

Faculty Name: DR. AIJAZ AHMAD WANI  
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Subject: Physics  
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**Summary:** After Completing Ph. D in Atomic Physics from Aligarh Muslim University (AMU), Aligarh, (U.P) in 2005 and joined in the Higher Education Department (J&K) in 2010. From last Ten years I have taught Atomic Physics, Classical Mechanics, Quantum Mechanics, Electronics etc for B. G. Students and also establishes Experimental Laboratory for Physics Department (B. G. Courses), in the GDC, Kulgam, Besides teaching Physics and I'm involved in various College Committees for the betterment of the College. From last ten years the students of our Department got admission in different Universities of the Country for P.G. Courses.

### **Awards and achievements:**

PG & BG Board of studies Member (Kashmir University) 2015, 2016, 2017, 2018, 2020. 2021, (2022 NEP 2020) June 8 2023

Best teacher award on the Occasion of republic day 26<sup>th</sup> Jan.2012

Life Membership of Society for Technologically Advanced Materials, India.

- Commendation certificate on the occasion of Republic day 2015 function by District Development Commissioner, Kulgam.
- Certificate of appreciation in recognition of unrelenting support and coordination provided to J&K Excise Department in Organising Awareness Camp at GDC Kulgam Under Nasha Mukht J &K Abhiyan.
- Certificate of Appreciation in recognition of outstanding contribution in organizing a workshop on intellectual Property Rights at Government Degree College, Kulgam on 1st of May 2023,

### **Workshops, Seminars, Symposia and Conferences Attended.**

1. International Conference on “Accelerator Based Research in Based Applied Science (NSC), New Delhi, during 25-27 Feb. 2001.
- 2 International Conference on Current developments of Atomic Molecular and Chemical Physics at Delhi University, March 20-23 (2002).
- 3 Workshop on computer simulation of Ion Matter Interactions at Nuclear Science Centre New Delhi 26<sup>th</sup> March 2001.
- 4 National Conference on Recent Advance in Condensed Matter Physics at AMU, Aligarh (U.P) March 14-15, 2011.
- 5 Workshop on Accelerator Based Atomic and Molecular Physics at IUAC, New Delhi 8<sup>th</sup> and 9<sup>th</sup> August 2012.
- 6 Attend the advance lecture series “Beam Optics and Signal Processing at NSC during 10-27 March 2001.
- 7 Attend Advance Lecture Series on “ Computer Technique and Numerical Methods” at NSC from 31 July to 17 sep. 2001.
- 8 A four week General Orientation course organized by Academic Staff College, AMU, Aligarh . (U.P) from 31 january 2012 to 29 Feb 2012

- 9 National Conference on Nanomaterial's and devices (NCONAS-2013) October 3-5-2013. NIT Srinagar (J&K).
- 10 A Two Day National Seminar on " Towards new horizons with interplay between Physics and Computer Science "09<sup>th</sup> -10<sup>th</sup> June 2014.
- 11 One day IUAC Acquaintance program on Frontiers in Accelerators Based Physics, jointly organized by the department of Physics, University of Kashmir, and IUAC new Delhi on 24<sup>th</sup> June 2014 held at University of Kashmir, Srinagar.
- 12 Indo-Japan school on Advanced for Ions and Electrons on 16-18 Feb. 2015 at Inter- University Accelerator centre, New Delhi
- 13 Participated in two-day workshop on introduction on Robot on 25<sup>th</sup>& 26<sup>th</sup> April 2016 at IUST Awantipore (J&K)
- 14 Participate two days National seminar on the theme "scope impotence and future perspectives of Nano technology 18-19 March 2016 at GDC women Anantnag .
- 15 Attended winter school training program for capacity building in Geospatial Technologies ,DST Program from 21<sup>th</sup> Dec.2015 to 10<sup>th</sup> Jan 2016 at Deptt. of RS&GIS Jammu university.
- 16 Attended Two days National inter disciplinary Conference, SSD w.e.f 25<sup>th</sup> to 26<sup>th</sup> Feb. 2017 organized by SP College Srinagar. (J&K).
- 17 Attended 12<sup>th</sup> Science Congress, Science and Technology: Emerging Trends and Innovations March 2-4<sup>th</sup> 2017 University of Jammu ( J&K)
18. Attended Two-day National Workshop on Nanoscience-oppurtunities and Challenges Jointly Organised by the Department of Physics and Department of Chemistry,IUST, Awantipora , J&K, w.e.f 4<sup>th</sup> to 5<sup>th</sup> September 2018.

19. Attended multidisciplinary refresher course on disaster management w.e.f 31-01-2019 to 21-02-2019 at University of Kashmir Srinagar, Jammu and Kashmir
20. Attended International web conference on Science, Engineering & Technology (IWCSET) held during 15-16 May 2020 organised by Society for Technologically Advanced Materials of India (STAMI)
- 21, Attended International webinar on “Advanced Nano-Materials For Electronic Sensors”, on June 02, 2020, organized by Hassan Khoyihami Memorial Degree College Bandipora (J&K).
22. Attended AISNP Webinar lecture Series on the topic “ Light House in the Face of COVID 19 Tsunami” on 15 June, 2020 organised by Amity International Society for Natural Products, Health & Allied Sciences Domain, Amity University Uttar Pradesh Noida (INDIA).
23. Attended “VIRTUAL INTERNATIONAL CONFERENCE ON SCIENCE TECHNOLOGY RESEARCH AND INNOVATION” 17 Jun 2020 at 9-12 am organized by Head of Research and Community Service Institute of Universitas Negeri Semarang.
24. Attended “ 6 DAYS- ONLINE FACULTY DEVELOPMENT PROGRAMME ON MASS SPECTROMETRY & THERMAL ANALYSIS TECHNIQUES” Jointly offered by Col.Dr. Jeppiaar Research Park, Centre for Ocean Research & Department of Chemistry, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu in association with (MoES-ESTC) from 13.7.2020 to 18.7.2020.
25. Attended International Web Conference On Recent Advances In Science (IWCRAAS 2020) held on 30<sup>th</sup> and 31<sup>st</sup> of July 2020. Organized by Don Bosco Collage Tura.

26. Attended One day International Webinar on “ Environmental Sustainability Challenges & Strategies: A Way Forward” organized by GDC Sumbal, Jammu and Kashmir, India on 11<sup>th</sup> August 2020.
27. Attended National Webinar on “ The Future of Nano Structures” Organised by the “ Department of Chemistry, GDC for Women Anantnag on 27-08-2020,
28. Attended the webinar on “Integrating Energy, Climate Change and Development” held on 8<sup>th</sup> September ,2020 organized by Department of Management, Mizoram university. Aizawal ,India.
29. Attended one week National E-workshop on “Research Methodology” Organised by Department of Zoology & Department of Commerce , Govt. Lahiri P. G College, Chirimiri, Koriya (C.G) India from 8<sup>th</sup> to 14<sup>th</sup> September 2020.
30. Attended one week on line workshop/ Faculty-Development-Program on Recent Research Trends in Information Technology from September 12, 2020 to September 18, 2020. Organised by Islamic university of science and Technology (IUST), J&K in collaboration with Maulana Abdul Kalam Azad University of Technology, West Bengal.
31. Attended 1 Weak Hands-on Faculty Development Program on “Artificial Intelliugence using Python” organised by Brainovision Solutions India Pvt. Ltd. & National youth council of india , held from 14-09-2020 to 19-09-2020.
32. Attended National Webinar on “ Financial Awarencess and Consumer training” organised by Govt. Degree College

Kulgam in Collaboration with NCFR held on 15<sup>th</sup> September ,2020.

33. Attended National Webinar on Cosmology. “Observing the origin and the evolution of our universe organised by department of Physics Bhairab Ganguly College on 23<sup>rd</sup> Sep. 2020 .
34. Attended one day international webinar “ Current fluxes in indian foreign policy: From Domestic Agenda to Global political outreach” organized by department of Political Science Government Degree College Kulgam Kashmir on 23<sup>rd</sup> sep. 2020
35. Attended two week (online) Faculty Development Programme on “ Transformation in Higher Education : Issues and Road Ahead” ( 28<sup>th</sup> September- 12<sup>th</sup> October, 2020) organized by Government Degree College for Women, Anantnag in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi.
36. Attended a webinar on “ Municipal Solid Waste Management” organized by the department of Civil Engineering JJS Polytechnic Nanjangud on 14<sup>th</sup> October 2020.
37. Attended “One Week Online National Faculty Development Program on E-Contents and ICT Tools for Innovative Teaching & Learning” Organized by RCP, Roorkee from 1 May to 7 May, 2021.
38. Attended “ one Week online International Virtual Faculty Development Program on Research Methodology in Humanities, Social Sciences and Legal Studies organized by Shillong Law College, Dhankheti, Shillong, Meghalaya, India in Collaboration with Cape Comorin Trust, India from 01-07 November 2021
39. Attended one week Accelerate Vigyan Workshop during 20<sup>th</sup> - 26<sup>th</sup> Jan 2022 organised by Department of Physics Indian Institute of technology Indore.

40. Attended online two weeks interdisciplinary research course on “ Advanced Research Methodology” organised by teaching learning centre, Ramanujan college university of Delhi in collaboration with Academic international college Nepal from 22 January-05 Feb 2022 and obtained Grade A+
41. Attended Workshop and Hands-on Training on Virtual Lab on 18<sup>th</sup> April 2022, organized by Department of Physics (FIST Funded) National Institute of Technology Srinagar in Collaboration with Indian Institute of Technology Delhi
43. Attended online Training Course on Nuclear Security for Scientists, Technicians and Engineers in Collaboration with the Amity Institute of Nuclear Science and Technology (AINST) from 23-25 May 2022.
44. Attended one day programme on World Environment Day with theme “ Only One Earth” on 9<sup>th</sup> June 2022 organised by Department of Environmental Science in Collaboration with NSS unit Government Degree College, Kulgam (J&K).
45. Attended One-Day Workshop on “Intellectual Property Rights” On 28<sup>th</sup> June 2022, organized by Debates and Seminar Committee in Collaboration with Research and Publication Committee, Govt. Degree College Kulgam, (J&K).
46. Attended EAT RIGHT MELA Held on the occasion of Azadi Ka Amrit Mahotsav on 06<sup>th</sup> August 2022 at Kulgam.
47. Attended One Week faculty Development Program on “Amazon Web Service” during the period of 22<sup>nd</sup> August 2022 to 27<sup>th</sup> August 2022, organized by Deptt. Of Computer Applications, Amar Singh College, Srinagar in Collaboration with Brainovision Solutions India Pvt. Ltd and All India Council for Technical Education-AICTE.
48. Participated in the Peace Education Program collection in Collaboration with District Administration Kulgam w.e.f 28/12/2022 to 31/12/2022 organised by PEP prem Rawat Foundation at Kulgam

49. Attended One Week International Virtual Faculty Development Program on “ Research Method, Tools and Techniques for Multidisciplinary Research Design” Organized by Govt SPMR College of Commerce, Jammu and Kashmir, India in collaboration with Cape Comorin Trust, India from 20-26 February 2023.
50. Participated in Two days National Conference on Theoretical Approach to Multidisciplinary Research, Organised by MRC-Govt. Degree College Kulgam from 8<sup>th</sup> & 9<sup>th</sup> March 2023.
51. Participated in District Level Neighbourhood Youth Parliament, Celebration of India’s G20 Levelraging, Organised by Nehru Yuva Kendra Anantnag under Ministry of youth affairs and sports Government of India on 14<sup>th</sup> March at GDC, Kulgam..
52. Attended two days Multidisciplinary National Conference Jointly Organized by GDC Darhal J&K (UT) & Pir Panjal Foundation for Peace and Communal Harmony on 18-19 March, 2023
53. Participated in the event of International Day of Forests on 21<sup>st</sup> of March 2023 organized by Forest division and district administration Kulgam.
54. Participated in the international virtual faculty Development Programme on Artificial Intelligence: Challenges and Opportunities in Research and Education (Multidisciplinary) organized by Government Degree College, Jammu and Kashmir, India and Cape Comorin Trust, India from 20-26 September 2023.
55. Participated in NEP Orientation and Sanitation Program under Malaviya Mission Teacher Training Progam (MM-TTP) of University Grants Commission (UGC) Organized by UGC-Malaviya Mission Teacher Training Centre, University of Kashmir, Srinagar from 15<sup>th</sup> to 26<sup>th</sup> March 2024.



## **PUBLICATIONS IN JOURNALS AND CONFERENCES (Impact Factor #)**

- 1 Lifetime for the  $1s2s\ ^3P_2$  level in  $^{58}\text{Ni}^{26+}$  using beam two- foil experiment. T. Nandi, **A.A. Wani**, N.Ahmad, P. Marketos, R.P.Singh, R.Ram and S. Ahmad. J. Phys. B. At. Mol. Opt. Phys. 37, 703-710 (2004) (# 2.119)
- 2 Lifetime for Li-like Ti  $1s2s2p^4\ P_{5/2}$  level using a mode of beam – two-foil experiment, T. Nandi, Nissar Ahamd, **A.A.Wani**, Physics Rev. A 72 022711 (2005) (# 2.925)
- 3 Reliable measurements of the Li-like  $^{48}\text{Ti}\ 1s2s2p^4p_{5/2}$  level lifetime by beam foil and two- foil experiment. T. Nandi, **A.A. Wani**, Nissar Ahmad, P. Marketos Physical Rev. A73 032509 (2006). (# 2.925)
- 4 Beam- single and beam two foil experiment facility to study physics of highly charged ions. Nissar Ahmad , **A. A.Wani**, T.Nandi Review of Scientific instru. 770333107 (2006). (# 1.428)
- 5 Electronic and Optical Properties of Semiconductor and Alkali Halides Sajad Ahmad, **Aijaz Ahmad** Arab J.sci. Eng.Vol.38, issue 7 p 1889 Jul 2013 (#1.12)
- 6 L x-ray Production in  $^{57}\text{La}$ ,  $^{58}\text{Ce}$ ,  $^{60}\text{Nd}$  and  $^{62}\text{Sm}$  by 35-60 MeV carbon and oxygen ions. Nitin K.Puri, Ajay Kumar, Ashok Kumar, **A.A. Wani** and I. M. Govil Nuclear instruments and methods in Physics research B 241(2005) 63-68
- 7 Equilibrium charge state distribution of ions exiting carbon foil over the range of  $Z=4-41$  and  $E=0.41$  to  $1.2\ \text{Mev}/U$ , T. Nandi. **A.A. Wani** S.Chopara, S. K. Dutta CDAMACP, New Delhi University March 20-23 (2002)

- 8 Variation of temperature trends in Srinagar and Gulmarg Gowhar Hussain, **Aijaz Ahmad** and Samina Akther, IJMAS, volume 03, No,6 Nov- Dec 2016.
- 9 Effect B site substitution an crystal field splitty in ABO<sub>3</sub> structures a comparitve study between theoretical and experimental data , Feroz Ahmad, **Aijaz Ahmad** National conference at ASC Srinagar at June 9<sup>th</sup> and 10<sup>th</sup> 2014
- 10 Wobbling Motion: From Symmetry to Dynamics, 12<sup>th</sup> Science Congresss March 2-4<sup>th</sup> 2017. Gowhar Hussain , Javid ahmad Sheikh and **Aijaz Ahmad.**
11. Possible very anharmonic one and two phonon  $\gamma$ -vibrational bands in <sup>103</sup>Mo, J. Hunter, E. H. Wang, C. J. Zachary, J. H. Hamilton, A. V. Ramayya, G. H. Bhat, J. A. Sheikh, **A. A. Wani**,et al., International Journal of Modern Physics E, Vol. 26, No. 5, 1750030 (2017), World Scientific Publishing Company, DOI: 10.1142/S0218301317500306 (# 1.615)
12. Multi-phonon  $\gamma$ -vibrational bands in <sup>103-108</sup>Mo and <sup>103,105</sup>Nb, chiral vibrations in <sup>104,106</sup>Mo, and octupole correlations in <sup>146,147</sup>La, E. H. Wang, J. H. Hamilton, C. J. Zachary, A. V. Ramayya, J. M. Eldridge, G.H. Bhat, J. A. Sheikh, R. N. Ali, **A. A. Wani**, A. C. Dai, W. Y. Liang, F. R. Xu, J. K. Hwang, Y. X. Luo, Proceedings of the International Symposium on Exotic Nuclei, International Symposium on Exotic Nuclei EXON-2016, Kazan, Russia, 4 10 September 2016, [https : //doi.org/10.1142/9789813226548 0 046](https://doi.org/10.1142/9789813226548_0_046)
13. Temperature Variability Analysis of Gulmarg, Phalgam, Srinagar, Quazigund, and Kokernag of Kashmir Valley, J&K, India, N. Rasool, G. H. Bhat and **A. A. Wani**, IJMAS,Vol.04, No.05, September-oct.2017 ISSN No. 2348-537X
14. Impact of High concentrations ( 2 MoI%, 3MoI%) of Divalent Impurity ( Sr<sup>2+</sup>) on Photoluminescence of sodium Iodide

- Thallium ( NaI:TI) Phosphor. Tajamul Islam, Gulzar Ahmad, **Aijaz Ahmad**, 11<sup>th</sup> JK Science congress October 12-14, 2015 University of Kashmir, Srinagar.
15. CHIRALITY: From Symmetry to Dynamics, 12<sup>th</sup> Science Congresss March 2-4<sup>th</sup> 2017. Gowhar Hussain, Javid ahmad Sheikh and **Aijaz Ahmad Wani**.
  16. Impact of different concentrations ( 1Mol%, 2Mol%) of Divalent Impurity ( Sr<sup>2+</sup>) on optical properties of sodium fluoride Thallium ( NaI:TI) Phosphor. Tajamul Islam, Gulzar Ahmad, **Aijaz Ahmad**, 11<sup>th</sup> JK Science congress October 12-14, 2015 University of Kashmir, Srinagar.
  17. Effect of divalent impurity (Sr<sup>2+</sup>) on Photoluminescence Spectra of Sodium Bromide Thallium (NaBr: TI) Phosphor. Tajamul Islam, **Aijaz Ahmad**, Gulzar Ahmad. SP College from (25<sup>th</sup> - 26<sup>th</sup> Feb, 2017).
  18. Microscopic study of Transitional Nuclei <sup>165,167,169</sup> Tm. G.H.Bhat, J.A.Sheikh and **A.A.Wani** Page No.1.JK Knowledge Initiative ,Higher Education Department. (J&K).2017.
  19. Core@shell quantum dots as a fluorescent probe for the detection of Cholesterol and heavy metal ions in aqueous media, Irshad Ahmad Mir, Sachin Kumar, Masroor Ahmad Bhat, Xie Yuelin, **Aijaz Ahmad Wani**, Ling Zhu , Colloid and Surface A: Physicochemical and Engineering Aspects, Volume 626, 5 2021, 127090. Impact factor 3.990
  20. Green Synthesis of Ag<sub>2</sub>S Quantum Dots as Sensing Probe: An Optical Sensor for the Detection of Cholesterol. Irshad Ahmad Mir, Sachin Kumar, Masroor Ahmad, Quadrat Ullah Khan, **Aijaz Ahmad Wani**, and Ling Zhu Crystal Research and Technology, DOI: 10.1002/crat.202100067. Volume 57, issue 1/ 2100067

- 21 Study Of The Compression Behaviour Of Fe Cr Ti Sn And Fe Cr Ti Sb Materials Using Various Equation Of States, Tajamul Islam, A.K Srivastava and Masood A Kaloo and **Aijaz A Wani**. Elementary Education Online ISSN: 1305-3515 in Volume 20, Issue 6 of 2021.
- 22 Revisiting the band structures in  $^{118}\text{Xe}$  nucleus via in-beam  $\gamma$ -ray spectroscopy A. Pandeya , R. Bhushana , A. Rohillab , C. Majumderc , H. P. Sharmad , S. Chakrabortye , R. P. Singhf , S. Muralitharf , Yashrajf , K. Katref , B. Rohilag , Subodhg , A. Kumarg , I. M. Govilg , S. Jehangirh , N. Ratherh , G. H. Bhati , **A. A. Wani** , J. A. Sheikhj , S. K. Chamolia,\*

### **Book chapters:**

- 1 Organic Management in Organic Greenhouse:  
Reyees Ahmad , Seyed Nighat Bukhari, shafiya Hassan, Barkat Hussain, Aijaz Ahmad Wani ISBN: 9781774915233
2. Ku-band Radiation Shielding Response of LaO, SrO, MnO<sub>3</sub> Thin Film.  
Hilal Ahmad Reshi , Shreeja Pillai Avanish Pratap Singh **Aijaz Ahmad Wani** Materials for EMI Shielding, page 303

### **Key Publications:**

1. **Int. J. Mod. Phys. E, 26, 1750030, 2017**
2. **J. Phys. B At. Mol. Opt. Phys., 377, 703, 2014.**
3. **Arab. J. Sci. Eng., 38, 1889, 2013**

**Citation Index (Total No, of citations): 100**

**Cumulative I. F. = 12.132**