

Aabid Hamid

Curriculum Vitae

Current Position	Lecturer Chemistry (Contractual), Jammu & Kashmir Higher Education Department, India
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Residential Address	H.No. 233, Stadium Colony Batapora Shopian – 192303, Kashmir, India
Research Interests	Density Functional Theory (DFT), Conceptual DFT (CDFT): Application of DFT and CDFT to Organic and Inorganic Systems/Reactions
Education	
2015 – 2021	Doctor of Philosophy (Ph.D.) in Chemistry Birla Institute of Technology and Science (BITS), Pilani – 333031, Rajasthan, India Thesis Title: “Understanding the Components of Density Functional Reactivity Theory (DFRT) Based Stabilization Energy and Related Applications” Advisor: Prof. Ram Kinkar Roy
2011 – 2013	Master of Science (M.Sc.) in Chemistry, First Class, 66.83% Jamia Millia Islamia - A Central University, New Delhi – 110025, India Project Title: Synthesis, Characterization and Dielectric Properties of Ceria Nanoparticles
2007 – 2010	Bachelor of Science (B.Sc.), First Class, 64.8% University of Kashmir, Hazratbal Srinagar – 190006, India
Awards/Fellowships	
Feb, 2018 – Dec, 2019	Institute Senior Research Fellowship (Inst. SRF) Awarded by Birla Institute of Technology and Science (BITS), Pilani, Rajasthan, India.
Jan, 2017 – Feb, 2018	Senior Research Fellowship (SRF) Awarded by Department of Science and Technology (DST), New Delhi, Govt. of India.
Jan, 2015 – Jan, 2017	Junior Research Fellowship (JRF) Awarded by Department of Science and Technology (DST), New Delhi, Govt. of India.

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Research Experience	Birla Institute of Technology and Science (BITS), Pilani, Rajasthan, India
2015-2020	<ul style="list-style-type: none">• Six Years• Completed the project entitled, "Development and Application of Density Functional Reactivity Theory-Based Modeling Techniques to Understand The Energetics of Reactive and Non-reactive Interactions" with Prof. Ram Kinkar Roy (PI of The Project).
Teaching Experience	Birla Institute of Technology and Science (BITS), Pilani, Rajasthan, India
2015-2019	Worked as Lab Instructor of following Laboratory Courses: <ul style="list-style-type: none">• Chemical Experimentation - I (B.E. - M.Sc. Dual Degree courses)• Chemical Experimentation - II (B.E. - M.Sc. Dual Degree courses)• Computational Chemistry Laboratory
30-09-2021 to present	Jammu & Kashmir Higher Education Department, Srinagar, India <ul style="list-style-type: none">• B.Sc. 3rd Semester – Theory• B.Sc. 3rd Semester – Lab
Publications	<ul style="list-style-type: none">• Aabid Hamid, Atul Anand and Ram Kinkar Roy. The Charge Transfer Limit of a Chemical Adduct: The Role of Perturbation on External Potential, <i>Phys. Chem. Chem. Phys.</i> 2017, <i>19</i>, 10905-10912. (IF:3.676)• Aabid Hamid and Ram Kinkar Roy. Solvent Effect on Stabilization Energy: An Approach Based on Density Functional Reactivity Theory, <i>Int. J. Quantum Chem.</i> 2019, <i>119</i>, e25909. (IF:2.44)• Aabid Hamid and Ram Kinkar Roy. Correlation between Equilibrium Constant and Stabilization Energy: A Combined Approach Based on Chemical Thermodynamics, Statistical Thermodynamics and Density Functional Reactivity Theory. <i>J. Phys. Chem. A.</i> 2020, <i>124</i>, 1279-1288. (IF:2.781)• Aabid Hamid and Ram Kinkar Roy. Validation of Hammett's Linear Free Energy Relationship Through an Unconventional Approach. <i>J. Phys. Chem. A.</i> 2020, <i>124</i>, 5775-5783. (IF:2.781)
Conferences, Workshops & Meetings	<ul style="list-style-type: none">• 7th National Symposium and Conference on Solid State Chemistry and Allied Areas, 24th – 26th November, 2011, ISCAS-2011, Jamia Millia Islamia, New Delhi, India.• Recent Advances in Chemistry (RAC), 12th March, 2012, Jamia Millia Islamia, New Delhi, India.• Science Academies Lecture workshop, 1st – 2nd March, 2013, Jamia Millia Islamia, New Delhi, India.• Nascent Development in Chemical Sciences, 16th - 18th October, 2015, BITS Pilani, Pilani Campus, Rajasthan, India.• Q-Chem workshop, 19th October 2015, BITS Pilani, Pilani Campus, Rajasthan, India.• 20th CRSI National Symposium in Chemistry, 3rd – 5th February, 2017, Gauhati University, Guwahati, India.• North West Meeting on Spectroscopy, Structure and Dynamics (SSD-2017), 18th - 19th March, 2017, BITS Pilani, Pilani Campus Rajasthan, India.• Nano and Functional Materials – Interface between Science and Engineering (NFM-2017), 16th – 18th November, 2017, BITS Pilani, Pilani Campus, Rajasthan, India.• Frontiers at the Chemistry-Allied Sciences and Interface (FCASI-2018) during 21st - 22nd December, 2018, University of Rajasthan Jaipur, India.

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- **16th Theoretical Chemistry Symposium (TCS-2019)** during 13th – 16th February 2019, BITS Pilani, Pilani Campus, Rajasthan, India.
- **FIRST-DAE Computational Chemistry Symposium (DAE-CCS-2019)**, 7th - 9th November, 2019, Bhabha Atomic Research Centre (BARC) Mumbai, India.

Skills

Operating Systems: Linux, Windows

Softwares/Tools: Gaussian g-09, GaussView5.0. DMOL3-Materials Studio, Q-Chem, IQMOL, MOLDEN, Origin-Pro 9.0, MS-Office

Instruments: UV-Visible Spectrophotometer, IR Spectrophotometer, pH meter, Conductivity meter

Languages

English (Fluent), Urdu (Fluent), Kashmiri (Fluent),
Hindi (Understanding/Speaking), Arabic (Understand Quranic Arabic)

References

Dr. Ram Kinkar Roy (Ph.D. Supervisor)

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