



KAPIL ROY
Ph.D

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Educational Qualification:

1. Ph.D from **University of Delhi**, India, 2011
Title of Ph.D. thesis “**Structural Polymorphism at Locus Control Region (LCR) of β -Globin and Human Growth Hormone Gene Cluster**”
2. M.Sc. Biomedical Science from **Bundelkhand University**, India, 2006
3. B.Sc. Zoology (Hons.) **University of Delhi**, India, 2004

Academic Achievement:

- Awarded **Rajiv Gandhi National Fellowship (RGNF) Junior Research fellowship (JRF)** and **Senior Research fellowship (SRF)** by **University Grants Commission (UGC)**.

Professional Competence:

- **Biochemical and Biophysical Techniques known** such as Native and Denaturing Polyacrylamide Gel Electrophoresis, UV-Spectroscopy, Circular Dichroism (CD) Spectrometry, NMR, IR Spectroscopy,
- **Experienced in leading independent research as well as contributing effectively to collaborative research projects.**

- Experienced in handling laboratory animals and maintaining “Rattus norvegicus” colonies for in vivo diabetes studies.
- **Membership of National Bodies**
 - ✓ Life Member of “DNA Society of India” (DSI) (Membership No. LM 45)
 - ✓ Life Member of “Green Chemistry Network Center” (GCNC) (Membership No. 0614/17256)

Teaching Experience:

Name of the Employer: Biomedical Science Department, Bhaskaracharya College of Applied Sciences, Dwarka (University of Delhi, Delhi, India)

Teaching Experience

Assistant Professor (Ad-hoc) | 23 July 2012 – Present

Serving as an Assistant Professor with responsibilities for teaching undergraduate B.Sc. (Hons.) Biomedical Science course. Currently engaged in teaching Biophysics, Medicinal Chemistry, Bio-organic Chemistry, Pharmacology and Toxicology.

In addition, have previously taught Immunology, Clinical Biochemistry, Biochemistry, Conceptual Organic Chemistry, Genetics and Biological Chemistry, contributing to both theoretical and practical instruction for undergraduate students.

Research Experience:

Doctoral Research (Ph.D.) | July 2006 – June 2011

University of Delhi, India

Thesis title: “Structural Polymorphism at the Locus Control Region (LCR) in β -Globin and Human Growth Hormone Gene Cluster.”

Master’s Dissertation (M.Sc.) | February 2006 – June 2006

Dr. B. R. Ambedkar Center for Biomedical Research, University of Delhi, India

Dissertation Title: “Evaluation of Hypoglycemic and Antioxidant Activity of 1,2,3,4-Tetrahydroquinoxalin-2-one, an Analogue of Thiazolidinediones.”

Publications/Presentations:

1. Publications in Peer-Reviewed Journals:

“A review on synthesis of antiviral drugs, in silico studies and their toxicity”
Sanchit Ratra, Bhaskaranand Pant, **Kapil Roy**, Sunny Manohar, Pradeep Kumar, Sangeeta Singh, Kaniki Tumba, Kamlesh Kumari, Prashant Singh
Journal of the Indian Chemical Society (2023)100, no. 3: 100936
ISSN: 0019-4522

“Unusual stability exhibited by (AT)_xN₁₂(AT)_y motif associated with high fetal hemoglobin levels”

Kapil Roy, Swati Mahendru, Ritushree Kukreti & Shrikant Kukreti (2019)
Journal of Biomolecular Structure and Dynamics, 37:14, 3848-3857
DOI: 10.1080/07391102.2018.1532320

“Peptide Biomarkers: Exploring the Diagnostic Aspect”

Swati Mahendru, **Kapil Roy**, Shrikant Kukreti
Current Protein and Peptide Science (2017), 18, 931-936

“A bouquet of DNA structures: Emerging diversity”

Mahima Kaushik, Shikha Kaushik, **Kapil Roy**, Anju Singh, Swati Mahendru, Mohan Kumar, Swati Chaudhary, Saami Ahmed, Shrikant Kukreti
Biochemistry and Biophysics Reports (2016) 5: 388-395

“Protein engineering and de novo designing of a biocatalyst”

Mahima Kaushik, Prashant Sinha, Pragya Jaiswal, Swati Mahendru, **Kapil Roy**, Shrikant Kukreti
Journal of Molecular Recognition (2016), 29, 499–503

“A short GC-rich palindrome of human mannose receptor gene (MRC2) coding region displays a conformational switch”

Aparna Bansal, Manoj Prasad, **Kapil Roy**, Shrikant Kukreti
Biopolymers (2012) Volume 97, Issue 12, Pages: 950–962

“Antihyperglycemic effect of a new thiazolidinedione analogue and its effect in ameliorating oxidative stress in alloxan induced diabetic rats”

Jyoti Chaudhry, Narendra Nath Ghosh, **Kapil Roy**, Ramesh Chandra

Life Science (2007) Volume 80, Pages: 135-142

1. **Poster Presented / Conferences Attended (National & International)/ Member of Organizing team**

- Attended three-day International Interdisciplinary virtual conference on “Breakthroughs and Approaches in Contemporary Scientific Research” organized by Department of Chemistry & Physics of PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India, in collaboration with University of Dar es Salaam, Tanzania from February 17-19, 2021.
- Attended online workshop on “Psycho-Social Skills of a Good Helper: Tackling the COVID Pandemic” organized by NAAC Committee of Bhaskaracharya College of Applied Sciences, University of Delhi in association with Mahatma Gandhi National Council of Rural Education, Ministry of Education, Govt. of India on June 30, 2021.
- Attended five days online workshop on “Principles & Applications of Analytical Instruments for Analysis Organic/Inorganic molecules” organized by Department of Chemistry & Department of Botany, Govt. R. R. M. P.G. College, Surajpur (C.G.) and Department of Chemistry, Govt. Shivnath Science College, Rajnandgaon (C.G.), India on August 25-29, 2020.
- Attended “National Science Series 2020: Igniting Young Minds”, a Virtual Learning Program organised by Bhaskaracharya College of Applied Sciences, University of Delhi under the aegis of Star College Scheme, Department of Biotechnology, Government of India and IQAC of the college from August 4-6, 2020.
- Attended International webinar on “Artificial Intelligence: Societal Implications of Thinking Machines” organized by Vivekanand Vichar Manch and Literary Committee, Bhaskaracharya College of Applied Sciences, University of Delhi on June 22, 2020.
- Attended International webinar on “Origin of Universe: Scientific and Vedic Perspectives” organized by QUBIT: the Physics Society, Bhaskaracharya College of Applied Sciences, University of Delhi on June 12, 2020.
- Attended International webinar on “Optical Sources and Their Applications” organized by QUBIT: Physics Society, Bhaskaracharya College of Applied Sciences, University of Delhi on May 28, 2020.
- Attended two days international webinar on “Prevalent Crisis Triggered by the COVID19 Pandemic and Its Appraisal” organized by Department of Chemistry in collaboration with

Department of Biomedical Science, Bhaskaracharya College of Applied Sciences, University of Delhi from May 18 - 19, 2020.

- Attended two days online Intercollege Faculty Development Programme on “Understanding Google Classroom” organized by Bhaskaracharya College of Applied Sciences, University of Delhi from May 13-14, 2020.
- Attended International webinar on “Role of host immune system in development of COVID-19” organized by Bundelkhand University, Jhansi on May 11, 2020.
- Presented a poster titled “**Extraction, characterization and comparative study of nicotine**” in second National conference on ‘Clean and Green Energy: The Chemical and Environmental Aspects’ organized by Department of Chemistry, Bhaskaracharya College of Applied Sciences, University of Delhi from September 26-27, 2019.
- Coordinator, Workshop on “**Public Financial Management System**” organized by Bhaskaracharya College of Applied Sciences, University of Delhi on January 3, 2018.
- Member, organizing committee of the workshop on “**Handling and Care of Laboratory Animals**” organized by Bhaskaracharya College of Applied Sciences, University of Delhi in association with Central Laboratory Animals Resources, JNU on October 31-November 01, 2018.
- Event coordinator, Invited Talk on “Brilliant Discoveries: Incredible People” organized by “DNAmics Society” of Department of Biomedical Science, Bhaskaracharya College of Applied Sciences, University of Delhi on October 26, 2018.
- Presented a poster in National Conference on “**Clean and Green Energy: The Chemical and Environmental Aspects**” organized by Bhaskaracharya College of Applied Sciences, University of Delhi, Delhi, India, 16th-17th Feb. 2017
- Member, organizing Committee in One day technical workshop on “**Molecular Modelling and Structure based Drug Designing**” on 21st January, 2017 held at Bhaskaracharya College of Applied Sciences (University of Delhi), Dwarka, New Delhi – 110075.
- Member, organizing committee in National conference on “**Clean and Green Energy: The Chemical and Environmental Aspects**” from 16 to 17 February 2017 held at Bhaskaracharya College of Applied Sciences (University of Delhi), Dwarka, New Delhi – 110075.
- Member, Organizing Committee in a National Conference on **Recent Advances in Biomedical Science: Diagnosis & Research** and 2 Annual Scholar's Science Meet of SBMLS (BIOMEDCON 2016) organized by Clinical Biochemistry Unit, Department of Biochemistry, V.P. Chest Institute (VPCI) University of Delhi, Delhi -110007, INDIA in collaboration with The Society of Biomedical Laboratory Scientists (SBMLS), INDIA on 16 December 2016.

- Attended Seminar on **“Integration of Teaching and Research in Biophysics at Graduate & Postgraduate Level”** organized by All India Institute of Medical Sciences, New Delhi, India, 11th February, 2014.
- Attended Workshop on **“Theory & Practical course Biochemistry & Environmental Chemistry”**, Department of Chemistry, University of Delhi, Delhi, India, 2nd - 7th July, 2012.
- Presented a poster in **“7th Asian Biophysics Association (ABA) Symposium & Annual Meeting of the Indian Biophysical Society (IBS)”** Department of NMR & MRI Facility, All India Institute of Medical Sciences, New Delhi, India, 30th Jan.-2nd Feb. 2011.
- Attended International Symposinm on **“Trends in Drug discovery and development”** Department of Chemistry, University of Delhi, Delhi,India, 5th -8th January, 2010.
- Attended Symposium on **“Recent Trends in Biophysics”** Department of Physics, Banaras Hindu University, Varanasi, India, 13th – 15th February, 2010.
- Attended Workshop on **“Emerging Techniques of Biophysics”** Department of Physics, Banaras Hindu University, Varanasi, India 16th February, 2010.
- Attended Workshop on **“Information Literacy & Competency”** Delhi University Library System, University of Delhi, Delhi, India, 23rd Feb. 2010.
- Attended 13th ISCB International Conference on **“Interplay of Chemical and Biological Sciences: Impact on Health and Environment”** Department of Chemistry, University of Delhi, Delhi, India, 26th Feb – 1st Mar 2009.
- Attended Indo-French Symposium on **“Biomolecular Chemistry”** Department of Chemistry, University of Delhi, India, Delhi, 4th March, 2009.
- Attended 6th Indo-Italian Workshop on **“Chemistry & Biology of Antioxidant”** Department of Chemistry, University of Delhi, Delhi, India, 10th - 11th Dec. 2009.
- Attended 2nd Workshop on **“Bioinformatics And Molecular Modelling In Drug Design”** Dr. B.R. Ambedkar Center for Biomedical Research, University of Delhi, Delhi, India, 22nd - 24th December 2009.
- Attended Workshop on **“Bioinformatics Tools & Techniques for Gene & Protein Analysis”** Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India) 10th-12th August, 2008.
- Attended Conference on **“Chemistry-Structure, Reaction Dynamics & Spectroscopy”** Department of chemistry, University of Delhi, Delhi, India, 21th – 23rd August, 2008.
- Attended Indo-Italian Seminar on **“Green Chemistry & Natural Products”** Department of Chemistry, Unuversity of Delhi, Delhi, India, 5th-6th Dec. 2008

References:

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