Curriculum Vitae

Name : Javed Musarrat

Nationality : Indian

Current Position : Vice Chancellor

Integral University (NAAC A+)

Lucknow (UP), India

Address for Correspondence: Prof. Javed Musarrat

D-72 Sarvodaya Nagar Indra Nagar, Lucknow

Email : musarratj1@yahoo.com; javedmusarrat1960@gmail.com

Contact No. : +91 9760785651

Subject Specialization : Biochemistry and Microbiology

Research Area : Molecular Microbiology and Nanotoxicology

Educational Qualification:

1987 - Ph.D. in Biochemistry, Aligarh Muslim University, Aligarh, India

1984 - M.Phil. in Biochemistry, Aligarh Muslim University, Aligarh, India

1982- M.Sc. (Biochemistry), Div. Ist, Aligarh Muslim University, Aligarh, India

1980- B.Sc. (Chemistry), Div. Ist, Aligarh Muslim University, Aligarh, India

1978- Pre-Medical course, Div. Ist, Aligarh Muslim University, Aligarh, India

Academic Positions and Experience:

12/2003 - 02/2022	Full Professor of Agricultural Microbiology, Faculty of Agricultural					
	Sciences, AMU, Aligarh					
06/2016 - 06/2019	International Professor, International Scientific Partnership Program					
	(ISPP) at King Saud University, Riyadh, Kingdom of Saudi Arabia.					
09/2017 - 09/2018	Distinguished Adjunct Professor, Department of Biological Sciences,					
	Faculty of Sciences, King Abdulaziz University, Jeddah, Saudi Arabia					
08/2014 - 10/2015	Dean, Faculty of Agricultural Sciences, AMU, Aligarh.					
08/2014 - 10/2015	Chairman, Department of Agricultural Microbiology, Faculty of					
Agricultural Sciences, AMU, Aligarh.						
08/2008 - 11/2012	Chair Professor, DNA Research Chair, King Saud University,					
	Riyadh, SA					
08/2006 - 08/2008	8/2006 – 08/2008 Dean, Faculty of Agricultural Sciences, AMU, Aligarh					

07/2001–10/2008 Chairman, Department of Ag. Microbiology, Faculty of Agricultural Sciences, AMU, Aligarh. 06/2000 - 07/2001 Visiting Scientist, Michigan State University, E. Lansing, Michigan, USA. 03/1997 - 06/2000 **Reader in Microbiology,** Aligarh Muslim University, Aligarh, India. 07/1996 - 03/1997 Senior Lecturer in Microbiology, Interdisciplinary Biotechnology Unit, Aligarh Muslim University, Aligarh, India. 02/1993 - 06/1996 Visiting Assistant Professor, The Ohio State University, Columbus OH, USA. 07/1989 - 01/1993 Lecturer in Microbiology, Interdisciplinary Biotechnology Unit, Aligarh Muslim University, Aligarh, India. Lecturer in Biochemistry, Department of Biochemistry, Faculty of 12/1988 - 07/1989 Life Sciences, Aligarh Muslim University, Aligarh, India. Visiting Scientist, National Institute of Public Health and 09/1988- 12/1988 Environmental Protection (RIVM) Bilthoven, The Netherlands. Research Associate, Department of Biochemistry, Aligarh Muslim 05/1987 - 09/1988

Statutory/Administrative Positions:

05/1985 - 04/1987

05/1983 - 04/1985

1. **Vice-Chancellor**, Integral University (UGC recognized 2(f) and 12 (B) NAAC A+ University, Lucknow (01-03-2021- till date)

CSIR Senior Research Fellow, Department of Biochemistry, Aligarh

CSIR Research Fellow, Department of Biochemistry, Aligarh Muslim

- 2. **Vice-Chancellor**, Baba Ghulam Shah Badshah University (UGC recognized 2(f) and 12 (B) State University), Rajouri, J & K (10/2015 10/2020)
- 3. **Dean, Faculty of Agricultural Sciences**, AMU, Aligarh (08/2014 11/2015)

University, Aligarh, India.

University, Aligarh, India.

Muslim University, Aligarh, India.

- 4. **Dean, Faculty of Agricultural Sciences**, AMU, Aligarh (08/2006 08/2008)
- 5. **Chair Professor**, DNA Research Chair, King Saud University, Riyadh, SA (08/2008 11/2012.
- 6. **Registrar**, Aligarh Muslim University, Aligarh (April 29, 2007 June 16, 2007)
- 7. **Chairman**, Department of Agricultural Microbiology, Faculty of Agricultural Sciences, AMU, Aligarh. (08/2014 10/2015).
- 8. **Chairman**, Department of Agricultural Microbiology, Faculty of Agricultural Sciences, AMU, Aligarh. (07/2001 10/2008)
- 9. **Member**, **AMU Court**, AMU, Aligarh (June, 2003 October 2008 & August, 2014 October 2015)
- 10. **Member, Executive Council**, AMU, Aligarh (July, 2007 August 2008)
- 11. **Member, Academic Council**, AMU, Aligarh (July, 2001- October 2008 & August, 2014 October 2015)
- 12. **Officer on Special Duty (Development)**, Aligarh Muslim University, Aligarh (07/2007 10/2008).
- 13. **Member-in-Charge** (MIC), Dawakhana Tibbiya College, AMU, Aligarh (04/2002 10/2008).

Total Publications/Books/Book Chapters/Patents/GenBank DNA sequences

- 1. **Total Scientific Publications** (Research Paper/Articles//Chapters/Reviews): (213)
- 2. Total Research Papers Presented in National/International Conferences: 117
- 3. Total Books (Springer and NOVA, USA Publishers): Six (06)
- 4. Total Book Chapter: Twenty Three (23)
- 5. US Patent: One (US Patent number: 9216455)
- 6. **NCBI-GenBank Database**:- Total number of partial DNA sequences deposited (**197**): Partial gene sequences from different species of Plants (06); Fungi (18); Bacteria (142), Viruses (31).
- 7. National Ranking 2022 (Biology & Biochemistry)- 34; World Ranking-2022: 8512

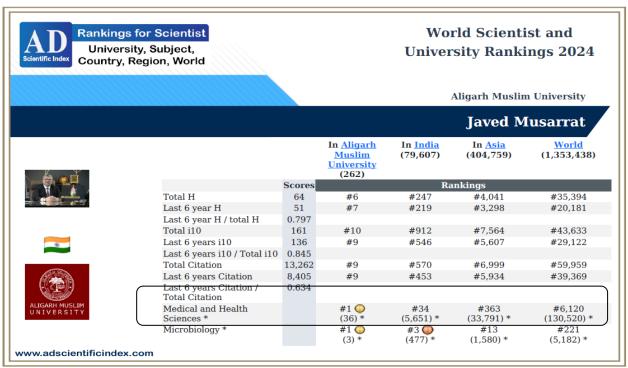
Research Publications (Citations and h-Index).

S. No.	Scientific Citation Indexing Service/Platforms	Research Publications	Citations	<i>h</i> - Index
1	Web of Science Gp/Publons	174	8392	51
2	Scopus	200	11199	59
3	Google Scholar	228	15000	69 (i10-index: 165)

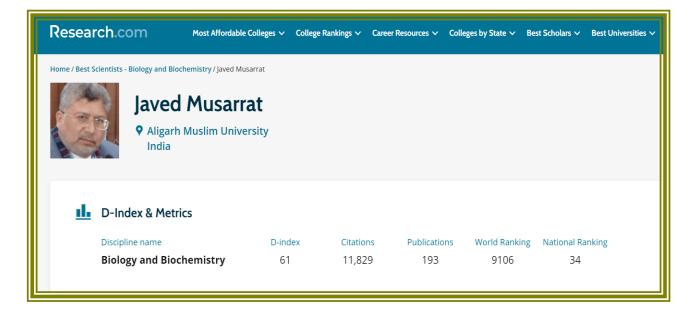
ORCID: http://orcid.org/0000-0001-5981-3813

Web of Science Researcher ID: I-1942-2013; Scopus ID: 7004600448; AD Scientific Index ID: 3423

Alper-Doger Scientific Index Scientific Index World Scientists Ranking 2024



Research. Com Index/Rank: Best Scientists - Biology and Biochemistry



Total Teaching Experience: 33 years

Total Research Experience: 40 years

Research guidance/Thesis supervised.

1. Ph.D : Ten (10) 2. M. Phil: Three (03)

3. Post-graduate Research Guided/supervised: Thirty-Four (34)

Number of Extra-Mural Research Projects.

As Principal Investigator (AMU, Aligarh) : Nine (09) Research Projects

(CSIR, CARA, DBT, AYUSH, UPCAR, UPCST)

As Co-Principal Investigator (KSU, Riyadh, SA): Four (04) Research projects

(National Plan for Science & Technology,

KACST-NPST, KSA)

Details of US Patent:

1. US Patent number: 9216455

Patent Pub No.: US2011/0274736 A1

Title: METHODS FOR PRODUCING SILVER NANOPARTICLES

Inventors: Abdulaziz A. Alkhedhairy and Javed Musarrat, KSU, Riyadh, SA

Pub Date: Nov 10, 2011

Abstract: Methods for producing silver nanoparticles are described. In one aspect, a liquid solution is prepared that contains phenazine-1-carboxylic acid. Silver metal salt is added to the solution to produce multiple silver nanoparticles.

Type: Grant

Filed: May 10, 2010

Date of Patent: December 22, 2015

<u>Member of the Councils/Board of Governors/Studies of Academic Institutions/Nodal officer of other Agencies/Organizations</u>

- 1. **Chairman,** Executive Council, Integral University, Lucknow, India (01-03-2021 till date)
- 2. **Chairman**, Academic Council, Integral University, Lucknow, India (01-03-2021 till date)
- 3. **Chairman,** Board of Governors, TEQIP-III (SoET-BGSBU), MHRD-World Bank Project, Gov. of India (2017 –2020), BGSBU, J &K
- 4. Chairman, Executive Council, BGSB University, J & K (October, 2015 2020)
- 5. **Chairman,** Academic Council, BGSB University, J & K (October, 2015 2020)
- 6. Chairman, Works Committee, BGSB University, J & K (October, 2015 2020)
- 7. **Chairman,** Library Committee, BGSB University, J & K (October, 2015 2020)
- 8. **Member, Governing Body,** Integral University, Lucknow, India (01-03-2021 till date)
- 9. **Member,** Planning and Monitoring Board, Central University of Kashmir (March 2017 till date).
- 10. **Member** of the draft committee for developing *Guidelines for Curriculum and Credit framework for undergraduate programmes as per NEP 2020*, constituted by the UP State Hr. Education Department Section-3, Govt of UP vide OM 109/seventy-3-2023-08 (20)/2022 dated 12-01-2023.
- 11. **Member** of the draft committee for developing *draft policy for Online Course mapping and credit Transfer as per NEP 2020*, constituted by the UP State Hr, Education Department, Section-3, Govt of UP vide OM 116/seventy-3-2023-08 (19)/2022 dated 13-01-2023.
- 12. **Member** of the draft committee for developing *draft policy for Multidisciplinary and Cluster as per NEP 2020*, constituted by the UP State Hr, Education Department, Section-3, Govt of UP vide OM 117/seventy-3-2023-08 (19)/2022 dated 13-01-2023.
- 13. **Member**, Executive Council, IUST, Awantipura, J & K (October, 2015 2020)
- 14. **Member**, Executive Council, AMU, Aligarh (July, 2007 August 2008)
- 15. **Member**, Academic Council, AMU, Aligarh (August, 2014 October 2015)
- 16. Member, Academic Council, AMU, Aligarh (July, 2001- October 2008)
- 17. **Member**, AMU-Court, AMU, Aligarh (August, 2014 October 2015).
- 18. Member, AMU-Court, AMU, Aligarh (June, 2003 October 2008).
- 19. Member, Finance Committee, AMU, Aligarh (July 2007- October 2008)
- 20. **Member**, Central Library Committee, AMU, Aligarh (April, 2006 October 2008).
- 21. **Member**, Central Library Committee, AMU, Aligarh (2014 October 2015).
- 22. Member, Establishment-cum-Grievance Committee, AMU, Aligarh

- 23. **Member**, Regional Advisory Committee of Regional Directorate, Central Board for Workers Education, Ministry of Labour & Employment, Govt. of India (September, 2005 October, 2008).
- 24. **Member**, Board of studies, Department of Biosciences, Jamia Millia Islamia, New Delhi (2014 till date).
- 25. **Member**, Board of Management, Interdisciplinary Biotechnology Unit, AMU, Aligarh (2006 October 2008).
- 26. **Member**, Committee for the Assessment and Accreditation of AMU by National Assessment and Accreditation Council (NAAC) (November, 2005 October 2008).
- 27. **Member**, Board of Studies of the Department of Applied Chemistry, Z.H. College of Engineering and Technology, AMU, Aligarh (January, 2004 October 2008)
- 28. **Member**, Board of Studies of the Department of Saidla, Faculty of Unani Medicine, AMU, Aligarh. (October, 2013 till date).
- 29. **Member**, Board of Studies, Centre for Professional Courses, AMU, Aligarh (2004 October 2008)
- 30. **Member**, Board of Studies of the Department of Microbiology, Faculty of Medicine, JNMC AMU, Aligarh. (January, 2004 January, 2006).
- 31. **Member**, Committee for Staff Appointment on Compassionate Ground, AMU (October, 2003- 2007).
- 32. **Nodal Officer**, National Information System on Agricultural Education Network (NISAGENET), Indian Agricultural Statistics Research Institute (IASRI), ICAR, New Delhi (September, 2014 10/2015).
- 33. **Nodal Officer**, National Information System on Agricultural Education Network (NISAGENET), Indian Agricultural Statistics Research Institute (IASRI), ICAR, New Delhi (September, 2005 2008).
- 34. **Nodal Officer**, National Academy of Agricultural Research and Management (NAARM), Hyderabad, India (September, 2005 2007).
- 35. **Nodal Officer**, Agricultural Science and Technology Indicators (ASTI), National Centre for Agricultural Economics and Policy Research, ICAR, New Delhi (September, 2005 2008).

Membership of Scientific Societies/Awards

- 1 **Life Member**, Environmental Mutagen Society of India.
- 2 **Life Member**, The Association of Microbiologists, India.
- 3 **Life member,** Saudi Biological Society, Riyadh, Saudi Arabia
- 4 **Life Member**, Bio-Ved Research and Communication Centre, Allahabad, India.
- 5 **Life Member,** Ibn-Sina Academy of Medical Sciences, India
- 6 **Ex-President**, The Association of Microbiologists (AMU Chapter), India
- 7 **Member** of many other scientific societies.

Member Editorial Boards/Reveiewer of Scientific Journals

Served in the past and/or serving as a reviewer of several scientific journals (only selected journals are listed as):

Member, Advisory Board of the "Toxicology International" an official Journal of the Society of Toxicology, India; Member, Editorial Board, International J. of Applied Nanotechnology, JournalsPub, India; Member, Editorial Board, International Journal of Nanobiotechnology, JournalsPub, India; Member, Editorial Board, International Journal of Nanosensors, JournalsPub, India; Reviewer of The Journal of Toxicological Sciences, Toxicology International, Current Microbiology, Current Science, FEBS Letters, Journal of Photochemistry and Photobiology, Journal of Toxicology and Environmental Health, Mutagenesis, Material letters, Photochemistry and Photobiology, African J. Biotechnology, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Chemosphere, and many more.

Organizer of Conferences/Workshops

- 1. Organizing Secretary of the International Symposium on "The Predictive, Preventive Mutagenesis & XXXIII EMSI Annual Meeting, Department of Agricultural Microbiology, Faculty of Agricultural Sciences, AMU, Aligarh, January 1-3, 2008. Sponsored by DBT, ICMR and CSIR, Govt. of India.
- 2. Organizing Secretary of the National One-Day workshop on Flow Cytometery and its applications Department of Agricultural Microbiology, Faculty of Agricultural Sciences, AMU, Aligarh, January 1-3, 2008. Sponsored by Becton and Dickinson, USA.
- 3. **Member**, Organizing Committee of the First workshop on **DNA Research: A gateway to Knowledge Economy**, Organized on May 24, 2009, Sponsored by the DNA Research Chair, King Saud University, Riyadh, SA.
- 4. **Member**, Organizing Committee of the Training Course on "**Polymerase Chain reaction Techniques**" Organized on January 10-12, 2009, Sponsored by the DNA Research Chair, King Saud University, Riyadh, SA.
- 5. Member, Local Organizing Committee, "Summer University", Sponsored by NRI AMU Alumni, held at the Department of Agricultural Microbiology, Faculty of Agricultural Sciences, AMU, Aligarh, April 2000 2004, as a regular annual feature.
- 6. Member, Organizing Committee of the workshop on "Introduction to the use of personal computers and window based software's in bioinformatics with special reference to NICNET connectivity and CD-ROM databases" Sponsored by the Department of Biotechnology, Govt. of India.

International Assignments as Visiting Professor/ Research Fellow

- **International Professor**, International Scientific Partnership Program (ISPP) at King Saud University, Riyadh, Kingdom of Saudi Arabia (2017-2018).
- **Distinguished Adjunct Professor**, Department of Biological Sciences, Faculty of Sciences, King Abdulaziz University, Jeddah, Saudi Arabia (2018).
- Visiting Professor, DNA Research Chair, King Saud University, Riyadh, SA (2016)
- Chair Professor, DNA Research Chair, King Saud University, Riyadh, SA (2008-2012).

- **Visiting Scientist**, The Lab of Ecotoxicology and Environmental Health, School of the Environment, Nanjing University (Xianlin Campus), 163 Xianlin Avenue, **Nanjing, Jiangsu, China** (Dec 11-17, 2011)
- Visiting Scientist, Michigan State University, E. Lansing, Michigan, USA (2000-2001).
- Visiting Assistant Professor, Ohio State University, Columbus OH, USA. (02/1993 06/1996).
- Visiting Scientist, National Institute of Public Health and Environmental Protection (RIVM) Bilthoven, The Netherlands (09/1988-12/1988).

International Visits as Invited Speaker:

- Invited Speaker: College of Science, King Saud University, Riyadh, SA. (Feb. 2023)
- Invited Speaker, Nano Safety Research Group at Nanotechnology Center (KAU), Faculty of Science, Dept. Biological Sciences, King Abdulaziz University, Jeddah, Saudi Arabia (April 11, 2018).
- Invited Speaker, ICSB, National Center for Natural Products Research, University of Mississippi, Oxford, MS, USA (April 03, 2017).
- Invited Speaker: Chair for DNA Research, College of Science, King Saud University, Riyadh, SA. (May, 2015,)
- Invited Speaker: Chair for DNA Research, College of Science, King Saud University, Riyadh, SA. (April 2014)
- **Invited Speaker**: BIT's 3rd Annual World Congress of NanoSciences & Technology-2013, during, **Xian, China** (September 26-28, 2013)
- **Invited Speaker**: 12th Annual Oxford International Conference on the Science of Botanicals (ICBS)" during at **Oxford, Mississippi, USA** (April 15-19, 2013)
- **Invited Speaker**: 11th Annual Oxford International Conference on the Science of Botanicals (ICBS)" during at **Oxford, Mississippi, USA**. (April 16-19, 2012)
- **Invited Speaker**: Nanjing University (Xianlin Campus), 163 Xianlin Avenue, **Nanjing, Jiangsu, China** (Dec 11-17, 2011)
- **Invited Speaker**: "The 2010 IEEE International Conference on Bioinformatics and Biomedical Technology (ICBBT 2010)" during at **Chengdu, Sichuan, China.** (April 16-18,2010)
- **Invited Speaker**: International Conference on Nanotechnology (ICON008), King Abdulaziz University, **Jeddah**, **SA**. (2008)
- Invited Speaker: In Vitro Biology Meeting, Baltimore, Maryland, USA. 2005-
- Speaker: American Association for Microbiologists, Orlando, Florida, USA (2001)-
- Speaker: HSRC Research symposium, Asilomer, Pacific Grove, California, USA (2000)
- Invited Speaker: American Association for Cancer Research, Washington DC, USA. (1996)
- **Invited Speaker**: American Association for Cancer Research, **Toronto, Canada**. (1995)

• Speaker: Ohio Valley-Lake Erie Association of Cancer Centres (OLACC) and Michigan State University Cancer-Treatment Consortium Conference, East Lansing, Michigan, USA (1993).

Represented the University at International Forum

- 1. Chaired a curtain raiser meeting with **His Excellency Mr. George Mkondiwa**, **The High Commissioner of Malawi to India**, Integral University, 17th August 2021.
- 2. Chaired a curtain raiser meeting with **Her Excellency Ms. Stella Budiringaya**, **Ambassador of Burundi** to the Republic of India, Integral Universit, 18th August 2021.
- 3. Chaired a curtain raiser meeting with **His Excellency Mr. Ahmad Sule, The High Commissioner of Nigeria** to India, Integral University, 27th & 28th August 2021.
- 4. Chaired a curtain raiser meeting with **His Excellency Mr. Mustapha Jawara**, **Ambassador of the Gambia** to the Republic of India, Integral University, 11th October 2021.
- 5. Chaired the high-powered delegation for a meeting with the **Hungarian Delegation at the Embassy of Hungary in New Delhi** on 20th May 2022 for Collaboration with the University of Public Services, Budapest, Hungary
- 6. Chaired a curtain raiser meeting with **Her Excellency**, **Ms. Hayet Talbi**, **Ambassador of Tunisia** to India, Integral Universit, 13th May 2022.
- 7. Chaired a curtain raiser meeting with Ambassador Kabiru Sadauki Minister/Head of Industry Trade and Investment High Commission of Nigeria, Integral University, 23rd June 2022.

Research Grants Successfully Completed as PI/Co-PI

- 1. **Principal Investigator** of the research project entitled "Molecular and Biochemical Characterization of Rhizospheric Bacteria for development of super bioinoculants with collateral biocontrol and bioremediation Potential. Funded by the **Department of Biotechnology**, Govt. of India vide *Sanction No. BT/PR3488/AGR/05/181/2002*.
- 2. **Principal Investigator** of the research project entitled "Assessment of Anti-biosis and Biofilm Inhibition Potential of Metal Oxide Nanoparticles for the developing on Novel Nano-antibiotics" Funded by the Council of Science and Technology, Vigyan Bhawan, Lucknow-2202446. Sanction No. CST/372 dated 20/25 May, 2015-2018.
- 3. **Principal Investigator** of the research project entitled "Characterization of Rhizosphere-competent bacteria with intrinsic bioremediation potential for developing bioinoculants specific to Aligarh region "Funded by the **Council of Science and Technology** (UP), India vide *sanction No. CST/D-2456(11)*.
- 4. **Principal Investigator** of the research project entitled "Assessment of genotoxic potential of coal fly ash and its promutagenic constituents, Funded by the **Council of Scientific and Industrial Research** (CSIR), **Government of India** vide sanction No.37(1124)/03/EMR-11.
- 5. **Principal Investigator** of the research project entitled "Microbial Degradation of Polycyclic Aromatic Hydrocarbons in Soil and Subsurface Environment in Vicinity of

- Mathura Oil Refinery". Funded by the **Department of Environment, Ministry of Forest and Environment,** Govt. of India, vide *grant No. 19/129/89-RE*.
- 6. **Principal Investigator** of the research Project entitled "Studies on the binding and photo-induced degradation of biological macromolecules with tetracyclines". Funded by the A.M.U. Aligarh, India, vide *sanction No. Acad/D-882/w*.
- 7. **Principal Investigator** of the research Project entitled "Influence of Agrichemicals on Lectin Mediated *Rhizobium*-Legume Symbiosis and Grain Yield in Leguminous Crop". Funded by the **Council of Science and Technology** (UP), India vide *grant No. CST/AAS/D-1902*.
- 8. **Principal Investigator** of the research project entitled "Assessment of Unani medicines for toxic heavy metals and their protective role in environmental genotoxicity and mutagenesis. Funded by the Department of AYUSH, CCRUM, Ministry of Health and Family Welfare.
- 9. **Principal Investigator** of the research project entitled "Studies on agrichemical Induced Structural Modifications and Oxidative Damage in Biological macromolecules". Funded by **Council for Academic and Research affairs**, India vide *sanction No. MAAS/RS/YKZ/1/D-569*.
- 10. **Co-Principal Investigator** of the research project entitled "Effects of polybrominated flame retardants from electronic waste on the cellular DNA and carcinogenesis. Funded by the National Plan for Science and Technology, KACST/KSU, Riyadh, SA vide *Sanction No. 10-ENV1314-02*.(April 2012-2014).
- 11. **Co-Principal Investigator** of the research project entitled "**Assessment of DNA damage and Toxicological Potential of nanoparticles.** Funded by the National Plan for Science and Technology, KACST/KSU, Riyadh, SA vide *Sanction No. 10-NAN1115-02*.(December, 2011- 2013).
- 12. **Co-Principal Investigator** of the research project entitled "Bioprospection of Arabian Medicinal Plants as Antiglycation Agents for the Development of a Novel Molecular Therapeutic Approach for Diabetes". Funded by the National Plan for Science and Technology, KACST/KSU, Riyadh, SA vide *Sanction No. 12-MED2491-02*.(2013-2015).
- 13. **Co-Principal Investigator** of the research project entitled "Development of Nanobiosensors for Rapid Detection and Diagnosis of Brucellosis" Funded by the National Plan for Science and Technology, KACST/KSU, Riyadh, SA vide *Sanction No. 12-NAN2490-02.* (2013-2015).

Awards/Appreciations Received

- 1. Elsevier **Highly Cited Author Award 2006-20011**, for paper entitled "Significance of Bacillus subtilis strain SJ-101 as a bioinoculant for concurrent plant growth promotion and nickel accumulation in *Brassica juncea*. Chemosphere, *Elsevier Ltd*, *USA*. 64: 991-997.
- 2. Shared the **First Prize Award** of SR 10,000 for the "*Best Research in the Hub*" in the area of nanotechnology at the "25th Annual Meeting of Saudi Biological Sciences Title: Nanotechnology in Life Sciences" on the work entitled "Biogenic synthesis of silver nanoparticles using an endophytic fungus *Amylomyces rouxii* strain KSU-09" during May 11-13, 2010 at King Faisal University, Al-Ahsa, Saudi Arabia.

- 3. Shared the *Research Excellence Award* of SR 100,000 for outstanding performance of the Al-Jeraisy Chair for DNA Research for the year 2011, King Saud University, Saudi Arabia.
- 4. NIH/NCI (USA) Faculty Development Award (1993)
- 5. Recipient of Award of Appreciation by the Nigerian Students Community in Recognition of Outstanding Contributions to the Academic Achievements and the Personal Growth of the Nigerian Students of the University.
- 6. Recipient of Appreciation Memento "PACT 2030" from QS-Iguage for making PACT 2030 a resounding success during Goa Summit in March 2022, as a signatory to Pledge-Act-Change-Transform (PACT-2030) for UN-2030 agenda for Sustainable Development.

Books Published (06)

- 1. Zaidi, A., Khan, M.S., **Musarrat, J.** (2017) Microbes for Legume Improvement 2nd **Edition** (Eds) M.S. Khan, A. Zaidi, J. Musarrat, *Springer International Publishing AG*, *Gewerbestrasse 11*, 6330 Cham, Switzerland .[ISBN 978-33-195-917-35].
- 2. Khan, M.S., Zaidi, A., **Musarrat, J.** (2014) Phosphate Solubilizing Microorganisms-Principle and Applications of Microphos Technology, (Eds) M.S.Khan, A. Zaidi, J. Musarrat, *Springer International Publishing, Switzerland*. [ISBN 978-33-190-821-58]
- 3. Khan, M.S., Zaidi, A., Goel, R., **Musarrat, J.** (2011) Biomanagement of Metal Contaminated Soils (Eds) M.S. Khan, A. Zaidi, R. Goel, J. Musarrat, **Springer Science** + **Business Media B.V., Dordrecht, The Netherlands** [ISBN 978-94-007-1913-2]
- Khan, M.S., Zaidi, A., Musarrat, J. (2010) Microbes for Legume Improvement (Eds) M.S. Khan, A. Zaidi, J. Musarrat, Springer-Verlag GmbH, Berlin/Heidelberg, Germany. [ISBN 978-3-211-99752-9].
- 5. Khan, M.S., Zaidi, A., **Musarrat, J.** (2009) Microbial Strategies for Crop Improvement, (Eds) M.S.Khan, A. Zaidi, J. Musarrat, **Springer-Verlag GmbH, Berlin/Heidelberg, Germany**. [ISBN 978-3-642-01978-4].
- 6. Khan, M.S., Zaidi, A., **Musarrat, J** (2008) Microbes in Sustainable Agriculture, **Nova Science Publishers, Hauppauge, NY, USA** [ISBN: 9781604569292].

Book Chapters Published (23)

1. Ansari M.A., Ali K., Farooqui Z., Al-Dossary H.A., Zubair M., **Musarrat J.** (2021) Nanotechnology and Diabetic Foot Ulcer: Future Prospects. In: Zubair M., Ahmad J., Malik A., Talluri M.R. (eds) Diabetic Foot Ulcer. Springer, Singapore. https://doi.org/10.1007/978-981-15-7639-3 20 [ISBN 978-981-15-7638-6].

- 2. Khursheed Ali, Tijo Cherian, Saher Fatima, Quaiser Saquib, Mohammad Faisal, Abdulrahman A Alatar, **Javed Musarrat**, Abdulaziz A Al-Khedhairy (2020) Surface Engineering Techniques Associated with Stability, Biocompatibility, and Toxicity of Nanoparticles. In: Green Synthesis of Nanoparticles: Applications and Prospects (eds) Saquib, Q., Faisal, M., Al-Khedhairy, A.A., Alatar, A.A. PP 75-101. [ISBN 978-981-15-5179-6].
- 3. Khursheed Ali, Tijo Cherian, Saher Fatima, Quaiser Saquib, Mohammad Faisal, Abdulrahman A Alatar, **Javed Musarrat**, Abdulaziz A Al-Khedhairy (2020) Role of Solvent System in Green Synthesis of Nanoparticles. In: Green Synthesis of Nanoparticles: Applications and Prospects (eds) Saquib, Q., Faisal, M., Al-Khedhairy, A.A., Alatar, A.A. PP 53-74. [ISBN 978-981-15-5179-6].
- 4. Ahmed, B., Khan, M.S., Saquib, Q., Al-Shaeri, M., **Musarrat, J.** (2018) Interplay Between Engineered Nanomaterials (ENMs) and Edible Plants: A Current Perspective In: Phytotoxicity of Nanoparticles, (Eds.) Faisal, M., Saquib, Q., Alatar, A.A., Al-Khedhairy, A.A. pp 63-102, Springer International Publishing AG,. **DOI:** 10.1007/978-3-319-76708-6 2. [ISBN 978-3-319-76708-6]
- 5. Dwivedi S., Saquib Q., Ahmad B., Ansari S.M., Azam A., **Musarrat J.** (2018) Toxicogenomics: A New Paradigm for Nanotoxicity Evaluation. In: Saquib Q., Faisal M., Al-Khedhairy A., Alatar A. (eds) Cellular and Molecular Toxicology of Nanoparticles. **Advances in Experimental Medicine and Biology**, vol 1048. Springer, Cham. DOI https://doi.org/10.1007/978-3-319-72041-8_9. Print ISBN: 978-3-319-72040-1.
- 6. Saquib, Q. Siddiqui, M.A., Ahmad, J., Ansari, S.M., Faisal, M., Wahab, R., Alatar, A.A., Al-Khedhairy, A. A., **Musarrat, J.** (2018) Nickel Oxide Nanoparticles Induced Transcriptomic Alterations in HEPG2 Cells. In: Saquib Q., Faisal M., Al-Khedhairy A., Alatar A. (eds) Cellular and Molecular Toxicology of Nanoparticles. Advances in Experimental Medicine and Biology, vol 1048. **Springer, Cham. DOI https://doi.org/10.1007/978-3-319-72041-8_10. Print ISBN: 978-3-319-72040-1**.
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Attended Conferences/Seminars/Symposia and other Academic sessions

- 1. Chaired the Inaugural Session of National Webinar on "Tourism and Covid: Road to Recovery" organized by the Faculty of Commerce & Business Management, Integral University on 3rd July, 2021.
- 2. Chaired the Inaugural Session of National Webinar on "Reading Mission-2022 Past, Present & Future of Reading' under 'National Education Policy-2020' organized by the Human Resource and Development Cell, Integral University on 5th July 2021.
- 3. Attended as Patron and Keynote Speaker, the Inaugural Session of the Two-Weeks FDP on "Changing Paradigm of Human Rights in Globalized World" organized by Faculty of Law, Integral University during 6th to 20th July, 2021.
- 4. Chaired the Inaugural Session of the National Webinar on "Academic Leadership and Institution Building: Some Reflections" organized by Faculty of Commerce & Business Management, Integral University on 12th July 2021.
- 5. Chaired and delivered a Keynote address in the Inaugural Session of the Two-Weeks PDP on "New Trends and Advancements in Bioengineering" organized by the Department of Bioengineering, Integral University during 15th to 29th Nov. 2021.
- 6. Guest of Honour in the National Campaign on "Antimicrobial Resistance in Fish" at ICAR-National Bureau of Fish Genetic Resources on 22nd Nov. 2021
- 7. Attended as Patron and Keynote Speaker, the Inaugural Session of the National Seminar on "Structural Reforms in Higher Education Proposed in the NEP 2020" organized by Human Resource Development Cell, Integral University on 24th August 2021.
- 8. Attended as Patron and Keynote Speaker, the Inaugural Session of the "World Antimicrobial Awareness Week 2021" organized by the Faculty of Pharmacy, Integral University during 18th to 24th Nov. 2021
- 9. Participated in Awareness Walk flagged by the Hon'ble Chancellor and the event was graced by the Hon'ble Pro-Chancellor and other high dignitaries and authorities the University.
- 10. Attended as Patron and Keynote Speaker, the Inaugural Session of the Inaugural Session of the two-weeks PDP "Recent Trends in Agriculture for Sustainable Food and Nutritional Security" by the Faculty of Agricultural Science and Technology, Integral University from 23rd Nov. to 7th Dec. 2021.
- 11. Attended as Patron and Keynote Speaker, the Inaugural Session of the Inaugural Session of the two-weeks PDP "Recent Trends in Agriculture for Sustainable Food and Nutritional Security" by the Faculty of Agricultural Science and Technology, Integral University from 23rd Nov. to 7th Dec. 2021.
- 12. Guest of Honour in the Inaugural Session of the National Symposium on "Immunization & Sustainable Health Innovations" for achieving "Sustainable Development Goal for Good Health and Well Being of the United Nations" organized by Integral Institute of Medical Sciences & Research, Integral University on 28th April 2022.

- 13. Keynote Speaker in the Inaugural Session of the "National Farmers Day" celebrated by the Faculty of Agricultural Science and Technology, Integral University on 12th March, 2022.
- 14. Bilal Ahmed, Asfa Rizvi, Almas Zaidi, Mohd. Saghir Khan, **Javed Musarrat** (2019) Understanding the Phyto-interaction of Heavy Metal Oxide Bulk and Nanoparticles: Evaluation of Seed Germination, Growth, Bioaccumulation, and Metallothionein Production. Presented at National Conference on "**Trends in Biochemical and Biomedical Sciences**" March 2-3, 2019, Department of Biochemistry, Faculty of Life Sciences, Aligarh Muslim University, Aligarh, India.
 - 15. Chief Guest in the National Symposium on "Psychological and Mental Health" during Covid Times ZHF Award Ceremony on 13th February 2022 organized by Dr. Zakir Husain Foundation, Aligarh.
 - 16. Chief Guest in the Installation Ceremony of "Alumni Welfare Association Qatar Chapter" of Integral University on 30th June 2022 at Hotel Sheraton Doha.
 - 17. Attended Consultative Meeting (online) on 'National Higher Education Qualifications Framework (NHEQF)' organized by UGC on 26.07.2022.
 - 18. Chief Guest in the National Seminar on 'Intellectual Property Rights' organized by the Central Council for Research in Unani Medicine, Ministry of Ayush, Government of India on 30.08.2022.
 - 19. Delivered a Keynote address in the 'Orientation Program-2022' organized by Integral University, Lucknow on 12.09.2022.
- 20. Presented Success Story of Integral University in 3rd Tech VC Conclave on 'NEP-2020 : A New Normal for Technical Education' at hotel the LaLiT Ashoka, Bangalore on 15th September 2022.
- 21. Distinguished Speaker and delivered a talk on "Realization of Sustainable Development Goals: An Overview" on 20.04.2022 in the Central Auditorium of Integral University to bring awareness about SDGs.
- 22. Khursheed Ali, Saher Fatima, Sabiha M. Ansari, Quaiser Saquib, Sourabh Dwivedi, Hend A. Alwathnani, Majed Al-Shaeri, Abdulaziz A. Al-Khedhairy, **Javed Musarrat** (2019) Aloe vera capped hematite nanoparticles amplify the oxidative stress, DNA damage and mitochondrial alterations to trigger apoptosis in human breast cancer (MCF-7) cells. **International Conference on Genomics and Proteomics Pertaining to Biological Sciences. Aligarh Muslim University, Aligarh, November 5-7, 2019**
- 23. Khursheed Ali, Bilal Ahmed, Sourabh Dwivedi, Quaiser Saquib, Abdulaziz A. Al-Khedhairy, **Javed Musarrat** (2018). Bio-inspired Eucalyptus globulus Terpenoids Encapsulated Copper (II) Oxide Nanoparticles Synthesis and Intracellular Uptake and ROS Mediated Killing of Bacterial and Human Breast Carcinoma (MCF-7) Cells. International Conference on Future Diagnostic, Therapeutic and Theranostics Modalities, Aligarh Muslim University, Aligarh, December, 29-31, 2018.
- 24. Bilal Ahmed, Sourabh Dwivedi, Mohammad Saghir Khan, Quaiser Saquib, Abdulaziz A. Al-Khedhairy, **Javed Musarrat.** Assessment of Oxidative Stress in Zn2+ Ions, ZnO-Bulk and ZnO-NPs treated Allium cepa roots. 17th International Conference on the Science of Botanicals, University of Mississippi, Oxford, MS, USA, April 3-6, 2017.

- 25. Khursheed Ali, Sourabh Dwivedi, Bilal Ahmed, Quaiser Saquib, Abdulaziz A. Alkhedhairy, Md. Saghir Khan1, **Javed Musarrat** (2017) Green synthesis of hematite (α-Fe2O3) nanoparticles using aqueous Aloe vera leaf extract and their antibacterial and antibiofilm activities. International Conference on Advances, In: Agricultural and Biodiversity Conservation for Sustainable Development. Chaudhary Charan Singh, University, Meerut, October 27-28, 2017.
- 26. Bilal Ahmed, Sourabh Dwivedi, Mohammad Saghir Khan, Quaiser Saquib, Abdulaziz A. Al-Khedhairy, **Javed Musarrat**. Assessment of Oxidative Stress in Zn2+ Ions, ZnO-Bulk and ZnO-NPs treated Allium cepa roots. **17th International Conference on the Science of Botanicals, University of Mississippi, Oxford, MS, USA, April 3-6, 2017.**
- 27. Bilal Ahmed, Mohammad Saghir Khan, and **Javed Musarrat** (2017) In vitro Assessment of Nano and Micro Forms Metal Oxides on Growth of Some Edible Plants, **National Conference on Biotechnology and Environment** (NCOBE-2017) jointly organized by Department of Biotechnology, Jamia Millia Islamia and National Environmental Science Academy (NESA) 10-11 April, 2017, JMI, New Delhi, India
- 28. Bilal Ahmed, Anam Hashmi, Mohammad Saghir Khan, and Javed Musarrat (2017) ROS mediated destruction of growth and biofilms of human bacterial pathogens by silver nanoparticles functionalized from bell pepper extract and quercetin, 58th Annual Conference of Association of Microbiologists of India & International Symposium on Microbes for Sustainable Development: Scope & Applications (MSDSA-2017), November 16-19, 2017, BBAU, Lucknow, India.
- 29. Sourabh Dwivedi, Ameer Azam, Rizwan Wahab, Abdulaziz A. Alkhedhairy, Javed Musarrat. Chitosan Biofunctionalized Gold Nanoparticles induced oxidative stress, cytotoxicity and DNA damage in cultured MCF-7 cells. International Conference On Nanotechnology (ALIGARH NANO-V) and STEM-Education and Research (STEM CON-16) March 12- 15, 2016.
- 30. Rumman Zaidi, Sourabh Dwivedi, Khursheed Ali, Ameer Azam, **Javed Musarrat**. Green synthesis of silver nanoparticles using Azadirachta indica aqueous leaf extract and their antibacterial and antibiofilm activity, International Conference On Nanotechnology (ALIGARH NANO-V) and STEM-Education and Research (STEM CON-16) (March 12-15, 2016)
- 31. Ameer Azam, Rumman Zaidi, Sourabh Dwivedi, **Javed Musarrat**. Methylene Blue photocatalysis using PANI/Ag/Graphene Nanoparticles and its broad spectrum antimicrobial and antibiofilm activity.
- 32. **J Musarrat**, K Ali, MA Ansari, Q Saquib, M Siddiqui, ST Khan, AA Alkhedhairy (2015) Green Synthesis of nanoparticles and their role as nano-antibiotics and antibiofilm agents. Planta Medica 01/2015; 81(5):OA44. DOI:10.1055/s-0035-1545126 · 2.34 Impact Factor.

- 33. Bilal Ahmed, Khursheed Ali, Sourabh Dwivedi, Quaiser Saquib, Abdulaziz A. Alkhedhairy, **Javed Musarrat** (2015). Allium cepa as A Model For Assessment of Cytotoxicity and Genotoxicity and Oxidative Stress Induced by Zinc Oxide Nanoparticles. Annual Conference of Association of Microbiologists of India", Jawaharlal Nehru University, New Delhi, December, 7-10, 2015.
- 34. Saher Fatima, Sourabh Dwivedi, Khursheed Ali, Quaiser Saquib, Abdulaziz A. Alkhedhairy and **Javed Musarrat**. Isolation And Characterization of Biofilm Forming Oral Bacteria and the role of abiotic stress on Biofilm Formation. Proceeding of the "Annual Conference of Association of Microbiologists of India", Jawaharlal Nehru University, New Delhi-December 7-10, 2015.
- 35. Zarrin Haris, Sourabh Dwivedi, Khursheed Ali , Quaiser Saquib, Abdulaziz A. Alkhedhairy and **Javed Musarrat** Impact of metal oxide nanoparticles on plant growth promoting rhizobacteria and their secondary metabolites. Annual Conference of Association of Microbiologists of India", Jawaharlal Nehru University, New Delhi-December 7-10, 2015.
- 36. Sourabh Dwivedi, Quaiser Saquib, Abdulaziz A. Al-Khedhairy ,Javed Ahmad, Maqsood A. Siddiqui, and Javed Musarrat (2014) Rhamnolipid Stabilized Silver Nanoparticles Induced Apoptosis in Human Breast Cancer Epithelial (MCF7) Cells. Proceedings of the International Conference on Recent Advances in Nanosciences and Nanotechnology (ICRANN-20014), Jawaharlal Nehru University, New Delhi-December 15-16, 2014.
- 37. Khursheed Ali, Bilal Ahmad, Sourabh Dwivedi, Mohd Azam Ansari, Quaiser Saquib, Abdulaziz A. Alkhedhairy and **Javed Musarrat** (2014) Green Synthesis and Characterization of Silver Nanoparticles with Eucalyptus globulus extract as Broad Spectrum Nano-antibiotics, Proceedings of the International Conference on Recent Advances in Nanosciences and Nanotechnology (ICRANN-20014), Jawaharlal Nehru University, New Delhi-December 15-16, 2014, India.
- 38. Tijo Cherian, Kursheed Ali, Sourabh Dwivedi, Quaiser Saquib, Abdulaziz Al-Khedhairy, **Javed Musarrat** (2015) Zinc oxide nanoparticles as potential antibacterial agent against the multidrug resistant *Escherichia coli* clinical isolates. Proceedings of the 2nd International Conference on Nanostructured Materials and Nanocomposites, Mahatma Gandhi University, Kottayam, Kerala, December 19-21, 2014, India.
- 39. Saquib Q, Al-Khedhairy A.A, Ahmad J, Siddiqui MA, Faisal M, Dwivedi S, **Musarrat J** (June 10-13, 2014). Toxicogenomic Investigation on Nickel Oxide Nanoparticles (NiO-NPs): Connections among Gene Function, DNA Damage and Cell Death. Proceedings of ESTIV 2014, June 10-13, 2014, Egmond ann Zee, The Netherlands.
- 40. Saquib Q, Al-Khedhairy A.A, Siddiqui MA, Ahmad J, Dwivedi S, Khan ST, **Musarrat J** Toxicogenomic Changes, Oxidative Stress and DNA Damage are Key Factors for Nanoparticles Induced Cellular Anomalies: An Insight into the Molecular Mechanism

- of Cell Death. Proceedings of Nanosafety 2013, November 20-22, 2013, Saarbrucken, Germany.
- 41. **Javed Musarrat**, Sourabh Dwivedi1, Quaiser Saquib1, Abdulaziz A. Al-Khedhairy (2013) Effective control of bacterial biofilm and selective killing of human breast cancer epithelial (MCF-7) cells through rhamnolipid stabilized silver nanoparticles, Proceedings of the BIT's 3rd Annual World Congress of NanoSciences & Technology-2013, during September 26-28, 2013, Xian, China
- 42. **J. Musarrat**, Mohd. Faisal, S Dwivedi, Quaiser Saquib, AA Al-Khedhairy. "Nanoparticles-induced cellular and genetic damage in Lycopersicon esculentum: A study on mechanism of cell death plants" in "12th Annual Oxford International Conference on the Science of Botanicals (ICBS)" during April 15-19, 2013 at Oxford, Mississippi, USA
- 43. Abdullah Al-Salem, Maqsood A Siddiqui, Abdulaziz A Al-Khedhairy, Saud Alarifi, **Javed Musarrat**. "Titanium dioxide and Zinc fluoride nanoparticles induced cellular morphology and cytotoxicity in MCF-7 cells" in "27th Annual Meeting of Saudi Biological Sciences" and a symposium on "Economics of Environment and Natural Resources" during March 6-8, 2012, College of Science, Jazan University, Jazan, Saudi Arabia.
- 44. MA Siddiqui, M Ahamed, J Ahmad, Q Saquib, R Wahab, ST Khan, S Dwivedi, A Al-Salem, AA Al-Khedhairy, **J Musarrat**, AB Pant. "4-Hydroxynonenal induced apoptotic changes in PC12 cells: Protection by trans- resveratrol" in "27th Annual Meeting of Saudi Biological Sciences" and a symposium on "Economics of Environment and Natural Resources" during March 6-8, 2012, College of Science, Jazan University, Jazan, Saudi Arabia.
- 45. Rizwan Wahab, Maqsood A Siddiqui, Maqusood Ahamed, Javed Ahmad, Abdullah Al-Salem Abdulaziz A Al-Khedhairy, **Javed Musarrat**. "Use of zinc oxide nanoparticles as an anti-microbial Nanomedicine" in "27th Annual Meeting of Saudi Biological Sciences" and a symposium on "Economics of Environment and Natural Resources" during March 6-8, 2012, College of Science, Jazan University, Jazan, Saudi Arabia.
- 46. J Musarrat, Q Quaiser Saquib, S Dwivedi, A Al-Salem, M A Siddiqui, AA Al-Khedhairy. "Assessment of DNA Damage, Mutagenesis and Anti-Mutagenic Activity of Unani (Greek) Herbal Medicines" in "11th Annual Oxford International Conference on the Science of Botanicals (ICBS)" during April 16-19, 2012 at Oxford, Mississippi, USA.
- 47. Quaiser Saquib, **Javed Musarrat**, Abdul-Aziz A Al-Khedhairy, Maqsood A Siddiqui, Sourabh Dwivedi, Sabry M. Attia. "An Insight into the cellular and molecular mechanism of pesticide toxicity" in "Montreal 2012 International Biomedicine & Chemistry Forum" during April 26-27, 2012 at EPS Global Medical Development Inc., Montreal, Quebec, Canada.

- 48. M Atif, MS AlSalhi, V Masilamani, MA Siddiqui, and **J Musarrat**. "Spectral characterization of cultured normal and malignant cells" in "21th International Laser Physics Workshop (LPHYS'12) during July 23–27, 2012 at Calgary, Canada.
- 49. **Javed Musarrat**, Quaiser Saquib, Maqsood A Siddiqui, Sourabh Dwivedi, Javed Ahmad, and Abdulaziz A. Al-Khedhairy. "Novel approaches for assessment of metal oxide nanoparticles induced oxidative stress, DNA damage and mutagenesis" in "The XXXII Annual Conference of Society of Toxicology (STOX), India and International Symposium on New Frontiers in Toxicology" on "New Paradigms in Toxicology (NPT-2012)" during December, 5-7, 2012 at CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, India.
- 50. Nida N Farshori, Ebtsam S Al-Sheddi, Mai M Al-Oqail, Wafaa HB Hassan, Abdulaziz Al-Khedhairy, **Javed Musarrat**, Maqsood A Siddiqui, Aditya B Pant. "Hepatoprotective potential of Lavandula coronopifolia extracts against ethanol induced oxidative stress mediated cytotoxicity in HepG2 cells" in "The XXXII Annual Conference of Society of Toxicology (STOX), India and International Symposium on New Frontiers in Toxicology" on "New Paradigms in Toxicology (NPT-2012)" during December, 5-7, 2012 at CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, India.
- 51. MA Siddiqui, NN Farshori, M Ahamed, J Ahmad, AA Al-Khedhairy, **J Musarrat** and AB Pant. Ameliorative effects of trans-resveratrol on 4-hydroxynonenal induced apoptosis in cultured neuronal cells in "The XXXII Annual Conference of Society of Toxicology (STOX), India and International Symposium on New Frontiers in Toxicology" on "New Paradigms in Toxicology (NPT-2012)" during December, 5-7, 2012 at CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, India.
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- 53. Maqusood Ahamed, Maqsood A Siddiqui, Javed Ahmad, **Javed Musarrat**, Abdulaziz A. Al-Khedhairy, Mohamad S. AlSalhi, Salman A. Alrokayan. "Nickel ferrite nanoparticles induced oxidative stress and apoptosis in human lung epithelial cells" in "26th Annual Meeting of Saudi Biological Sciences" and a symposium on "Climate Change and Biodiversity" during May 10-12, 2011 at College of Science, Taif University, Taif, Saudi Arabia.
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