Conservation</b> at Old Campus, Swami Shraddhanand College, University of Delhi <b>Sponsor by : UGC DRDO MNRE</b>	<b>Convener,</b> SSNC, Univ. of Delhi
July 1-7, 2010	<b>National Workshop on Computational Science</b> at Dept. of Physics & Astrophysics, North Campus, Univ. of Delhi <b>Sponsor by :</b> <b>UGC DST DBT CSIR DRDO INSA Mo IT &amp;C</b>	<b>Convener,</b> SSNC, Univ. of Delhi

**LIST OF PUBLICATION (with title of the papers/articles, list of authors along with journal title , year of publication, ISSN/ISBN No. and Impact factor) :**

**2014**

1. **"PIEZOELECTRICITY : A NEW WAY OF TAMING ENERGY "** by Mukesh Kumar and Divakar Parashar in " Physics Education" 2014, Volume 30, Issue 4, Article Number: 6 , ISSN 0970-5953.
2. **" TAMING WASTE VIA LAWS OF PHYSICS "** by Mukesh Kumar in International Journal of Sustainable Energy and Environmental Research, 2014, **3(3): 164-170**, ISSN:2327-0330 (Online).
3. **"New Perspective on Conservation Laws"** by Mukesh Kumar in International Journal of Advanced Research in Physical Science (IJARPS) Volume 1, Issue 1, May 2014, 10-15.

**2013**

4. **"Investigation of High Altitude Electromagnetic Pulse Propagation under Relativistic Effect of Electrons"** by O.P. Malik, Mukesh Kumar, Sukhmander Singh, and Hitendra K. Malik in "National Seminar on "Applications of Basic Sciences in Engg. & Technology" by Echelon Institute of Technology, Faridabad on Dec. 27-28, 2013.

5. **"Production of Plasma and Its Effect on High Altitude Electromagnetic Pulse Propagation"** by O.P. Malik, **Mukesh Kumar**, Hitendra K. Malik, and A. Kumar in the proceeding of INTERNATIONAL CONFERENCE ON RECENT TRENDS IN ELECTRONICS COMMUNICATION & VLSI", organized by AL-FALAH SCHOOL OF ENGINEERING & TECHNOLOGY, Faridabad on Oct 2013.
6. **"Role of computational science in understanding physics"** by **Mukesh Kumar** presented at EDULEARN13 proceeding on July 1<sup>st</sup>-3<sup>th</sup> (2013),**Barcelona (Spain)** , ISSN 2340-1117.

## **2012**

1. **"On a Non- Variational Viewpoint in Newtonian Mechanics"** by Mukesh Kumar, Advances in Physics Theories and Applications, Vol 4(2012),1-8 ( IC impact 7.17 p-ISSN 2224-719X ).

## **2011**

1. **"A new approach to constants of motion and the Helmholtz conditions"** by Mukesh Kumar, Advances in Physics Theories and Applications, Vol 3(2011),7-9 ( IC impact 7.17 p-ISSN 2224-719X ).

### **List of *Books/Monographs* Published** (along with the Publisher's name and ISBN No. and year of Publication)

2012 : Proceeding of **"National Seminar on Electrical Energy : Safety & Conservation"**, published by Shri Krishna Sahitya Sadan .

2010 : Proceeding of **"National Workshop on Computational Science"**, published by Excel India Publishers, ISBN: 978-93-81361-09-2.

**E-Proceeding** of Short Term Courses (SSNC & MGICCC) -

**2014 : *Climate change and Sustainable Development***

**2013 : *Environmental Sustainability : Role of Science & Technology***

**2012 : *Energy & Climate Change ( Focus on Computational methods),***

**2010 : *Energy, Environment & Climate Change Management,***

Online available at <http://people.du.ac.in/~mrana>

### **Articles in Edited Books/Conference Proceedings/Book Chapter Published**( along with title of the book, publisher and ISBN No and year of publication).

1. **Electrical Energy Conservation & Safety** by Mukesh Kumar in proceeding of National Seminar on Electrical Energy : Safety & Conservation published by Shri Krishna Sahitya Sadan

**Journal Proceedings/ Journals Edited** (with title of the journal , year of publication etc.)

**Cheif Editor of Gravity Vol VI (2015), Gravity Vol-V (2014), Gravity Vol-IV (2011) , Gravity Vol III (2010)**

Gravity Edition are online available at <http://people.du.ac.in/~mrana>

**Popular articles published / Articles published in newspapers etc.**

1. **Vehicle's Heat Capturing** by Mukesh Kumar in GRAVITY, Vol VI(2015) publish by Physics Society SSNC
2. **Nature, Symmetry & Conservation Laws** by Mukesh Kumar in GRAVITY, Vol VI(2014) publish by Physics Society SSNC.
3. **Computational Science- 3<sup>rd</sup> pillar of Science** by Mukesh Kumar in GRAVITY, Vol V(2012) published by Physics Society SSNC.

**Professional Association and Membership of Learned Bodies**

- 1) Life time membership of All India Association of teacher Educators (AIATE)
- 2) Members of various online forums like
  - American Physical Society
  - Research Gate
  - ISI web of knowledge
  - Sci. physics group etc

**Any Other information:**