STANDARD TEMPLATE OF FACULTY PROFILE FOR UPLOADING OF UNIVERSITY WEBSITE

<table>
<tr><td>Title</td><td>Dr.</td><td>First Name</td><td>KRITI</td><td>Last Name</td><td>BATRA</td><td rowspan="4">  </td></tr>
<tr><td colspan="2">Designation</td><td colspan="4">Associate Professor</td></tr>
<tr><td colspan="2">School /Dept. Name</td><td colspan="4">University School of Basic and Applied Sciences</td></tr>
<tr><td colspan="2">Address:</td><td colspan="4">BFR-502, B-Block, USBAS</td></tr>
<tr><td colspan="2" rowspan="3">Phone No.</td><td>Office</td><td colspan="4">01125302402</td></tr>
<tr><td>Residence</td><td colspan="4">(optional)</td></tr>
<tr><td>Mobile</td><td colspan="4">(optional)</td></tr>
<tr><td colspan="2">Email</td><td colspan="2">1. kbatra@ipu.ac.in</td><td colspan="3">2. kriti.ipu@gmail.ocm</td></tr>
<tr><td colspan="2">Web Page (if any)</td><td colspan="5"></td></tr>
<tr><td colspan="2">Subjects Taught</td><td colspan="5">Engineering Physics-I and Physics-II (B.Tech), BSc. (Physics) courses, Embedded Systems, Matlab (M.Tech(EP)</td></tr>
<tr><td colspan="2">Areas of Interest/Specialization</td><td colspan="5">Molecular Modelling and Spectroscopy, DFT studies of Molecules, Atomic and Molecular clusters, Electronic Structure calculations, Linear and Nonlinear Optical Properties, Quantum Heterostructures, Effect of External fields on low dimension systems etc. (Theoretical Atomic and Molecular Physics)</td></tr>
<tr><td colspan="2" rowspan="4">Experience (in years)</td><td>Total</td><td colspan="4">17 years</td></tr>
<tr><td>Industry</td><td colspan="4">Nil</td></tr>
<tr><td>Teaching</td><td colspan="4">17 years</td></tr>
<tr><td>Research</td><td colspan="4">17 years</td></tr>
<tr><td colspan="2" rowspan="4">Educational Qualifications</td><td>UG</td><td colspan="4">BSc. Physics Honors</td></tr>
<tr><td>PG</td><td colspan="4">MSc. (Physics) with spl. in electronics</td></tr>
<tr><td>Doctorate</td><td colspan="4">Ph.D. (Physics)</td></tr>
<tr><td>Any other</td><td colspan="4">CSIR-NET (JRF)</td></tr>
<tr><td colspan="2">Research Publications in Journals</td><td colspan="5">Details should be provided in APA/IEEE format
1. “Modeling natural dye molecules lawsone and purpurin in different solvents for DSSC Applications: A DFT and TD-DFT</td></tr>
</table>

(last 5 years)	study", Garima Chanana, **Kriti Batra**, Molecular Simulation,(2022) (Reviewed, publication awaited) 2. "Investigating functional performance and substituent effect in modelling Molecular Structure, UV-Visible Spectra and Optical properties of D-π-A conjugated organic dye molecules: A DFT and TD-DFT study" Garima Chanana, **Kriti Batra,** Journal of Molecular Modelling, 27 (2021) 229, https://doi.org/10.1007/s00894-021-04824-y, I.F. 1.8 3. "Exploring response of Li_2 molecule to external electric field: A DFT and SAC-CI study" Garima Chanana, **Kriti Batra** and Vinod Prasad, Computational and Theoretical Chemistry, 1169, (2019), 112620. ISSN No.2210-271X, https://doi.org/10.1016/j.comptc.2019.112620, I.F.-1.9, Citations:4 4. "Spherical quantum dot in Kratzer confining potential: Study of linear and nonlinear optical absorption coefficients and refractive index changes", **Kriti Batra,** Vinod Prasad, European Physical Journal B, 91, (2018),298(1-11),ISSN-14346028,14346036,https://doi.org/10.1140/EPJB/E2018-90432-X, I.F.-1.5, citations-13 5. "Finite difference calculation of optical properties of hydrogenic impurity in spherical quantum dot with parabolic confinement", **Kriti Batra,** Vinod Prasad, Revista Mexicana de Física E, 64,(2018) ,7. ISSN No.0035001X, https://doi.org/10.31349/RevMexFisE.64.7, IF-0.814 6. "Quantum Ring states in magnetic field and delayed half cycle pulses" **Kriti Batra**, Hira Joshi and Vinod Prasad , Pramana-J.Phys ,87, (2016), 29. ISSN No.0304-4289, IF 2.219, DOI 10.1007/s12043-016-1226-6, I.F-2.219

<table>
<tr><td>Papers Published in Conference Proceedings (last 5 years)</td><td colspan="5">1. “Modelling novel organic molecule 2-(4-ethylbenzylidene) malononitrile (EBM) for Nonlinear Optical (NLO) Applications”, Garima Chanana and Kriti Batra, Springer Proceedings in Physics of International Conference on Atomic, Molecular, Optical and Nano Physics with Applications held on 18th-20th December 2019, Organized by Department of Applied Physics, Delhi Technical University, Delhi India (accepted and under publication)</td></tr>
<tr><td>Books Authored/Book Volume Chapters</td><td colspan="5"></td></tr>
<tr><td rowspan="3">No. of Conferences</td><td rowspan="2">National</td><td colspan="2">Attended</td><td colspan="2">Organized</td></tr>
<tr><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td>International</td><td colspan="2">4 (with paper presentation</td><td colspan="2"></td></tr>
<tr><td rowspan="3">Research Guidance</td><td rowspan="2">Awarded</td><td>PG</td><td>M. Phil</td><td colspan="2">Doctorate</td></tr>
<tr><td>1</td><td></td><td colspan="2"></td></tr>
<tr><td>Undergoing</td><td></td><td></td><td colspan="2">2</td></tr>
<tr><td rowspan="2">Research Projects</td><td>Completed</td><td colspan="4">5(FRGS)</td></tr>
<tr><td>Undergoing</td><td colspan="4">1</td></tr>
<tr><td>Awards & Distinctions</td><td colspan="5"></td></tr>
<tr><td>Administrative Assignments Handled</td><td colspan="5">Convenor- East Campus (GGSIPU) Technical Committee Physics Lab Equipment Purchase, Involved in Physics Lab design layout, Equipment Purchase and establishing of Physics Lab at East campus
Convenor-Program Education Objectives Committee (NAAC)
Convenor- Budget Committee Physics Equipment purchase (Dwarka Campus)
Convenor- Syllabus revision Committee (B.Tech)
Coordinator- B.Tech (Physics-courses)
Incharge- B.Tech Physics Lab
Member-University Procurement Committee East Campus
Admission Officer-M.Tech (EP)
Member-Audit Committee, Purchase Committee (Physics Lab)
Incharge-Equipment write off committee(Physics Lab)
Member-Academic Program Committee (APC)
Member-School Research Committee (SRC),
Member-Research Advisory Committee(RAC)</td></tr>
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	Member-PhD Admission Committee **Member**-Selection Committee (faculty)
Association with Professional Bodies	1. Indian Association of Physics Teachers 2. Vijanana Bharti (Vibha India) 3. Evaluator National Anveshika Network of India
Any other Achievements	