Dr. Rajendra Prasad

Professor

Department of Chemistry, S G B Amravati University, Amravati-444602 Phone: +91-9423277117, Email: theochem@gmail.com



Phone: +91-9423277117, Email: theochem@gmail.com					
PREFESSIONAL EXPERIENCE					
Duration	Position &	Teaching/Research Area			
	Organization				
Oct22,2015 -Present	Professor	Theoretical & Computational Quantum Chemistry.			
Oct22,2009- Oct21,2015	Reader/Associate Professor S G B Amravati University, Amravati	Theoretical & Computational Quantum Chemistry.			
Mar 2007- Oct 21,2009	CSIR Scientist pool Department of Chemistry, Banaras Hindu University, Varanasi.	The fermion sign problem in the electronic structure quantum diffusion Monte Carlo simulation.			
Aug, 2006- Feb, 2007	Department of Chemistry, Banaras Hindu University, Varanasi.	The electronic structure quantum diffusion Monte Carlo simulations.			
Mar, 2005- Jul, 2006	Post Doctoral Researcher Lawrence Berkeley National Laboratory, Berkeley University of California Berkeley,USA	Ouantum Monte Carlo: Improvement of trial functions used in the electronic structure quantum diffusion Monte Carlo simulations.			
Jul, 2004- Feb, 2005	Post Doctoral Researcher University of California Davis, USA	Excited state electronic structure and properties of heavy metal clusters			
Oct, 2001- Feb, 2004	Post Doctoral Researcher Lehrstuhl fuer Theoretische Chemie, Ruhr-Universitaet Bochum, Germany and Department of Chemical Physics, Fritz-Haber Institute, Berlin, Germany.	Surface Science: Stereo dynamics of photodesorbed CO from Cr2O3 (0001) surface, ab-initio embedded quantum cluster calculations were performed to obtain several excited states 4D PES for Cr2O3(0001) surface.			

AWARDS & FELLOWSHIPS:			
2001	Fast Track Young Scientist Project, Science and Engineering Research Council, New Delhi, India. (Awarded while working abroad therefore not executed).		
1997-2000	Senior Research Fellowship (University Grants Commission, India).		
1995-1997	Junior Research Fellowship (University Grants Commission, India).		
1995	Graduate Aptitude Test in Engineering (GATE)		

EDUCATIONAL BACKGROUND:			
Jun., 2001 Ph.D.	Banaras Hindu University, Varanasi 221 005, India Doctor of Philosophy in Theoretical & Computational Quantum Chemistry. Title of Thesis: "MRD-CI STUDIES OF ELECTRONIC STRUCTURE AND MOLECULAR PROPERTIES OF TRANSIENT MOLECULES"		
Sep., 1994 M.Sc. First Div. (61.3%)	Banaras Hindu University, Varanasi 221 005, India. Major Subjects: Physical and Nuclear Chemistry Minor Subjects: Organic, Inorganic and Analytical Chemistry.		
Jun., 1992 B. Sc	Banaras Hindu University, Varanasi 221 005, India. Honors Subject: Chemistry		

First Div. (69.0%) Subsidiary Subjects: Physics and Mathematics

Jun., 1988 Board of High School and Intermediate Education, Utter Pradesh, India.

Intermediate Queens Inter College, Varanasi.

First Div. (66.4%) Subjects: General Hindi, English, Physics, Chemistry, and Mathematics.

July, 1986 Board of High School and Intermediate Education, Utter Pradesh, India.

High School Queens Inter College, Varanasi.

First Div. (72.0%) Subjects: Hindi, English, Mathematics, Science, Social Science and Biology.

MEMBERSHIP OF PROFESSIONAL BODIES

Life Member 1. Asia-Pacific Association of Theoretical and Computational

Chemists (APATCC)

2. Indian Science Congress Association (ISCA)

CHAIRMAN/MEMBER OF UNIVERSITY BODIES/COMMITTEES

Member Committee to prepare/write proposal under the scheme

Promotion of University Research and Scientific Excellence (PURSE) Grant for Sant Gadge Baba Amravati University.

Chairman Research Advisory Committee, Research Center

Department of Chemistry, Sant Gagde Baba Amravati

University.

Member Steering Committee, National Institutional Ranking

Framework (NIRF), Sant Gadge Baba Amravati University.

Chairman Committee for the Promotion of Excellence in Teaching and

Research in the University Departments, Sant Gadge Baba

Amravati University.

Chairman Committee to frame regulations for the Professor Emeritus

Scheme, Sant Gadge Baba Amravati University.

Member Committee No. 5/2021 to frame regulations for Checking and

Penalizing for plagiarism in Research and Publications, Sant

Gadge Baba Amravati University.

Author's (Rajendra Prasad) Research Output Impact Matrices/Citation Report Author's research outcome (as on 18.09.2021)

1.	Number of publications in Peer-Reviewed/Refereed Journals	39
2.	Number of publications in the journals indexed in SCOPUS	
3.	Number of publications in the journals/proceedings indexed in Web of Science	
4.	Number of publications in the journals indexed in Science Citation Index Expanded(SCIE)	37
5.	Number of publications having Impact Factor (Thomson Reuters)	37
6.	Total sum of the Impact Factor (Thomson Reuters)	131.702
7.	Average Impact Factor (Thomson Reuters)	3.560
8.	Number of publications with impact factor between 0 and 1	2
9.	Number of publications with impact factor between 1 and 2	2
10.	Number of publications with impact factor between 2 and 5	27
11.	Number of publications with impact factor between 5 and 10	6
12.	Number of publications in the JCR best JCR Category Quartile: Q1	16
13.	Number of publications in the JCR best JCR Category Quartile: Q2	10
14.	Number of publications in the JCR best JCR Category Quartile: Q3	7
15.	Number of publications in the JCR best JCR Category Quartile: Q4	4

Author's Research Performance Impact

	Parameter ↓ / Database→	Google Scholar	SCOPUS	Web of Science
1.	No. of documents listed	39	38	37
2.	Sum of times cited	2183	1820	1631
3.	Sum of times cited (excluding self-citations)		1787	1600
4.	Average Citations per Item	56.0	47.9	44.8
5.	Average Citations per Year	109.1	91.0	77.7
6.	h-index	18	17	16
7.	h-index (excluding self- citations)		17	16
8.	<i>i</i> 10	23	23	22
9.	i20	18	15	15
10.	<i>i</i> 25	16	13	13
11.	<i>i</i> 30	13	13	13
12.	<i>i</i> 40	11	10	9
13.	i50	8	5	6
14.	i100	5	4	4

Journal Impact Information 2021 from Journal Citation Reports (Thomson Reuters)

Journal Titles	JCR Category	Impact Factor 2020	Best Category Quartile	Record Count
Corrosion Science	Materials Science, Multidisciplinary - SCIE	7.205	Q1	3
Dalton Transactions	Chemistry, Inorganic & Nuclear - SCIE	4.390	Q1	2
Spectrochimica Acta Part A	Spectroscopy - SCIE	4.098	Q1	2
CrystEngComm	Crystallography - SCIE	3.545	Q1	3
Journal of Chemical Physics	Physics, Atomic, Molecular & Chemical - SCIE	3.488	Q1	6
Solar Energy	Energy & Fuels - SCIE	5.742	Q2	1
Bulletin of the Chemical Society of Japan	Chemistry, Multidisciplinary - SCIE	5.488	Q2	1
Arabian Journal of Chemistry	Chemistry, Multidisciplinary - SCIE	5.165	Q2	1
Materials Chemistry and Physics	Materials Science, Multidisciplinary - SCIE	4.094	Q2	1
Polyhedron	Chemistry, Inorganic & Nuclear - SCIE	3.052	Q2	1
Inorganica Chimica Acta	Chemistry, Inorganic & Nuclear - SCIE	2.545	Q2	1
Inorganic Chemistry Communications	Chemistry, Inorganic & Nuclear - SCIE	2.495	Q2	1
Chemical Physics	Physics, Atomic, Molecular & Chemical - SCIE	2.348	Q2	2
Chemical Physics Letters	Physics, Atomic, Molecular & Chemical - SCIE	2.328	Q2	1
January of Malagular				
Journal of Molecular Structure	Chemistry, Physical - SCIE	3.196	Q3	5
Journal of Applied Electrochemistry	Electrochemistry - SCIE	2.800	Q3	1
Journal of Solid State Electrochemistry	Electrochemistry - SCIE	2.647	Q3	1
International Journal of Electrochemical Science	Electrochemistry - SCIE	1.765	Q4	1
Australian Journal of Chemistry	Chemistry, Multidisciplinary - SCIE	1.321	Q4	1
Journal of Theoretical and Computational Chemistry	Chemistry, Multidisciplinary - SCIE	0.939	Q4	1
Indian Journal of Chemistry Section A	Chemistry, Multidisciplinary - SCIE	0.491	Q4	1

RESEARCH, PUBLICATIONS AND ACADEMIC CONTRIBUTIONS.

Published Papers in Journals

	Author(s), Title. Journal. Volume, pages, (Year).
Sr. No.	Accepted on Day-Month-Year, Published on Day-Month-Year, ISSN, Publisher, Indexed in the database, Peer Reviewed: YES/NO, Impact Factor (Thomson Reuters).
1.	R. Prasad, P. Chandra, <i>Ab-initio</i> MRD-CI Studies of electric field gradient (efg) and dipole moment of CCN radical at CASSCF optimized geometries for $X^2\Pi$, $a^4\Sigma^ A^2\Delta$, $B^2\Sigma^-$ and $C^2\Sigma^+$ electronic states. <i>Indian Journal of Chemistry–Section A.</i> 39 , 148–162 (2000).
	Accepted on 26-Nov-1999, Published on Jan-Mar-2000, ISSN:03764710, Publisher: NISCAIR, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 0.483.
2.	Rajendra Pd, P. Chandra, Ground and valence excited states of C ₂ N and CN ₂ transients: <i>ab initio</i> geometries, electronic structures, and molecular properties. <i>Journal of Chemical Physics.</i> 114 , 1589–1600 (2001).
	Accepted on 27-Oct-2000, Published on 10-Jan-2001, ISSN: 00219606, Publisher: American Institute of Physics, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters):3.488.
3.	Rajendra Pd, P. Chandra, Ground and excited states of HNC, NH, and NH ₂ transients: <i>Ab initio</i> geometries, electronic structures, and molecular properties. <i>Journal of Chemical Physics.</i> 114 , 7450–7460 (2001). Accepted on 06-Feb-2001, Published on 19-Apr-2001, ISSN: 00219606, Publisher: American Institute of Physics, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 3.488.
4.	R. L. Prasad, R. Prasad, G. C. Bhar, S. N. Thakur, Photoacoustic spectra and modes of vibration of TNT and RDX at CO2 laser wavelengths. <i>Spectrochimica Acta - Part A:</i> 58 , 3093–3102 (2002). Accepted on 18-Jan-2002, Published on 20-Mar-2002, ISSN: 13861425, Publisher: Elsevier, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 4.098.
5.	R. Prasad, Theoretical study of fine and hyperfine interactions in N ₃ ⁺ , N ₃ , and N ₃ ⁻ . <i>Journal of Chemical Physics</i> . 119 , 9549–9558 (2003). Accepted on 12-Aug-2003, Published on 24-Oct-2003, ISSN: 00219606, Publisher: American Institute of Physics, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 3.488.
6.	R. Prasad, A theoretical study of the fine and hyperfine interactions in the NCO and CNO radicals. <i>Journal of Chemical Physics</i> . 120 , 10089–10100 (2004). Accepted on 02-Mar-2004, Published on 11-May-2004, ISSN: 00219606, Publisher: American Institute of Physics, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 3.488.
7.	R. Prasad, N. Umezawa, D. Domin, R. Salomon-Ferrer, W. A. Lester Jr, Quantum Monte Carlo study of first-row atoms using transcorrelated variational Monte Carlo trial functions. <i>Journal of Chemical Physics.</i> 126 , art. no. 164109 (2007). Accepted on 16-Feb-2007, Published on 25-Apr-2007, ISSN: 00219606, Publisher: American Institute of Physics, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 3.488.

8.	A. Aspuru-Guzik, B. Austin, D. Domin, P. T. A. Galek, N. C. Handy, R. Prasad, R.
	Salomon-Ferrer, N. Umezawa, and W. A. Lester Jr., Recent developments in quantum
	Monte Carlo: Methods and applications. <i>AIP Conference Proceedings</i> . 963 , 210-211
	(2007).
	Accepted on 26-Dec-2007, Published on 08-Jan-2008, ISSN: 0094243X, Publisher: American Institute
	of Physics, Indexed in Web of Science (WoS), Peer Reviewed : YES, Impact Factor (Thomson
	Reuters): No.
9.	N. Singh, R. Prasad, S. Bhattacharya, Structural studies on Ph ₃ MSMPh ₃ (M = Sn, Pb):
	Quest for a metal-metal bond. <i>Polyhedron.</i> 28 , 548–552 (2009).
	Accepted on 19-Nov-2008, Published on 02-Jan-2009, ISSN: 02775387, Publisher: Elsevier,
	Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters):
	3.052.
10.	S. Jaiswal, A. Kushwaha, R. Prasad, R. L. Prasad, R. A. Yadav, Structural and vibrational
	studies of molecular conductors using quantum mechanical methods: 1,3-Dithiole-2-thione,
	1,3-dithiole-2-one, 1,3-dioxole-2-one and 1,3-dioxole-2-thione. Spectrochimica Acta - Part
	A: 74 , 16–25 (2009).
	Accepted on 23-Feb-2009, Published on 09-Mar-2009, ISSN: 13861425, Publisher: Elsevier,
	Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters):
	4.098.
11.	K. K. Upadhyay, S. Upadhyay, K. Kumar, R. Prasad, X-ray crystallographic study of 3-Oxo-
	2-{[4-(thiazol-2-ylsulfamoyl)-phenyl]-hydrazono}-butyric acid ethyl ester and its
	application in the solvent assisted naked eye sensing of Hg(II). Journal of Molecular
	Structure. 927 , 60–68 (2009).
	Accepted on 25-Feb-2009, Published on 06-Mar-2009, ISSN: 00222860, Publisher: Elsevier, Indexed
	in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 3.196.
12.	K. K. Upadhyay, A. Kumar, R. K. Mishra, R. Prasad, Colorimetric recognition of d^{10} metal
	ions through an adenine-based ICT probe. Bulletin of the Chemical Society of Japan. 82,
	813-815 (2009).
	Accepted on 25-Mar-2009, Published on 10-Jul-2009, ISSN: 00092673, Publisher: Chemical Society
	of Japan, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson
	D
1 7	Reuters): 5.488.
13.	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural
13.	
13.	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural
13.	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-
13.	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-thione, 1,3-dithiole-2-one, 1,3-dioxole-2-one, and 1,3-dioxole-2-thione. <i>Journal of Theoretical and Computational Chemistry</i> . 8 , 1185–1195 (2009). Accepted on 05-May-2008, Published on 28-Mar-2009, ISSN: 02196336, Publisher: World Scientific
13.	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-thione, 1,3-dithiole-2-one, 1,3-dioxole-2-one, and 1,3-dioxole-2-thione. <i>Journal of Theoretical and Computational Chemistry</i> . 8 , 1185–1195 (2009). Accepted on 05-May-2008, Published on 28-Mar-2009, ISSN: 02196336, Publisher: World Scientific (Singapore), Indexed in Science Citation Index Expanded (SCIE), Peer Reviewed: YES, Impact Factor
	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-thione, 1,3-dithiole-2-one, 1,3-dioxole-2-one, and 1,3-dioxole-2-thione. <i>Journal of Theoretical and Computational Chemistry.</i> 8, 1185–1195 (2009). Accepted on 05-May-2008, Published on 28-Mar-2009, ISSN: 02196336, Publisher: World Scientific (Singapore), Indexed in Science Citation Index Expanded (SCIE), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 0.939.
14.	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-thione, 1,3-dithiole-2-one, 1,3-dioxole-2-one, and 1,3-dioxole-2-thione. <i>Journal of Theoretical and Computational Chemistry</i> . 8 , 1185–1195 (2009). Accepted on 05-May-2008, Published on 28-Mar-2009, ISSN: 02196336, Publisher: World Scientific (Singapore), Indexed in Science Citation Index Expanded (SCIE), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 0.939 . A. Kumar, R. Prasad, G. Kociok-Köhn, K. C. Molloy, N. Singh, Synthesis, structure and
	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-thione, 1,3-dithiole-2-one, 1,3-dioxole-2-one, and 1,3-dioxole-2-thione. <i>Journal of Theoretical and Computational Chemistry.</i> 8 , 1185–1195 (2009). Accepted on 05-May-2008, Published on 28-Mar-2009, ISSN: 02196336, Publisher: World Scientific (Singapore), Indexed in Science Citation Index Expanded (SCIE), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 0.939. A. Kumar, R. Prasad, G. Kociok-Köhn, K. C. Molloy, N. Singh, Synthesis, structure and calculated NLO properties of [(n-Bu) ₂ Sn-μ-O-μ-OH-Sn(n-Bu) ₂ (CH ₃ CO ₂)] ₂ and its putative
	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-thione, 1,3-dithiole-2-one, 1,3-dioxole-2-one, and 1,3-dioxole-2-thione. <i>Journal of Theoretical and Computational Chemistry.</i> 8 , 1185–1195 (2009). Accepted on 05-May-2008, Published on 28-Mar-2009, ISSN: 02196336, Publisher: World Scientific (Singapore), Indexed in Science Citation Index Expanded (SCIE), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 0.939. A. Kumar, R. Prasad, G. Kociok-Köhn, K. C. Molloy, N. Singh, Synthesis, structure and calculated NLO properties of [(n-Bu) ₂ Sn-μ-O-μ-OH-Sn(n-Bu) ₂ (CH ₃ CO ₂)] ₂ and its putative derivatives. <i>Inorganic Chemistry Communications.</i> 12 , 686–690 (2009).
	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-thione, 1,3-dithiole-2-one, 1,3-dioxole-2-one, and 1,3-dioxole-2-thione. <i>Journal of Theoretical and Computational Chemistry.</i> 8 , 1185–1195 (2009). Accepted on 05-May-2008, Published on 28-Mar-2009, ISSN: 02196336, Publisher: World Scientific (Singapore), Indexed in Science Citation Index Expanded (SCIE), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 0.939. A. Kumar, R. Prasad, G. Kociok-Köhn, K. C. Molloy, N. Singh, Synthesis, structure and calculated NLO properties of [(n-Bu) ₂ Sn-μ-O-μ-OH-Sn(n-Bu) ₂ (CH ₃ CO ₂)] ₂ and its putative derivatives. <i>Inorganic Chemistry Communications.</i> 12 , 686–690 (2009). Accepted on 23-May-2009, Published on 28-May-2009, ISSN: 13877003, Publisher: Elsevier, Indexed
14.	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-thione, 1,3-dithiole-2-one, 1,3-dioxole-2-one, and 1,3-dioxole-2-thione. <i>Journal of Theoretical and Computational Chemistry.</i> 8 , 1185–1195 (2009). Accepted on 05-May-2008, Published on 28-Mar-2009, ISSN: 02196336, Publisher: World Scientific (Singapore), Indexed in Science Citation Index Expanded (SCIE), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 0.939. A. Kumar, R. Prasad, G. Kociok-Köhn, K. C. Molloy, N. Singh, Synthesis, structure and calculated NLO properties of [(n-Bu) ₂ Sn-μ-O-μ-OH-Sn(n-Bu) ₂ (CH ₃ CO ₂)] ₂ and its putative derivatives. <i>Inorganic Chemistry Communications.</i> 12 , 686–690 (2009). Accepted on 23-May-2009, Published on 28-May-2009, ISSN: 13877003, Publisher: Elsevier, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 2.495.
	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-thione, 1,3-dithiole-2-one, 1,3-dioxole-2-one, and 1,3-dioxole-2-thione. <i>Journal of Theoretical and Computational Chemistry.</i> 8 , 1185–1195 (2009). Accepted on 05-May-2008, Published on 28-Mar-2009, ISSN: 02196336, Publisher: World Scientific (Singapore), Indexed in Science Citation Index Expanded (SCIE), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 0.939. A. Kumar, R. Prasad, G. Kociok-Köhn, K. C. Molloy, N. Singh, Synthesis, structure and calculated NLO properties of [(n-Bu) ₂ Sn-μ-O-μ-OH-Sn(n-Bu) ₂ (CH ₃ CO ₂)] ₂ and its putative derivatives. <i>Inorganic Chemistry Communications.</i> 12 , 686–690 (2009). Accepted on 23-May-2009, Published on 28-May-2009, ISSN: 13877003, Publisher: Elsevier, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 2.495. S. K. Sen Gupta, R. Prasad, Origin and nature of transmission modes of anomalous effects
14.	R. L. Prasad, A. Kushwaha, R. Prasad, S. Jaiswal, R. A. Yadav, Energetics and structural insights of molecular conductors using density functional theory methods: 1,3-dithiole-2-thione, 1,3-dithiole-2-one, 1,3-dioxole-2-one, and 1,3-dioxole-2-thione. <i>Journal of Theoretical and Computational Chemistry.</i> 8 , 1185–1195 (2009). Accepted on 05-May-2008, Published on 28-Mar-2009, ISSN: 02196336, Publisher: World Scientific (Singapore), Indexed in Science Citation Index Expanded (SCIE), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 0.939. A. Kumar, R. Prasad, G. Kociok-Köhn, K. C. Molloy, N. Singh, Synthesis, structure and calculated NLO properties of [(n-Bu) ₂ Sn-μ-O-μ-OH-Sn(n-Bu) ₂ (CH ₃ CO ₂)] ₂ and its putative derivatives. <i>Inorganic Chemistry Communications</i> . 12 , 686–690 (2009). Accepted on 23-May-2009, Published on 28-May-2009, ISSN: 13877003, Publisher: Elsevier, Indexed in Science Citation Index (SCI), Peer Reviewed: YES, Impact Factor (Thomson Reuters): 2.495. S. K. Sen Gupta, R. Prasad, Origin and nature of transmission modes of anomalous effects of meta-Substituents on the 13C chemical shift of the carboxyl carbon (δCO) of benzoic
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Sanctioned/Ongoing/Completed Research Projects/Consultancies

Sr. No.	Title	Agency	Period	Grant /Amount Mobilized(Rs. Lakh)
1	"The fermion sign problem in the quantum diffusion monte Carlo simulation" Order No. SR/S2/CMP-0003/2011 dated 05.03.2012*Not executed.	Science & Engineering Research Board (SERB) DST, New Delhi	2012-2015	14.3

 ${\bf Training\ Courses,\ Teaching-Learning-Evaluation\ Technology\ Programmes,\ Faculty}$

Development Programmes (not less than one week duration).

Sr. No.	Programme	Duration	Organized by
1.	SERC Winter School on Quantum Chemistry	Three weeks Dec.4-24, 1998	IIT Bombay and NCL Pune, India
2.	European Summer School in Quantum Chemistry (ESQC-01) at Tjörnarp Conference	Two weeks Aug.19 – Sep.1, 2001	The University of Lund Sweden

Papers/Posters presented in Conferences, Seminars, Workshops, Symposia

Sr. No.	Title of the Paper Presented Presented	Title of Conference / Seminar	Organized by	Whether international/ national/ state/ regional/ college or university level
1.	Ab initio configuration interaction calculations of electric field gradient at ³⁵ Cl and ² H nuclei in SiCl ₂ (¹ A ₁), SiH ₂ Cl ₂ , SiH ₃ Cl, and SiHCl ₃ : a comparative study with Hartree-Fock SCF	2 nd Conference of the International Academy of Physical Sciences	Guru Ghasidas University, Bilaspur (MP) India on December 13-14, 1997.	International
2.	Poster presentation: Title: <i>Ab initio</i> studies of hyperfine interactions in NCO and CNO transients.	European Summer School in Quantum Chemistry (ESQC-01)	University of Lund, Sweden on Saturday, August 25, 2001.	International
3.	POSTER presentation: Title: Laser induced photodesorption of CO from Cr ₂ O ₃ (0001) surface	11 th International Congress of Quantum Chemistry.	University of Bonn, Germany on July 20-26, 2003.	International
4.	POSTER presentation: Title: Laser induced photodesorption of CO from $\text{Cr}_2\text{O}_3(0001)$ surface: An <i>abinito</i> quantum chemical study	39 th Symposium on Theoretical Chemistry 2003(STC-03): Molecular Spectroscopy and Dynamics.	ETH-Zurich 28 th September to 2 nd October 2003, Gwatt, Lake Thun, Switzerland.	International
5.	POSTER No. PII-53: Title: Diffusion Monte Carlo study of Li-Ne using transcorrelated variational Monte Carlo trial function	The American Conference on Theoretical Chemistry 2005 (ACTC-2005)	University of California, Los Angeles held on July 16-21, 2005	International