




Resume (Prof. Mahima Kaushik)

Title	Dr. (Mrs.)	Name	Mahima Kaushik	Photograph
Designation	Professor			
Department	Cluster Innovation Centre (CIC), University of Delhi, Delhi			
Residential Address	Saraswati Vihar, Pitampura, Delhi			
Phone	011-27666702 (Ext: 205)			
Email	mkaushik@cic.du.ac.in kaushikmahima@yahoo.com			
Google Scholar link: https://scholar.google.co.in/citations?user=PZ-8nBQAAAAAJ&hl=en&oi=ao Research Gate Link: https://www.researchgate.net/profile/Mahima_Kaushik4 Research ORCID: 0000-0002-6453-076X				
Educational Qualifications				
Degree	College/University		Year	
Ph.D.	Department of Chemistry, University of Delhi, Delhi		2003	
M.Phil.	Department of Chemistry, University of Delhi, Delhi		1999	
M.Sc.	M.M. College, CCS University, Meerut		1997	
Post-Doctoral Fellowship	University of Nebraska Medical Center (UNMC), Omaha (Nebraska), USA		2004	
D.S.T. Scientist (Principal Investigator)	“Young Scientist Project” under FAST TRACK Scheme from Department of Science and Technology		2005	
Boyscast Fellowship	Dept. of Science and Technology (D.S.T.), Gov. of India for working in an eminent research laboratory in USA.		2011	
Vice Chancellor’s Fellowship	University of Delhi, Delhi		2014	
Career Profile (Academic/Research Experience)				
Research experience: Almost 18-20 years now. Ph.D. students: 03 awarded, 03 are undergoing. Teaching experience at Colleges: <ul style="list-style-type: none">• Cluster Innovation Centre, University of Delhi, Delhi (From March, 2015 onwards)• Ramjas College, University Campus, Delhi University (From 22-Aug 2006 – March, 2015)• Ramjas College, University Campus, Delhi University (From Sep 2002 – Feb 2004)• Engaged in MSc. Practicals, Department of Chemistry, Univ. of Delhi, Delhi (2005).• Kalindi College, Delhi University (From Jan 2002 – Sep. 2002)				
Administrative/Cultural/Extra-Curricular Assignments				
AT CLUSTER INNOVATION CENTRE: <ul style="list-style-type: none">• Program Coordinator, B. Tech. (IT & Mathematical Innovations) [1st March., 2021 till 30th June, 2023]• Member, Committee for DIC incubators and start ups at CIC (2022-till date)• Member, Academic Committee (2022-23)				

- Member, Infrastructure and Purchase Committee, (2022-23)
- Member, Admission committee (2022-23)
- Member, IQAC and Annual reports committee (2022-23)
- Member Secretary, Staff Council, CIC (July, 2017-June, 2022)
- Member, Examination Committee (2021-22)
- Member, Purchase committee (2021-22)
- Member, Library committee, CIC (2017-22)
- Member, Innovation Cell, CIC (2018-20)
- Convener, Student Grievance Committee, CIC (2015-21)
- Member, Academic committee, CIC (2017-19)
- Coordinator, Project Committee, B. Tech. (2017-18)
- Member, Hostel committee, CIC (2017-22)
- Nodal Officer, Admissions for B. Tech (IT and MI) at Cluster Innovation Centre (2016-17)
- Coordinator, Examination Committee of B.Tech. (IT and MI) (May, 2016 & Dec., 2015)
- Member, Maintenance Committee (2016-17)
- Member, Admission Committee of B. Tech (IT and Mathematical Innovations) (2015-2017)
- Member, Selection Committee for Admission to B. Tech (IT and Mathematical Innovations) (Aug., 2015)
- Hostel In-charge, Cluster Innovation Centre (2016-17) and (2015-16)
- Compiled Data for NAAC report of CIC (2015 and 2016)
- Given inputs for question paper of entrance examination for B. Tech. (IT and MI), (2015 and 2016)
- Member, Technical Committee for the purchase
- Involved in syllabus revision of B. Tech. (IT & MI) (2018-19) as per choice-based credit system (CBCS) and in April-July, 2022 as per National Education Policy 2020 (UGCF)
- Nodal officer, E. Resources upload on CIC website (2020); During Covid

At Department of Chemistry:

- Involved in Syllabus making and approval of research and methodology course for Ph.D. Course work

National Level:

- Participated as “Jury Member” for INSPIRE awards by Department of Science and technology (D.S.T., Gov. of India); National level Exhibition & project competition (NLEPC)-2012 (October 21-22, 2012).
- Worked for Science Paper setting for National Talent Search Examination (NTSE) by NCERT in schools for various consecutive years

University Level:

- Provost, Rajiv Gandhi Hostel for Girls, University of Delhi (17th April 2023-till date)
- Treasurer, Governing Body, Indira Gandhi Institute of Sports Sciences, University of Delhi, Vikaspuri, Delhi (----- 2022- 26th march. 2022; ----- Governing body Meeting resolution)
- Member, Governing Body, Indira Gandhi Institute of Sports Sciences, University of Delhi, Vikaspuri, Delhi (2022-23)
- Treasurer, Governing Body, Indira Gandhi Institute of Sports Sciences, University of Delhi, Vikaspuri, Delhi (17th Sept. 2021- 11 Jan. 2022; 95th Governing body Meeting resolution)
- Member, Screening Committee for the promotion of Assistant Professor, Associate Professor and Professor in IGIPSS College (April-June 2021)
- Member, Governing Body, Indira Gandhi Institute of Sports Sciences, University of Delhi, Vikaspuri, Delhi (2021-22)
- Member, Organizing Committee, 6th World congress on Nanomedical Sciences (ISNSCON 2018), Organized by Department of Chemistry, University of Delhi and Jamia Hamdard at Vigyan Bhawan, Delhi (7-9 Jan., 2019)

- Member, organizing Committee; QUEST 2017, held at CIC, University of Delhi (Different rounds on 15th Feb., 18th Feb., 29th March, 30th March, 2017); participation from various colleges of DU
- Worked as “Deputy Coordinator” North Campus in the Workshop on Theory and Practical Course “Biochemistry and Environmental chemistry” at Department of Chemistry, University of Delhi, Delhi (2nd July – 7th July, 2012).

College Level:

- Staff Advisor, Dept. of Chemistry, DBT Star College Project at Ramjas College, University of Delhi, Delhi. (2012-13 and 2013-14).
- Joint Secretary, Staff Association, Ramjas College (2013-2014).
- Member of Executive Council, Staff Association (2013-14)
- Member, Monitoring Committee, Ramjas College (2013-2014)
- Member, Library Committee, Department of Chemistry (2010-11)
- Member (Hostel Committee, Ramjas College), (2009-11)
- Member (Students Welfare Committee, Ramjas College), (2009-11)
- Member, Academic Standard Committee, Ramjas College (2010-11)

Department Level:

- Member Advisory Committee, “International Conference on Interface between Chemistry and Environment (ICICE)” Ramjas College (13-14 December, 2012).
- Member Organizing Committee “National Workshop on Renewable Energy & Environment”, conducted by Department of Chemistry, Ramjas College, University of Delhi, (28-29 January, 2011).
- In-charge, Chemistry Society, Dept. of Chemistry, Ramjas College (2007-09). Organized One day function of the same including two lectures from Eminent Professors followed by poster, quiz and other competitions

Extra-Curricular:

- Participated in “ANTARDHVANI 2014”; A Multi-Dimensional Cultural Festival: organized by University of Delhi and displayed a poster exhibiting the activities of the “Innovation Project-RC 201) and a “Vice Chancellor’s Fellow Stall”. (February 14-16, 2014)
- Participated in “ANTARDHVANI 2013”; A Multi-Dimensional Cultural Festival: organized by University of Delhi and displayed a poster exhibiting the activities of the Star College Project in the year 2012-13. (February 22-24, 2013)
- Convener, Photography Club (2007-08)

Areas of Interest / Specialization

Nanobiotechnology (Synthesis and characterization of nano-bioconjugates for their applications in bio sensing, gene/ drug delivery) and environmental applications etc.; Biophysical aspects of DNA and it’s multistranded structures along with their Interactions with various ligands (Drug/Metal Ions/ Protein Interactions etc.) and Structural Biology especially of Nucleic acids and proteins.

UG/PG Subjects Taught and Research Guidance

(a) Undergraduate:

Semester Mode:

- **B. Tech. (Information Technology and Mathematical Innovations):**

As per NEP 2020 syllabus

Engineering Chemistry -I and II

Revised syllabus 2019; CBCS mode

Paper V. 6.3. Biological instrumentation Kitchen: Genomics and Proteomics;

Paper VI. 6.3. Genes to Genomes;

Paper I. 7 (FC) Environment Science & Ecosystem Management

Old Syllabus:

Paper III. 6.3 Cell: Biochemical and Molecular perspective; Paper IV. 6.3. Flow of information in living systems; Paper V. 6.3. Applied Genomics and Proteomics; Paper VII. 5.2. Engineering at Molecular Scale: Devices and Nanotechnology

- B.Sc. (Hons.) Chemistry Sem.V; Paper CHHT-514, Biochemistry & Env. Chemistry
- B.Sc. (Hons.) Chemistry Sem. V; Paper CHHT-512, Organic Chemistry

Annual Mode:

- B.Sc. (Hons.) Chemistry III Year; Paper XV, Organic Chemistry
 - B.Sc. (Prog.) III Year; Paper CH-302, Organic Chemistry
 - B.Sc. (E.V.S) III Year; Paper V, Toxic Chemicals in the Environment & Methods of Environmental Evaluation
 - B.Sc. (Hons.) Chemistry I Year; Paper VI (b), Environmental Chemistry
 - B.Sc. (Prog.) I Year; Paper CH-103 (Unit V & VI), Organic Chemistry
 - B.Sc. (Hons.) Physics I Year, Organic Chemistry
 - BSc. (Hons.) subsidiary I Year, Organic Chemistry
- (b) **Post-Graduate:** Assisted in M.Sc. Practicals at Dept. of Chemistry, Univ. of Delhi, Delhi
- (c) **Ph.D. course work** in Department of chemistry on Biomolecules (2017-18) and Research & Methodology (2017-18 and 2018-19)
- (d) **Research Guidance/ Ph.D. Research Scholars:** Two Ph.D. have been awarded under my supervision and four Ph.Ds are undergoing. Mentoring various projects of B.Tech. (IT and MI) students at CIC. Also, Guiding Post-Graduate and Graduate students for their internships.
- (e) **Summer Internships/ Semester long projects / Class projects:** A large number of projects are carried out in my research laboratory with undergraduate students every year from CIC itself and various colleges of not only Delhi University, but also from various other institutions/ Universities from India

Research Projects

1. **Faculty Research Project (FRP 2022-23) from Institute of Eminence (IOE), University of Delhi**
2. **Faculty Research Project (FRP 2021-22) from Institute of Eminence (IOE), University of Delhi**
3. **Faculty Research Project (FRP 2020-21) from Institute of Eminence (IOE), University of Delhi**
4. **TARE (Teachers Associateship for Research Excellence) Grant (Oct., 2019- Oct. 2022)** as Mentor from Science and Engineering Research Board of Dept. of Science and Technology (DST, Gov. of India) [project entitled- ‘Physicochemical Investigations ofgene’]
5. **Seed Grant** (2015-16) from University of Delhi, Delhi
6. **Innovation Project** as Principal Investigator from Univ. of Delhi, Delhi (2015-16); [(Title: Holistic Approach of Fighting Cancer: From Prevention to Cure (CIC 306)],
7. **Research and Development Grant** from University of Delhi, Delhi (2015-16),
8. **Innovation Project** as Principal Investigator from Univ. of Delhi, Delhi (2013-15) [(Title: Exploring the use of Biocatalysis in laboratory chemical reactions: A Green Chemistry Approach. (RC 201)]
9. **“YOUNG SCIENTIST PROJECT”** under FAST TRACK Scheme, from DST, Gov. of India, (April, 2005); [(Title: Physico-chemical and Biochemical Investigations of the polymorphic DNA (RNA) sequences present in regulatory region of the beta-globin gene cluster.]

Research Publications (TOTAL IMPACT FACTOR > 200)

S. No	Authors	Year / ISSN No./ Publisher	Title of paper	Name of the Journal	Vol. / Impact factor	Pages
54.	Pankaj Kumar, Amit Singh, Niloy Sarkar, Mahima Kaushik*	2023 / Print ISSN: 1359-5113 / Elsevier	Role reversal of silica nanoparticles with bovine trypsin from enzyme inhibitor to enzyme activator on surface modification	Process Biochemistry	IF 4.885	Accepted
53.	Amit Singh, Shivangi Bora, Sonia Khurana, Pankaj Kumar, Niloy Sarkar, Ritushree Kukreti, Shrikant Kukreti, Mahima Kaushik*	2023/ Print ISSN: 1773-2247 / Elsevier	Advance nanotherapeutic approach for systemic co-delivery of mitoxantrone loaded chitosan coated PLGA nanoparticles to improve the chemotherapy against human non-small cell lung cancer.	Journal of Drug Delivery Science and Technology	IF 5.062	Accepted
52.	Mahima Kaushik*, Niloy Sarkar, Amit Singh, Pankaj Kumar	2023/ Print ISSN: 2235-2988 / Frontiers	Nanomaterials to address the genesis of antibiotic resistance in <i>Escherichia coli</i> .	Frontiers in Cellular and Infection Microbiology	IF 6.073	Accepted
51.	Komal, S. Kukreti, M. Kaushik*	2023 / eISSN: 1572-896X; Print ISSN: 1388-0764	A comparative catalytic kinetics study for exploring dye degradation potential of silver, gold and palladium nanoparticles	Journal of Nanoparticle Research	IF 2.531	Accepted
50.	Vaibhav Mehra, Niloy Sarkar, Bibhunanda Biswal, Mahima Kaushik*	2023 / Print ISSN: 0892-7022 / Taylor and Francis	Simulation of Nanocarrier Based Targeted delivery of an antidepressant for Major depression disorder (MDD)	Molecular Simulation	IF 2.346	Accepted
49.	S. Chaudhary, Pankaj Kumar, M. Kaushik*	2022 / ISSN: 0141-8130 / Elsevier	Exploring the interaction of Guanidine ligands Amiloride, Rimemoride and Cariporide with DNA for understanding their role as inhibitors of Na ⁺ /H ⁺ Exchangers (NHEs): A spectroscopic	International Journal of Biological Macromolecules	213 IF 8.025	834-844

			and molecular docking investigation			
48.	Sonia, Amit Singh, Shivangi Bora, R. Kukreti, S. Kukreti, M. Kaushik*	2022 / ISSN: 0928-4931 / Elsevier	Probing multifunctional azure B conjugated gold nanoparticles with serum protein binding properties for trimodal photothermal, photodynamic, and chemotherapy: Biophysical and photophysical investigations	Material Science and Engineering C (changed to Biomaterials Advances)	134 IF 7.328	1126 78
47.	S. Chaudhary, Mohan Kumar, M. Kaushik*	2022 / ISSN: 0141-8130, Elsevier	Interface of G-quadruplex with both stabilizing and destabilizing ligands for targeting various diseases	International Journal of Biological Macromolecules	219 IF 8.025	414- 427
46.	P. Kumar, N. Sarkar, A. Singh, M. Kaushik*	2022 / ISSN: 1043-1802 American Chemical Society	Nanopaper Biosensors at Point of Care	Bioconjugate Chemistry	33 (6) IF 6.069	111 4- 113 0
45.	N. Nain, A. Singh, S. Khan, M. Kaushik, S. Kukreti*	2022 / ISSN: 0141-8130, Elsevier	Structural Switching/polymorphism by sequential base substitution at quasi-palindromic SNP site (G → A), in LCR of Human β -globin Gene cluster	International Journal of Biological Macromolecules	201 IF 8.025	216- 225
44.	N. Sarkar, A. Singh, P. Kumar, M. Kaushik*	2022 / ISSN: 2194-9379 Thieme Medical Publishers	Protein kinases: Role of their dysregulation in carcinogenesis, identification, and inhibition	Drug Research	 IF 0.326	
43.	Sonia, Komal, S. Kukreti, M. Kaushik*	2021 / Elsevier	Gold Nanoclusters: An Ultrasmall Platform For Multifaceted Applications	Talanta	234 IF 6.556	122 623
42.	Sonia, Koma, S. Kukreti, M. Kaushik*	2021 / Elsevier	Designing a two-stage colorimetric sensing strategy based on citrate reduced gold nanoparticles: Sequential detection of Sanguinarine (anticancer drug) and visual sensing of DNA	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	246 IF 4.831	119 039

41.	N. Sarkar, R.S. Sharma, Mahima Kaushik*	2021 / Springer	Innovative application of facile single pot green synthesized CuO and CuO@APTES nanoparticles in nanopriming of <i>Vigna radiata</i> seeds	Environmental Science and Pollution Research	28 (11) IF 5.191	132 21- 132 28
40.	S. Chaudhary, Amit Singh, P Kumar, M Kaushik*	2021 / Wiley Online Library	Strategic targeting of non-small-cell lung cancer utilizing genetic material-based delivery platforms of nanotechnology	Journal of Biochemical and Molecular Toxicology,	IF 3.642	e22 784
39.	N. Yadav, Amit Singh, M. Kaushik*.	2020 / Springer	Hydrothermal Synthesis and Characterization of magnetic Fe ₃ O ₄ and APTS coated Fe ₃ O ₄ nanoparticles: Physicochemical investigations of interaction with DNA	Journal of Materials Science: Materials in Medicine	31 (68) IF 4.727	1-11
38.	N. Yadav, Amit Singh, M. Kaushik*	2020/ ISSN: 2585-7290 (Print) 1336-9075 (Online) Springer	Synthesis and characterization of hydrothermally synthesized superparamagnetic APTS-ZnFe ₂ O ₄ nanoparticles: DNA binding studies for exploring biomedical application	Chemical Papers	74 (4) IF 2.146	1177 -88
37.	S. Chaudhary, M. Kaushik, S. Ahmed, S. Kukreti*	2020 / Elsevier	Exploring potential of i-motif DNA formed in the promoter region of GRIN1 gene for nanotechnological applications	Results in Chemistry	2	100 086
36.	N. Sarkar, R.S. Sharma, Mahima Kaushik*	2020 / Online ISSN: 1522-7243 Wiley	Green synthesis and physiochemical characterization of nickel oxide nanoparticles: interaction studies with calf thymus DNA.	Luminescence (The Journal of Biological and Chemical Luminescence)	35 IF 2.613	178- 186
35.	M. Kumar, M. Kaushik, S. Kukreti	2020 / Elsevier	Interaction of a photosensitizer Methylene Blue with various structural forms (cruciform, bulge duplex and hairpin) of designed DNA sequences.	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	21 (242) IF 4.831	118 716

34.	S. Kaushik, M. Kaushik, R. Barthwal, S. Kukreti	2020 / Elsevier	Self-association of Coralyne: An ordered thermal destacking	Results in Chemistry		100 043
33.	M. Kaushik*, S. Maheshwari, R. Raghunand	2020 / ISSN: 1573-3947 (Print) Bentham	Exploring Promises of siRNA in Cancer Therapeutics	Current Cancer Therapy Reviews	16 (1)	29-35
32.	Komal, Sonia, S. Kukreti, M. Kaushik*	2019 / ISSN: 1011-1344 Elsevier	Exploring the potential of environment friendly silver nanoparticles for DNA interaction: Physicochemical approach	Journal of Photochemistry and Photobiology Part B	194 IF 6.814	158-165
31.	Amit Singh, Neelam, Mahima Kaushik*	2019 / ISSN: 2211-3797 Elsevier	Physicochemical Investigations of Zinc oxide Nanoparticles Synthesized from <i>Azadirachta Indica</i> (Neem) Leaf Extract and Their Interaction with Calf-Thymus DNA	Results in Physics	IF 4.565	1021 68
30.	Neelam, Mahima Kaushik*	2019 ISSN: 2455-0191 (online) JNST	Physicochemical Interactions of APTS-ZnFe ₂ O ₄ Nanoparticles with Bovine Serum Albumin (BSA): Biomedical Applications	Journal of Nanoscience and Technology	5 (4)	776-779
29.	N. Sarkar, R.S. Sharma, Mahima Kaushik*	2020 / Print ISSN 0250-541X Springer	Exploring the Potential of DNA/RNA Aptamers in National Security	National Academy of Science Letters	43 (2)	187-190
28.	M. Kaushik*, S. Mahendru, S. Chaudhary, M. Kumar, S. Kukreti	2019 / ISSN: 1573-3947 (print) Bentham	Prerequisite of a Holistic Blend of Traditional and Modern Approaches of Cancer Management	Current Cancer Therapy Reviews	15 (1)	56-64
27.	Sonia, Komal, S, Kukreti, M. Kaushik*	2018 / ISSN: 0141-8130, Elsevier	Exploring the DNA Damaging Potential of Chitosan and Citrate-reduced gold nanoparticles: Physicochemical Approach	International Journal of Biological Macromolecules	115 IF 8.025	801-810

26.	S. Ahmed, M. Kaushik, S. Chaudhary, S. Kukreti	2018 / ISSN: 0141-8130, Elsevier	Structural polymorphism of a Cytosine-rich DNA Sequence forming i-motif structure: Exploring pH based biosensors	International Journal of biological macromolecules	111 IF 8.025	455-461
25.	M. Kaushik,* Sonia, Komal, Neelam, S. Mishra, S. Kukreti	2018 / ISSN: 1381-6128 (Print) Bentham	Emerging Trends in Advanced Nanomaterials Based Electrochemical Genosensors	Current Pharmaceutical Design	24 (31) IF 3.310	3697-3709
24.	M. Kumar, M. Kaushik, S. Kukreti*	2018 / ISSN: 0175-7571 Springer	A topological transition from bimolecular quadruplex to G-triplex/ tri-G-quadruplex exhibited by truncated double repeats of human telomere	European Biophysics Journal	47 IF 2.094	903-915
23.	S. Chaudhary, M. Kaushik, S. Ahmed, R. Kukreti and S. Kukreti*	2018 / ISSN: 2470-1343 American Chemical Society	Structural switch from hairpin to duplex/ antiparallel G-quadruplex at Single Nucleotide Polymorphism (SNP) site of human Apolipoprotein E (APOE) gene coding region.	ACS Omega	3 (3) IF 4.132	3173-3182
22.	S. Ahmed, M. Kaushik, S. Chaudhary, and S. Kukreti	2018 / Print ISSN: 0006-3525 Wiley	Formation of G-wires, bimolecular and tetramolecular quadruplex: Cation induced structural polymorphs of G-rich DNA sequence of Human <i>SYTX</i> gene.	Biopolymers	109 (5) IF 2.5	e23115
21.	M. Kaushik,* A. Singh, M. Kumar, S. Chaudhary, S. Ahmed, & S. Kukreti	2017 / ISSN: 1568-0266 Bentham	Structure-Specific Ligand Recognition of Multistranded DNA Structures	Current topics in medicinal chemistry	17(2) IF 3.57	138-147
20.	S. Chaudhary, M. Kaushik, R. Kukreti, S. Kukreti	2017 / ISSN: 1742-2051 Royal Society of Chemistry	Structural switch from multistranded G-quadruplex to single strands as a consequence of point mutation in the promoter of human GRIN1 gene	Molecular Biosystems	13 IF 3.743	1805-16
19.	M. Kaushik,* Sonia, S. Mahendru,	2017 / ISSN: 1058-4587	Multiple dimensions of functional relevance of Genosensors	Integrated Ferro-electrics	185 (1)	134-143

	P. Tyagi, S. Kukreti	Taylor & Francis				
18.	M. Kaushik,* S. Chaudhary, S. Mahendru, S. Ahmed, A. K. Pathak, S. Kukreti	2017 ISSN: 2212- 697X Bentham Science	MicroRNA: A Multi- Facet Biological Target for Cancer and Other Diseases	Clinical Cancer Drugs	4(1)	2-9
17.	M. Kaushik*, S. Kaushik, S. Kukreti	2016/ 2.5 ISSN: 1093- 9946.	Exploring the characterization tools of Guanine-quadruplexes	Frontiers in Bioscience	21 IF 4.0	468- 78
16.	M. Kumar, M. Kaushik, S. Kukreti	2016 / ISSN: 0976- 3961	Interaction of an electrochemical redox indicator New Methylene Blue with DNA using biophysical techniques	Advanced Materials Letters	1 (1) IF 1.5	38- 45
15.	M. Kaushik*, P. Sinha, P. Jaiswal, S. Mahendru, K. Roy and S. Kukreti	2016 / ISSN: 1099- 1352 Wiley	Protein engineering and de novo designing of a biocatalyst	Journal of Molecular Recognition	29 IF 2.891	499- 503
14.	M. Kaushik*, S. Kaushik, K. Roy, A. Singh, S. Mahendru, M. Kumar, S. Chaudhary, S. Ahmed, S. Kukreti	2016 / ISSN: 2405- 5808 Elsevier	A Bouquet of DNA Structures: Emerging Diversity	Biochemistry and Biophysics Reports	5	388- 395
13.	M. Kaushik, S. Kukreti,	2015 / ISSN: 0739- 1102 Taylor and Francis	Differential structural status of the RNA counterpart of an undecamer quasi- palindromic DNA sequence present in LCR of human β -globin gene cluster	J. of Biomolecular Structure and Dynamics	3 (2) IF 3.2	244- 152
12.	M. Kaushik*	2015	Exploring Renewable Energy Sources: Need of the hour	DU J. of UG Research and Innovation	1 (3)	67- 74
11.	M. Kaushik*, S. Kaushik and S. Kukreti	2014 / ISSN: 2038- 0321	Advancement in the structural polymorphism of G-quadruplexes	International review of Biophysical chemistry	5 (2)	37- 46

10.	M. Kaushik, S.Kaushik, A.Bansal, S.Saxena, S.Kukreti	2011 / ISSN: 1566-5240 Bentham	Structural Diversity and Specific Recognition of four stranded G-quadruplex DNA	Current Molecular Medicine	11 IF 2.9	744-769
9.	S. Kaushik, M. Kaushik, F. Svinarchuk, C. Malvy, S.Fermandjian, S.Kukreti	2011 / ISSN: 1520-4995 Americal Chemical Society	Presence of divalent cation is not mandatory for the formation of intramolecular purine-motif triplex containing human c-jun protooncogene target.	Biochemistry	50 IF 3.321	4132 – 4142
8.	S. Kukreti, H. Kaur, M. Kaushik, A. Bansal, S. Saxena, S. Kaushik, R. Kukreti	2010 / ISSN: 0300-9084	Structural polymorphism at LCR and its role in beta-globin gene regulation.	Biochimie	92 (9) IF 4.372	1199-206
7.	M. Kaushik, M.Prasad, S.Kaushik, A.Singh, S. Kukreti.	2010 / ISSN: 0006-3525	Structural transition from dimeric to tetrameric i-motif, caused by the presence of TAA at the 3'-end of human telomeric C-rich sequence.	Biopolymers	93 (2) IF 2.3	150-160
6.	M. Kaushik, A. Bansal, S. Saxena, S. Kukreti.	2007 / ISSN: 1520-4995 American chemical society	Possibility of an Antiparallel (Tetramer) Quadruplex Exhibited by the Double Repeat of the Human Telomere.	Biochemistry	46 IF 3.321	7119 - 7131
5.	M. Kaushik, N. Suehl, Luis A Marky	2007 / ISSN: 0301-4622	Calorimetric unfolding of the bimolecular and i-motif complexes of the human telomere complementary strand, d(C ₃ TA ₂) ₄ .	Biophysical Chemistry	126 (1-3) IF 3.628	154-64
4.	M. Ganguly, F. Wang, M. Kaushik, M. P. Stone, L. A. Marky and B. Gold.	2007 / ISSN: 0305-1048 Oxford University Press	A study of 7-deaza-2'-deoxyguanosine-2'-deoxycytidine base pairing in DNA	Nucleic Acids Research	35 (18) IF 19.16	6181-95
3.	M. Kaushik and S. Kukreti	2006 / ISSN: 0305-1048 Oxford University Press	Structural polymorphism exhibited by a quasi-palindrome present in the locus control region (LCR) of the human β -globin gene cluster	Nucleic Acids Research	34 IF 19.16	3511 - 3522

2.	M. Kaushik, R. Kukreti, D. Grover, S.K. Brahmachari, and S. Kukreti	2003 / ISSN: 0305- 1048 Oxford University Press	Hairpin-Duplex equilibrium reflected in A→B transition in an undecamer quasi- palindrome present in locus control region (LCR) of Human β - globin gene cluster	Nucleic Acids Research	31 IF 19.16	6904 - 6915
1.	M. Kaushik, and S. Kukreti	2003 / ISSN: 1873-3557	Temperature induced hyperchromism exhibited by Hoechst 33258: Evidence of drug aggregation from UV- Melting method.	Spectrochimica Acta, Part A	59 IF 4.831	3123 - 3129

TOTAL IMPACT FACTOR ~ 200

BOOK CHAPTERS

9. SPRINGER NATURE (2022)

Antibiotic-Resistant Bacteria (ARB) and Antibiotic-Resistance Genes (ARGs) in agriculture: A rising alarm for future

Stephen Browne, Sparsh Bhatia, Niloy Sarkar, **M. Kaushik***

Degradations of Antibiotics and Antibiotic Resistance Bacteria from various sources (Book)

8. SPRINGER NATURE (2021)

Nano-fertilizers and Nano-pesticides as Promoters of Plant Growth in Agriculture

N. Sarkar, S. Chaudhary, **M Kaushik***

Plant-Microbes-Engineered Nano-particles (PM-ENPs) Nexus in Agro-Ecosystems: Understanding the Interaction of Plant, Microbes and Engineered Nano-particles (ENPS) (Book)

Pages: 153

7. JOHN WILEY & SONS, Ltd. (2021)

Detection and Removal of Heavy Metals from Wastewater Using Nanomaterials

S. Chaudhary, M. Kumar, S. Ahmed, **M Kaushik***

Pollutants and Water Management: Resources, Strategies and Scarcity, 241-272. (Book)

6. ELSEVIER PUBLISHER (2021)

Recent advances in nanotechnology for accomplishing sustainable agriculture

S. Chaudhary, N. Sarkar, **M. Kaushik***

Water Conservation in the Era of Global Climate Change, 147-166 (Book)

5. ELSEVIER PUBLISHER (2020)

N. Sarkar, R. S. Sharma, **M. Kaushik***

Book Title: Nano-Materials as Photocatalysts for Degradation of Environmental Pollutants:

Challenges and Possibilities

Chapter entitled “**Exploitation of Antibiotics: Mechanism of resistance, consequences, challenges of conventional remediation and promise of nanomaterials in mitigation.**” Vol. 1 (1), 195-209.

Paperback ISBN: 9780128185988

4. BENTAHM SCIENCE PUBLISHERS (2020)

M. Kaushik*, Dhriti Jha
 eBook Title: Targeting Alzheimer’s Disorders through Nanomedicine
 Chapter entitled “**Targeting Alzheimer’s Disorders through Nanomedicine.**”
 Bentham Science Publishers
 Frontiers in Clinical Drug Research – Dementia; Vol. 1 (1), 165.
 [eISBN: 978-1-68108-339-1, 2017; ISBN: 978-1-68108-340-7]
<http://bspebook.eurekaselect.com/index.php/FCDRAD>
Indexed in: Scopus, EBSCO.

3. BENTAHM SCIENCE PUBLISHERS (2019): (20 PAGES)
 Chapter entitled “**Decoding DNA Structure Using NMR Spectroscopy**”,
M. Kaushik*, S. Chaudhary, Sonia, Komal, S. Kukreti
 in "Applications of NMR Spectroscopy" 8/19/2016-Ebk Series/NMR/EOI-41; Volume 7

2. BENTAHM SCIENCE PUBLISHERS (2018): (55 PAGES)
 Chapter entitled “**Overview of Chemoresistance in Cancerous Cells**”
M. Kaushik*, S. Mahendru, M. Kumar, S. Chaudhary, S. Ahmed, Sonia, S. Kukreti*
 in “Frontiers in Drug Design & Discovery, 2018, Vol. 9, 35-90. eISBN: 978-1-68108-582-1, 2018
 ISBN: 978-1-68108-583-8, ISSN: 1574-0889 (Print), ISSN: 2212-1064 (Online)

1. WILLEY PUBLICATIONS (2007): (41 PAGES)
 Chapter entitled “**Building Blocks of Nucleic Acid Nanostructures: Unfolding Thermodynamics of Intramolecular DNA Complexes.**”
 L. A. Marky, S. Maiti, C. Olsen, R. Shikiya, S. Betzold, **M. Kaushik**, and I. Khutsishvili;
 in “Biomedical Applications of Nanotechnology”, edited by V. Labhasetwar and D. Leslie-Pelecky,
 published by “John Wiley & Sons”, Inc.,111 River Street, Hoboken, New Jersey 07030-577

POPULAR ARTICLES IN MAGAZINES (2018)
 Article entitled “**Science behind smog and its ominous implications**”
M. Kaushik*, A. Singh, N. Sarkar, Neelam, Komal, Sonia, R.S. Sharma, S. Kukreti
 in Down to earth magazine, April, 2018 issue.

PUBLISHED PROCEEDINGS:

1.	M. Kaushik, A. Singh, S. Kukreti	2015 (JAMIA Conference)	Duplex to Cruciform transition in a Quasi palindrome present in Human Neuronal Growth Regulator 1(<i>NEGR1</i>) gene, associated with Cancer	Journal of Proteins and Proteomics	6(1)	JPP9 9
2.	A. Singh, M. Kaushik, S. Kukreti	2015 (JAMIA Conference)	Preferential Recognition of DNA G-Quadruplex Topologies	Journal of Proteins and Proteomics	6(1)	JPP 35
3.	M. Kumar, M. Kaushik S. Kukreti	2015 (JAMIA Conference)	Spectroscopic investigation of interaction between CT- DNA and New Methylene Blue	Journal of Proteins and Proteomics	6(1)	JPP 104

4.	A. Singh, M. Kaushik, S. Joshi and S. Kukreti,	2012 (JAMIA Conference)	G-Quadruplex polymorphism: An attempt to explore the association between G-tracts and intervening T's.	Journal of Proteins and Proteomics	-	JPP 27- 28
5.	B. Gold, M. Ganguly, R.W., Wang, L. Marky, M. Kaushik, M. Stone, and F.Wang	2009	Unfolding thermodynamics of DNA with 7-deaza-2\# 8217;- deoxyguanosine and 7- aminomethyl 7-deaza-2\#8217;- deoxyguanosine: the effect of cationic charge tetheredin the majorgroove	<i>Cancer Research</i> [AACR Annual Meeting, Apr18- 22,2009; Denver, Colorado, USA]	69	3539
6.	M. Kaushik, R. Shikiya, S. Betzold, R. Ganugula, A. M. Soto, and Luis A. Marky	2005 (Albany, USA, Conference)	Melting Behavior of DNA Triplexes of the Pyrimidine Motif	J. of Biomolecular Structural Dynamics	22 (6)	-

Workshop/Conference/Symposia Participated/Organized

TALKS DELIVERED:

- Invited Talk on “Women: An epitome of Strength” in Webinar Session on "The SHE of Science World" on International Women’s Day 2021 at Pandit Deen Dayal Energy University PDEU, Gandhinagar, Gujarat (8th March, 2021)
- Invited Talk on “Recent Innovations in Green Technology” in National Conference on the theme “Clean & Green Energy: The Chemical and Environmental Aspects” at the Bhaskaracharya College of Applied Sciences campus, University of Delhi, Delhi (27 Sept., 2019)
- Invited Talk on “Green Technology: Recent Advances and Challenges” in National Workshop/ Seminar “Ubharti harit prodyogiki tatha taqniki shabdawali” in Ramjas College, University of Delhi under the aegis of Commission for Scientific and Technical Terminology, West Block-&, R.K. Puram, New Delhi-110006 (14th Feb., 2019)
- Extension lecture on “Exploring Nucleic Acids Based Applications Via Nanotechnology” in Department of Chemistry, Jamia Millia Islamia University, Delhi (27th march, 2018)
- Talk on “Innovative pedagogies” during a teacher’s training session of Gifted children project” from Principal scientific advisor (PSA) office, Government of India, at CIC (2nd May, 2017; 1.5 hours)
- Talk on “environmental pollution” during a student’s training session of Gifted children project” from Principal scientific advisor (PSA) office, Government of India, at CIC (2nd May, 2017; 1.5 hours)
- Talk on “Cancer: facts, figures and awareness” as a part of “Breast cancer awareness” during Innovation project CIC-306, at CIC (4th October, 2016)
- Talk on “Alarming and Intertwined Relationship between Cancer and Environmental Pollution” in National Conference on “Nanoscience – Opportunities and Challenges”, Maitreyi College, University of Delhi, (19-20th Feb. 2016).

- Talk on “Environmental Pollution: A Ringing Bell for Cancer” in the National symposium on environmental contamination and public health, at Dept. of Zoology, Zakir Hussain College, Univ. of Delhi, Delhi, India. (Aug. 24, 2015)
- Talk in “Lecture/Workshop / Conference on Emerging Trends in Development of Drugs and Devices” at Department of Chemistry, University of Delhi, Delhi. (21st-23rd January, 2013).
- Talks as “Resource Person” for the Workshop on Theory and Practical Course “Biochemistry and Environmental chemistry” at Dept. of Chemistry, Univ. of Delhi, Delhi (2nd-7th July, 2012).
- Talk in IBS National Symposium on “*Biophysics in Medicine and Biology*”, Panjab University, Chandigarh (November 15- 17, 2007).
- Talk and Demonstration of a laboratory technique in a “National Workshop on “Challenges and Opportunities in Chemistry”, Maitreyi College, Univ. of Delhi (22-23 Sept, 2006).
- Talk on “Energetic Contributions of C•C⁺/ C•C⁺ Base-Pair Stacks to the Formation of Bimolecular Complex and i-motif Structures” on 12 Feb., 2005 in Dept. of Pharmaceutical Science in University of Nebraska Medical Center (U.N.M.C.), Omaha, Nebraska (U.S.A.).

POSTER PRESENTATIONS:

International:

- Exploring the potential of Silica and Modified Silica Nanoparticles to Target Bovine Trypsin: Interaction for Biomedical Applications
Pankaj Kumar, Amit Singh, **M. Kaushik***
Recent Advances in Nano Medical Sciences (RANMS - 2022), organized by Institute of Nano Medical Science (INMS) and Institution of Eminence (IoE), University of Delhi, Delhi, (22nd - 23rd June, 2022).
- A physicochemical approach to investigate the influence of green synthesized zinc oxide nanoparticle on binding of Azure dye with Chymotrypsin for dual therapy
Amit Singh, Pankaj Kumar, Niloy Sarkar, **M. Kaushik***
Recent Advances in Nano Medical Sciences (RANMS - 2022), organized by Institute of Nano Medical Science (INMS) and Institution of Eminence (IoE), University of Delhi, Delhi, (22nd - 23rd June, 2022).
- Physicochemical Analysis of the Interaction of Silica and Modified Silica Nanoparticles with Bovine Trypsin for Targeting Biomedical Applications
Pankaj Kumar, Amit Singh and **M. Kaushik***
International Conference on Advances in Chemical Sciences and Nanocomposites (ACSN-2022) scheduled to be held at Zakir Husain Delhi College (April 1 and 2, 2022)
- Efficacy of MePEG-PCL Diblock Copolymeric Nanoparticles and PCL Nanoparticles for Drug Delivery in Lung Fibrosis
A. Singh, R. Kulshrestha, A. Pandey, **M. Kaushik**, A.K. Dhinda
ATS international conference, Dallas, USA (17th-21st May, 2019)
- A Physicochemical approach to study and compare the genotoxic potential of chitosan and citrate reduced gold nanoparticles towards calf thymus DNA
Sonia, Komal, S. Kukreti, **M. Kaushik***;
International Conference on “Emerging Trends in Drugs Development and Natural-Products”, Department of Chemistry, University of Delhi, Delhi (January 12-14, 2018)
- **M. Kaushik** Oral talk on “Multiple dimensions of functional relevance of Genosensors” in “International conference on technologically advanced materials & Asian meeting on ferroelectricity (ICTAM-AMF10) (November 7-11, 2016) [8 Nov.]
- A Physicochemical approach to study the genotoxic potential of chitosan and citrate reduced gold nanoparticles towards calf thymus DNA: A physicochemical approach;
Sonia, Komal, S. Kukreti, **M. Kaushik***; One-day Indo-Hungarian symposium on “Recent advances in chemistry and biology” (INHCAB-2017) (11 December, 2017)
- An environmentally benign approach to synthesize Silver nanoparticles using *Epipremnum aureum* leaf extract and its interaction studies with Calf Thymus DNA;

Komal, Sonia, S. Kukreti, **M. Kaushik***;

One-day Indo-Hungarian symposium on “Recent advances in chemistry and biology” (INHCAB-2017) (11 December, 2017)

- Interaction of an electrochemical redox indicator New Methylene Blue with DNA using biophysical techniques,
M. Kumar, **M. Kaushik**, S. Kukreti,
International Conference on Materials Science & Technology 2016, Conference Centre, University of Delhi, Delhi, India (01-04th March, 2016)
- Structural switch from duplex to cruciform in a quasipalindrome present in promoter region of human *otog* gene
M. Kaushik, A. Singh and S. Kukreti
International Congress on “Friedreich’s Ataxia and DNA Structure in Health & Disease” at the All India Institute of Medical Sciences, New Delhi, India. (11th-13th April, 2015) [**Best Poster Award**]
- A Novel Parallel Triple Stranded G-Quadruplex Formation In Promoter Region Of Human Myosin β (*Myh7*) Gene [**ORAL**]
S. Kukreti, **M. Kaushik** and A. Singh
International Congress on “Friedreich’s Ataxia and DNA Structure in Health & Disease” at the All India Institute of Medical Sciences, New Delhi, India. (11th-13th April, 2015)
- G-Quadruplex polymorphism: An attempt to explore the association between G-tracts and intervening T’s.
A. Singh, **M. Kaushik**, S. Joshi and S. Kukreti,
International Interdisciplinary Science Conference (I-ISC, 2012) on protein folding and diseases, Center for Interdisciplinary research in basic science, Jamia Millia Islamia, New Delhi, India. December 8-10, 2012.
- Self-Association of Coralyne: A Plausible Drawback for DNA targeting.
S. Kaushik, **M. Kaushik**, A. Singh, Anuradha and S. Kukreti,
International Symposium on Trends in Drug Discovery and Development,
Department of Chemistry, University of Delhi, Delhi, India. January, 05th-08th, 2010.
- A Study of 7-Deaza-2'-Deoxyguanosine•2'-Deoxycytidine Base Pairing in DNA
M. Ganguly, F. Wang, **M. Kaushik**, M. P. Stone, Luis A. Marky and B. Gold,
Nucleic Acids: Structure and Interactions III, SERMACS 2007,
October 24 -27, 2007, Greenville, South Carolina (U.S.A.).
- Structural polymorphism exhibited by the C-rich strand of the Human Telomeric DNA
M. Kaushik, Shrikant Kukreti
Second International Symposium on Green / Sustainable Chemistry
10-13 January, 2006, Convention centre, University of Delhi, Delhi.
- Melting Behavior of DNA Triplexes of the Pyrimidine Motif
I. Khutsishvili, **M. Kaushik**, R. Shikiya, S. Betzold, R. Ganugula and L. A. Marky, (March, 29; 2006),
Second Annual Research Expo, Lincoln, Nebraska (USA).
- Stability and Melting Behavior of DNA Triplexes of the Pyrimidine Motif.
S. Betzold, **M. Kaushik**, C. Olsen and Luis A. Marky.
Eighth Annual Pharmacy Student Research Conference – Western Region,
June 03-04th, 2005. Denver, CO (USA).
- Unfolding of the Complimentary Strand of the Human Telomere.
N. Suehl, **M. Kaushik**, and Luis A. Marky
Eighth Annual Pharmacy Student Research Conference – Western Region,
June 03-04th, 2005. Denver, CO (USA).
- Hemiprotonated CC⁺ Duplex \rightleftharpoons i-Motif Equilibrium in the Unfolding of d[C₃TA₂]₄ and d[C₃TA₂]₃C₃T
Below Physiological pH
M. Kaushik, N. Suehl and Luis A. Marky.,

18th Annual Gibbs Conference on Biothermodynamics, Oct. 9-12th, 2004. Carbondale, Illinois (USA).

- Unfolding of d[C₃TA₂]₃C₃T: Interconversion of the i-motif and Hemiprotonated C.C⁺ Duplex Below Physiological pH's.
N. Suehl, **M. Kaushik** and Luis A. Marky
Research Colloquium, Poster session, August 2004
University of Nebraska Medical Center, Omaha, Nebraska, (USA).
- Hairpin-Duplex equilibrium reflected in A→B transition in an undecamer quasi-palindrome present in locus control region (LCR) of Human β-globin gene cluster
M. Kaushik, R. Kukreti, D. Grover, S.K.Brahmachari, and S. Kukreti.
IUPAC international conference on Biodiversity and Natural Products: Chemistry and Medical applications, 26-31 Jan. 2004, New Delhi, India.
- Interaction of polymorphic DNA sequences with intercalants
A.Bansal, **M. Kaushik** and S.Kukreti
IUPAC international conference on Biodiversity and Natural Products: Chemistry and Medical applications, 26-31 Jan. 2004, New Delhi, India.
- Duplex and Triplex DNA: Stabilization Aspects.
M. Kaushik, S. Saxena, and S. Kukreti.
International Symposium on Trends in Medicinal Chemistry and Biocatalysis, 26-29 Jan, 2000, Deptt of Chemistry, Univ. of Delhi, Delhi (India).
- Regulation of Gene Expression using Antigen Strategy.
S. Saxena, **M. Kaushik**, and S. Kukreti.
International Symposium on Trends in Medicinal Chemistry and Biocatalysis,
26-29 Jan, 2000, Department of Chemistry, University of Delhi, Delhi (India).

National:

- Colorimetric Assay for rapid detection of Sanguinarine (anticancer drug) and Calf thymus DNA (Ct-DNA) using Gold nanoparticles
Sonia, S., Kukreti, **M. Kaushik***
National Seminar on Biophysics (BIOPHYSIKA-2019), at Jamia Millia Islamia, New Delhi (4th October, 2019). [Oral Talk]
- Exploring the Potential of CuO and CuO@APTES nanoparticles as Nanoprimers to Increase Seed Vigor of Model Legume *V. radiata*.
N. Sarkar, R. S. Sharma, **M. Kaushik***
National Conference on the theme "Clean & Green Energy: The Chemical and Environmental Aspects" at the Bhaskaracharya College of Applied Sciences campus, University of Delhi, Delhi (26-27 Sept., 2019) [Oral talk on 26th sept., 2019]
- Comparative analysis of CuO and NiO nanoparticles obtained via green synthesis: For exploring better immobilization, ecotoxicity and photocatalytic degradation of dyes
N. Sarkar, R. S. Sharma, **M. Kaushik*** [First poster prize]
Nanobiotech-2018, 3rd Annual conference of Indian Society of Nanomedicine,
All India Institute of Medical Sciences AIIMS, New Delhi, Delhi (24-27 Oct., 2018)
- Designing of polymeric nanoparticle drug delivery systems for the treatment of lung fibrosis
A.Singh, R. Kulshrestha, A. Pandey, **M. Kaushik**, A.K. Dhinda
Nanobiotech-2018, 3rd Annual conference of Indian Society of Nanomedicine,
All India Institute of Medical Sciences (AIIMS), New Delhi, Delhi (24-27 Oct., 2018)
- Characterization, and interactions of NiO nanoparticles synthesized by green method: Applications as Aptasensors [Oral Presentation]
N. Sarkar, R. S. Sharma, **M. Kaushik***
National Conference on Thieme Chemistry: Science of Synthesis;
Department of Chemistry, University of Delhi, Delhi (September 28, 2018)

- Hydrothermal synthesis of magnetite nanoparticles and their interaction with DNA
Neelam, **M. Kaushik** *
FBR-2018 11th symposium on frontiers in biomedical research challenges in human health: Prevention, Diagnosis and cure, ACBR, Delhi university, (19-21st February, 2018).
- Hydrothermal Synthesis, characterization and interaction of 3-aminopropyl-trimethoxysilane (APTS) coated super paramagnetic Fe₃O₄ nanoparticles with DNA
Neelam, **M. Kaushik** *
National conference on innovations in Sciences and emerging challenges in health and environment (NSHE-2018), Department of chemistry, Daulat Ram College Delhi university (20th March 2018).
- Environment friendly Green Synthesis of NiO Nanoparticles: Characterization and Interaction with DNA;
N. Sarkar, R. S. Sharma, **M. Kaushik***;
ACBR sponsored conference titled “11th Symposium on Frontiers of Biomedical Research,” (19th Feb 2018)
- Environment friendly Green Synthesis of NiO Nanoparticles: Characterization and Potential use in Environmental Pollutant Detection& Remediation;
N. Sarkar, R. S. Sharma, **M. Kaushik***;
National Conference on Chemical Science: Opportunities and Challenges,” (20 March 2018)
- Oral Presentation on “Green Synthesis of NiONP, Characterization, interaction with CT-DNA& Potential in Environmental Remediation”
N. Sarkar, R. S. Sharma, **M. Kaushik***;
Society for Environment and Development (SED), Swami Shraddahanand College sponsored national conference titled, “Emerging Environmental Challenges and Sustainable Development,” (22-03-18)
- Green synthesis of Zinc oxide nanoparticles from *Azadirachta indica* leaf extract and their interaction with Calf thymus DNA
Amit Singh, M. Shoaib, **M. Kaushik***
Trends in Nanobiotechnology (Biotikos), Teri University, Delhi. (28-29 September, 2017)
- Biosynthesized silver nanoparticles from eucalyptus leaf extract and their interaction of Calf Thymus-DNA
M. Shoaib, A. Singh, **M. Kaushik***
Trends in Nanobiotechnology (Biotikos), Teri University, Delhi. (28-29 September, 2017)
- Unravelling the binding of Calf Thymus DNA with metal nanoparticles: A comparative study of chitosan and citrate stabilized gold nanoparticles
Sonia, Komal, S. Kukreti, **M. Kaushik***
Trends in Nanobiotechnology (Biotikos), Teri University, Delhi. (28-29 September, 2017)
- Green synthesis of silver nanoparticles using *Epipremnum aureum* leaf extract and its interaction studies with Calf Thymus DNA
Komal, Sonia, S. Kukreti, **M. Kaushik***
Trends in Nanobiotechnology (Biotikos), Teri University, Delhi. (28-29 September, 2017)
- Microwave assisted green synthesis of silver nanoparticles using *Syzygium Cumini* leaf extract: Interaction with Calf thymus DNA
Amit Singh, M. Shoaib, **M. Kaushik***
Recent Advances In Chemical Sciences Towards Green & Sustainable Environment, Aditi Mahavidyalaya, University of Delhi, Delhi (10-11 October 2017)
- Physicochemical Studies of biosynthesized silver nanoparticles and their interaction with Calf-Thymus DNA
M. Shoaib, A. Singh, **M. Kaushik***
Recent Advances In Chemical Sciences Towards Green & Sustainable Environment, Aditi Mahavidyalaya, University of Delhi, Delhi (10-11 October 2017)

- Physicochemical studies of silver nanoparticles prepared using *Epipremnum aureum* leaves extract with Calf Thymus DNA.
Komal, Sonia, S. Kukreti, **M. Kaushik***
Recent Advances In Chemical Sciences Towards Green & Sustainable Environment, Aditi Mahavidyalaya, University of Delhi, Delhi (10-11 October 2017)
- Physicochemical study of gold nanoparticles synthesized through Green as well as Chemical method: Interaction with Calf Thymus DNA and the role of stabilizing agent
Sonia, Komal, S. Kukreti, **M. Kaushik***
Recent Advances In Chemical Sciences Towards Green & Sustainable Environment, Aditi Mahavidyalaya, University of Delhi, Delhi (10-11 October 2017)
- Structural polymorphs of a quasipalindrome located in *NEGR1* oncogene
M. Kaushik, A. Singh and S. Kukreti
ACBR Symposium on Frontiers in Biomedical Research -2015 (FBR-2015), 29-31 Oct. 2015
- Spectroscopic investigation of interaction between ctDNA and New Methylene Blue”
M. Kumar, **M. Kaushik**, S. Kukreti
National symposium on Biophysics and Golden Jubilee Meeting of the Indian Biophysical Society at Jamia Millia Islamia, New Delhi, India, 14th – 17th Feb, 2015
- Duplex to Cruciform transition in a Quasi palindrome present in Human Neuronal Growth Regulator 1(*NEGR1*) gene, associated with Cancer
M. Kaushik, A. Singh, S. Kukreti
National symposium on Biophysics and Golden Jubilee Meeting of the Indian Biophysical Society at Jamia Millia Islamia, New Delhi, India, 14th – 17th Feb, 2015
- Diverse Topology of G-Quadruplexes,
A. Singh, **M. Kaushik**, S. Joshi and S. Kukreti,
Lecture Workshop/Conference on Emerging Trends in Development of Drugs and Devices,
Department of Chemistry, University of Delhi, Delhi, India, January 21st-23rd, 2013.
- G-Quadruplexes: Incredible Topology
A. Singh, **M. Kaushik**, S. Joshi and S. Kukreti,
National Symposium on “Frontiers of Biophysics, Biotechnology & Bioinformatics” & 37th Annual Meeting of Indian Biophysical Society (IBS),
Department of Biophysics and Centre for Excellence in Basic Sciences,
University of Mumbai, India, January 13-16, 2013.
- Self-Association of a ligand: A Cautionary aspect of DNA targeting.
S. Kaushik, **M. Kaushik**, A. Singh, Anuradha and S. Kukreti,
Symposium on recent trends in Biophysics,
Department of Physics, BHU, Varanasi, India. February, 13th-15th, 2010.
- Structural Polymorphism exhibited by the C-rich strand of the Human Telomere: Intercalated-motif DNA
M. Kaushik, S. Kukreti
Indian Biophysical Society’s National Symposium on “*Biophysics in Medicine and Biology*”, Panjab University, Chandigarh. November 15- 17, 2007.
- Formation of a Py•Pu•Pu Type Intermolecular Triplex Containing Human *c-jun* Protooncogene Sequence
S. Kaushik, M. Prasad, **M. Kaushik** and S.Kukreti
3rd Indo-Italian Workshop on Chemistry and Biology of Antioxidants,
November 28-30, 2007 University of Delhi, Delhi.
- Selective Recognition of DNA by Minor Groove Binding Ligands
M. Prasad, S. Kaushik, **M. Kaushik** and S.Kukreti
National Seminar on Green Chemistry and Natural Products,
November, 26-27, 2007, Univ. of Delhi, Delhi.
- Formation and stability of a DNA triple helical structure at Herpes Virus 4 gene target
S. Kaushik, **M. Kaushik**, S. Kukreti

9th CRSI, National Symp. in Chemistry (NSC-9), 1-4 February 2007, Univ. of Delhi, Delhi.

- DNA-Ligand Interactions: Sequence and Structure Selectivity
M. Prasad, S. Kaushik, A. Bansal, **M. Kaushik** and S. Kukreti
CARBO-XXI Symposium, 26-29 November 2006 University of Delhi, Delhi.
- DNA tetraplexes: Interaction with intercalants
A. Bansal, M. Prasad, **M. Kaushik** and S. Kukreti.
Chemistry Biology Interface: Synergistic New Frontiers, (Conference), Nov 21-26, 2004, Delhi.
- Structural polymorphism at a quasipalindromic site in β -globin gene LCR.
M. Kaushik, R. Kukreti, D. Grover, S.K.Brahmachari, and S. Kukreti.
National Symposium on cellular and molecular Biophysics, 14-17 Jan. 2004,
NIMHANS, Bangalore, India.
- 11. Interaction of a minor groove binder Hoechst 33258 with G/C-rich deoxyoligonucleotides.
M. Kaushik, and S. Kukreti.
National Symposium on Biophysics, 21-23 Feb. 2003.
Indian Institute of Technology, Roorkee (India).
- Interaction of Proflavine and Acridine Orange with Polymorphic DNA Sequences.
M. Kaushik, S. Saxena, and S. Kukreti.
National Bioorganic Symposium 7, Nov. 9-10, 2001.
Department of Chemistry, Guru Nanak Dev University, Amritsar (India)-143005

PARTICIPATION AT SEMINARS/ SYMPOSIA/ WORKSHOPS:

- Attended two days workshop on Matlab conducted by Delhi University computer centre, Conference hall, DU (18th -19th May, 2023).
- Participation in National Seminar on Innovation in higher education through Public – Private - partnership (PPP) Model, at Conference centre, organized by Cluster innovation Centre, University of Delhi, Delhi (13th - 15th March, 2023).
- One week online short-term programme on Indian Knowledge systems jointly organized by Department of commerce and Business Delhi school of economics, Institute of life long learning and Shriram college of commerce, University of Delhi, Delhi (16th -21st Jan., 2023).
- Four weeks Women Entrepreneurship Development Programme (WEDP) Sponsored by Department of Science & Technology (DST), Govt. of India, at Jamia Hamdard, New Delhi, India (22nd August - 16th September 2022).
- Participated in CSIR-IMMT, Bhubaneswar, Orissa: InTEC – one week National *e*-Workshop on Innovation and Intellectual Property Rights (**NeW IPR-2022**) from June 13-18, 2022 with the theme *IP for ALL*. (CSIR-Institute of Minerals and Materials Technology (IMMT): Innovative Technology Enabling Center (InTEC), Sachivalaya Marg, Bhubaneshwar (13th - 18th June, 2022)
- Participated in International Seminar on effects of pollution on human health jointly organized by department of Chemistry, University of Delhi & Indian academy of biomedical sciences (IABS) at Dept. of Chemistry, Univ. of Delhi (1st December, 2017)
- Participated in “National Seminar on e-learning and MOOCs in higher education” jointly organized by SGTB Khalsa College, Guru Angad Dev teaching learning centre and centre of e-learning at SGTB, Khalsa college, Univ. of Delhi (29th March, 2017)
- Publishing Connect Workshop, conducted by Central Science Library, Delhi University with Elsevier at convention hall, University of Delhi, Delhi (11 September, 2013).
- Workshop on Foundation course on Science and Life, Organized by CPDHE, University of Delhi at Institute of Lifelong Learning (ILLL) (21-22 June, 2013).
- A Workshop on test and measurement, Organized by Dept. of Physics (under DBT star college project scheme), Ramjas college, University of Delhi, Delhi. (04-05 March, 2013)

- One day National Seminar on Natural Products: Application in Human welfare, organized by Ramjas College, University of Delhi, Delhi. (27 June, 2013)
- National Seminar on Chemistry in Interdisciplinary Applications organized by Hansraj College, University of Delhi, Delhi. (19 March, 2013).
- A Symposium entitled “Ramachandran manifestation: From peptide to proteome” South Campus and Sri Venkateswara College, Univ. of Delhi, (14-15 March, 2013).
- Workshop on Molecular Modeling and it’s Applications, organized by Department of Chemistry, Ramjas College, University of Delhi, Delhi (4 March, 2013).
- Lecture/Workshop / Conference on Emerging Trends in Development of Drugs and Devices at Department of Chemistry, University of Delhi, Delhi. (21-23 January, 2013).
- International Conference on Interface between Chemistry and Environment (ICICE), Ramjas College, Delhi. (13-14 December 2012).
- Author Workshop on ‘How to Write for and Get Published in Scientific Journals and Publish Manuscripts’, Springer in collaboration with Delhi University Library System, at Convention Hall, University of Delhi, Delhi, India, (23 August, 2012).
- Workshop on Theory & Practical Course “Biochemistry & Environmental Chemistry” [Bsc. (H) Chemistry (CHHT514 & CHHP514), Dept of Chemistry, University of Delhi, India. (July 2-7, 2012).
- Workshop on Information Literacy & Competency, Delhi University Library System, University of Delhi, Delhi, India. (23 February, 2012).
- National Seminar on Recent Trends in chemistry at Sri Venkateswara College, University of Delhi, Delhi. (20-22 March, 2012).
- International Symposium on ‘Green chemistry and Sustainable Development’ organized by Miranda House, University of Delhi, Delhi (30-31 march, 2012).
- National Seminar on “Role of analytical techniques in Biological and environmental Sciences” organized by Kirori Mal College at Convention Hall, University of Delhi, Delhi, 2011. (27-29 January, 2011).
- National workshop on “Renewable Energy and Environment”, organized by Ramjas College at Convention Hall, University of Delhi, Delhi, 2011 (28-29 January, 2011).
- 4th Indo-Italian Seminar on “Green Chemistry and Natural Products” at Department of Chemistry, University of Delhi, Delhi (17 November, 2010).
- 7th Indo – Italian Workshop on “Chemistry and Biology of Antioxidants”, Department of Chemistry, University of Delhi, (16 November 2010).
- One day Workshop on Improvement of Chemistry Lab Safety Lab Manual at the Institute of Lifelong Learning, University of Delhi, Delhi. (3 August, 2010)
- Symposium on Recent Trends in Biophysics on 13th-15th February, 2010 at Department of Physics, Banaras Hindu University, Varanasi. (13-15 February, 2010)
- Workshop on Emerging Techniques of Biophysics on 16th February, 2010 at Department of Physics, Banaras Hindu University, Varanasi. (16 February, 2010).
- Indo-French Seminar on “Biomolecular Chemistry”, at Dept. of Chemistry, University of Delhi, Delhi. (4 March, 2009)
- National Symposium on Biophysics: Trends in Biomedical Research, organized by Indian Biophysical Society-2007, at Indian National Science Academy, Delhi. (13-15 Feb., 2007)
- National Symposium on Biophysics “Biophysics in Medicine and Biology”, organized by Indian Biophysical Society, at Department of Biophysics, Panjab University, Chandigarh. (15-17 November, 2007)
- 3rd Indo- Italian workshop on Chemistry and Biology of Antioxidants, Department of Chemistry, University of Delhi, Delhi, India. (28-30 November, 2007).
- One day seminar on Third year Chemistry course of the restructured B.Sc. Programme, organized by Department of Chemistry, Univ. of Delhi. (27 Oct., 2007).

- One day seminar on second year chemistry course of the restructured B.Sc. Programme, organized by Department of chemistry, Univ. of Delhi. (11 Nov., 2006).
- 6th Annual Symposium on Frontiers in Biomedical Research, Organized by A.C.B.R., Univ. of Delhi. (30 Nov.-02 December, 2006).
- National Symposium on Cellular and Molecular Biophysics, organized by Indian Biophysical Society at National Institute of Mental Health and Neurosciences, Bangalore. (14-17 January, 2006)
- National Bioorganic Symposium-7 at Department of Chemistry, Guru Nanak Dev University, Amritsar. (9-10 November, 2001)
- International Symposium on Green Chemistry, Department of Chemistry, University of Delhi, Delhi (India). (10-13 January, 2001).
- Indo-Russian ILTP Seminar on Trends in Chemical Sciences, Department of Chemistry, University of Delhi, Delhi (India). (24-25, January, 2000).
- First National Symposium on Green Chemistry, Department of Chemistry, University of Delhi, Delhi (India). (11-13 January, 1999).

Achievements/Awards/Distinctions

- Awarded Certificate of appreciation for “**Best Display**” in **Environmental issues section** to the “**INNOVATION PROJECT**” (RC-201) during “**ANTARDHWANI 2015**”, from University of Delhi, Delhi (2013-15)
- Awarded “**VICE-CHANCELLOR’S FELLOWSHIP**” from Univ. of Delhi, (Dec. 2014)
- Awarded “**BOYSCAST FELLOWSHIP**” from Department of Science and Technology (D.S.T., Gov. of India), (2010-11)
- Awarded “**YOUNG SCIENTIST PROJECT**” under FAST TRACK Scheme, from DST, Gov. of India, (April, 2005)
- Awarded free membership from AAAS for one year along with subscription of Science magazine for one year during Post-Doctoral Fellowship (2004-05)
- C.S.I.R / U.G.C. [National Eligibility Test for Lecturership (**NET**) Qualified (2001).
- **Poster Prizes at conferences/ Symposia:**
- **First Poster Prize**
Comparative analysis of CuO and NiO nanoparticles obtained via green synthesis: For exploring better immobilization, ecotoxicity and photocatalytic degradation of dyes
N. Sarkar, R. S. Sharma, **M. Kaushik***
Nanobiotech-2018, 3rd Annual conference of Indian Society of Nanomedicine,
All India Institute of Medical Sciences AIIMS, New Delhi, Delhi (24-27 Oct., 2018)
- **Second Poster Prize**
Environment friendly Green Synthesis of NiO Nanoparticles: Characterization and Potential use in Environmental Pollutant Detection& Remediation;
N. Sarkar, R. S. Sharma, **M. Kaushik***
St. Stephens sponsored national conference titled “National Conference on Chemical Science: Opportunities and Challenges,” (20 March 2018)
- **Third Poster Prize**
An environmentally benign approach to synthesize Silver nanoparticles using *Epipremnum aureum* leaf extract and its interaction studies with Calf Thymus DNA
Komal, Sonia, S. Kukreti, **M. Kaushik***
One-day Indo-Hungarian symposium on “Recent advances in chemistry and biology” (INHCAB-2017), Miranda House, Delhi University, Delhi. (11 December, 2017)
- **Second Poster Prize**

<p>Microwave assisted green synthesis of silver nanoparticles using <i>Syzygium Cumini</i> leaf extract: Interaction with Calf thymus DNA A. Singh, M. Shoaib, M. Kaushik* Trends in Nanobiotechnology (Biotikos), Teri University, Delhi. (28-29 September, 2017)</p> <ul style="list-style-type: none"> • Second Poster Prize Physicochemical studies of silver nanoparticles prepared using <i>Epipremnum aureum</i> leaves extract with Calf Thymus DNA Komal, Sonia, S. Kukreti, M. Kaushik* Trends in Nanobiotechnology (Biotikos), Teri University, Delhi. (28-29 September, 2017) • Best Poster Award Structural switch from duplex to cruciform in a quasi-palindrome present in promoter region of human <i>otog</i> gene M. Kaushik, A. Singh and S. Kukreti International Congress on “Friedreich’s Ataxia and DNA Structure in Health & Disease”; All India Institute of Medical Sciences (AIIMS), New Delhi, India. (11-13 April, 2015)
<p>Membership/Association with Professional Bodies/Societies</p> <p>Indian Biophysical Society (I.B.S.); DNA Society (Life time membership), Ramanujan Mathematical Society (Life time membership)</p>
<p>Other Activities</p> <ul style="list-style-type: none"> • Chairperson and participation in National Seminar on Innovation in higher education through Public – Private -partnership (PPP) Model, at Conference centre, organized by Cluster innovation Centre, University of Delhi, Delhi (13th - 15th March, 2023) • Designed courses of B.Tech. (IT & MI) for National Education Policy (NEP 2020) [Engineering Chemistry-I and Engineering Chemistry-II] starting from 2022-23 session onwards • Designed two Ph.D. courses at CIC [Biomolecules: Structure, application and interactions; Nanotechnology.....], April, 2023 • Editor for the book <i>Plant-Microbes-Engineered Nano-particles (PM-ENPs) Nexus in Agro-Ecosystems</i>. ISSN 2522-8714; ISSN 2522-8722 (electronic); Advances in Science, Technology & Innovation; IEREK Interdisciplinary Series for Sustainable Development; ISBN 978-3-030-66955-3; ISBN 978-3-030-66956-0 (eBook); https://doi.org/10.1007/978-3-030-66956-0; ©Springer Nature Switzerland AG Available from: https://www.researchgate.net/publication/346539401_Plant-Microbes-Engineered_Nano-particles_PM-ENPs_Nexus_in_Agro-Ecosystems#fullTextFileContent [accessed Jul 08 2021]. • Hands-On training in Next Generation Sequencing by CIC-Centre for science education and communication, CIC, University of Delhi (30th Sept. and 1st Oct., 2016) • Reviewer of various esteemed Journals like Chemical Communications (Chem. Comm.), RSC Advances, RSC Analyst, Mini reviews in medicinal chemistry, Biophysical Chemistry, Frontiers in Oncology, Journal of Nanoparticle research, Journal of Biochemical and Molecular Toxicology etc. • Given Inputs for Lab Manual, Dept of Chemistry, prepared under DBT-Star College Project; Feb. 2013. • Inputs given for Lab Manual prepared under the Workshop on Theory and Practical Course “Biochemistry and Environmental chemistry” at Dept. of Chemistry, Univ. of Delhi, Delhi (2nd-7th July, 2012).

Mahima Kaushik

Prof. Mahima Kaushik (updated on June, 2023)