Curriculum Vitae & List of Publications

1.	Department	Physics
2.	a) Designation	Professor
	b) Field of specialisation	Condensed Matter Physics (Theory)
3.	Name in full (in capital letters)	SAURABH BASU
4.	Date of birth	10/09/1969
5.	Date of joining in the Institute	23 rd July, 2003

6. Administrative activities at IIT Guwahati

SI No.	Position Held	Period	Responsibilities
1	JAM Chairman	2005-2006	Conducting JAM exam (M.Sc admission test for the IITs)
2	Associate Warden, Kameng Hostel	2005-2006	Management of Hostel Affairs
3	Faculty in-charge, Training and Placement	2009-2012	Campus Placement of students, Training programme for Staff
4	HoD, Physics	2012-2015	Department Chair
5	Nodal Officer, Rashtriya Avishkar Abhiyaan	2015-	Spreading awareness about Science teaching and Education in schools and colleges
6	Dean Outreach Education Programme	May, 2016 -	Connect to schools, colleges and Universities of North-East and rest of the country

7. Summary of educational qualifications:

SI . No	Name of the Board / University / Institution and Department	Examination / Degree / Diploma passed	Discipline/ Specialization	Year of Passing	Distinction / Class / Division and CPI / Percentage
1.	St. Lawrence High School (West Bengal Board)	Madhyamik	English, Bengali, Mathematics, Science etc.	1986	1 st Div

2.	St. Lawrence High School (West Bengal Board)	Higher Secondary	Physics, Chemistry, Maths, English etc.	1988	1 st Div
3.	St. Xavier's college	B.Sc (Hons.)	Physics, Maths, English	1991	1 st Class
4.	IIT Bombay	M.Sc	Physics	1993	1 st Class
5	IIT Kanpur	PhD	Condensed Matter Physics (Theory)	1999	-

8. Particulars of present and past employments in chronological order, starting with the present one:

SI. No.	Organisation / Institute	Position held	Nature of duties / work	Date of joining	Date of leaving
1	IIT Guwahati	Professor	Teaching, Rsearch, Administration	29.07.2012	-
1.	IIT Guwahati	Associate Professor	Teaching, Research	10.4.2007	28.07.2012
2.	IIT GUwahati	Assistant Professor	Teaching, Research	23.7.2003	9.4.2007
3.	BITS Pilani	Lecturer	Teaching, Research	22.4.2002	22.7.2003
4.	Queens University, Canada	Post Doctoral Fellow	Teaching Research	1.2.2000	31.3.2002
5.	Tata Institute of Fundamental Research (TIFR)	Post Doctoral Fellow	Research	1.1.1999	31.1.2000

9. Summary of Research & Development Activities

No. of PG projects	No. of Ph.D. thesis guided		1	No. of Projects involved in			
guided	Completed	On-going	Spons	ored		Consultancy	
12(M.Sc) + 1 (M.Tech)	· · ·		Nil				
Number of Journal publications		Number of Conference publications					
N. C. I		Refer	eed		Un-ref	ereed	
National	International	National	International	Nationa	al	International	
3	51	16	4	4		3	

No. of Patents:

10. Academic Achievements: Guidance of PhD students, Sponsored Projects, Research Publications, Seminars and Conferences attended etc.

Seminars and Conferences attended etc.				
Name of the Student	Thesis Title / Area			
Dr. Amal Medhi	Role of interlayer couplings in bilayer superconductors: A variational Monte Carlo Study (Completed)			
Dr. Poulumi Dey	Disorder and spin imbalance induced exotic phases in weakly coupled s-wave superconductors (Completed)			
Dr. Krishna Kanti Dey	Autonomous Motion driven by catalytic nanoparticles(Completed)			
Ms. Sangeetha N.S.	Coexistence of charge density waves in rare-earth compounds (CMP-Theory and expt) (Completed)			
Mr. Apurba Barman	Theory of bosonic superfluidity in optical lattices (CMP Theory) (Completed)			
Mr. Sudin Ganguly	Dynamical Mean Field Theory for bosons (verge of completion)			
Mr. Kajwal Patra	Biophysics (verge of completion)			
Mr. Sk. Noor Nabi	Spinor Bosons on optical lattices (ongoing)			
Ms. Priyadarshini Kapri	Quantum transport in Normal-Superconducting junction devices(Ongoing)			
Ms. Sunayana Dutta	Dynamics of ultracold Bosons in optical lattice Potential(Ongoing)			
Ms. Sushmita Ghosh	Protein folding (Ongoing)			
Ms. Priyanka Sinha	Transport in Graphene based heterostructures (Ongoing)			
Details of sponsored Projects				

Title	Sponsoring Agency	Sponsored Amount	
Phases of the interacting Bose Gas: Simulating Quantum Phenomena at large length scales	CSIR	Rs. 14.40000/- (Completed)	
Inhomogeneous Superconductivity in Pauli Limited Superconductors	DST	Rs. 10,23,200/- (Completed)	
Physics of the pseudogap phase – possible routes- A BCS-BEC crossover and a kinetic energy driven pairing sceraio	CSIR	Rs. 9.82,000/- (Completed)	
Role of Spin-Orbit Coupling in spintronic devices: Search for Topological State of Matter	SERB	Rs. 22,00,000/- (ongoing)	

	I Conference/Seminar
Invited	seminar in IUPAP conference in Guwahati 2015
Gordor	Research Conference in Hong Kong 2015
Invited	Seminar at IISER Kolkata in November 2012
Gordor	Research Conferences, in South Hadley, USA 2012
Invited	Public lecture in Institute of Microengineering and Nanoelectronics (IMEN), University of Kebangsaan Malasyia
SCES,	in Univ. of Cambridge, UK
Gordo	n Research Conferences, in South Hadley, USA
Invited	Colloquium for PhD students in Gauhati University
Talk at	Indian Condensed Matter Physics, ICMP in Mahabaleshwar, India
Invited	talk at Discussion meeting on Statistical mechanics and Condensed matter Physics' at IIT Guwahati, India
TPSC s	seminar at Institute of Mathematical Sciences (IMSC), Chennai
TPSC S	Seminar at IIT Kanpur
Invited	talk at G. Goethe Institute, Frankfurt, Germany
Invited	talk at ICTP, Italy
	Seminar, November 2006 at Saha Institute of Nuclear Physics (SINP), Kolkata and SN Bose National Center for ciences (SNBNCBS), Kolkata
TPSC (Colloquium, September 2006 at Delhi University and IIT Roorkee, India
PSC-	North East Consortium Meeting" in February, 2004 at IIT Guwahati, India
	st of Publications (in reverse chronological order, including earlier publications)) Books/Book Chapters
(a)) Books/Book Chapters Disordered superconductors: A simple model manifesting pseudogap and BCS-BEC crossover: P. Dey ar
1. 2	Disordered superconductors: A simple model manifesting pseudogap and BCS-BEC crossover: P. Dey ar Saurabh Basu in Condensed Matter Theories (Vol. 24) World Scientific (2010) Catalytic Nanoparticle driven Self-Propulsion of Polymer Microspheres: Evolution and Opportunities, by K Dey, P.K. Choudhury and Saurabh Basu in 'Nanoscale Spectrocopy and Applications' CRC press (to be
1. 2	Disordered superconductors: A simple model manifesting pseudogap and BCS-BEC crossover: P. Dey ar Saurabh Basu in Condensed Matter Theories (Vol. 24) World Scientific (2010) Catalytic Nanoparticle driven Self-Propulsion of Polymer Microspheres: Evolution and Opportunities, by K Dey, P.K. Choudhury and Saurabh Basu in 'Nanoscale Spectrocopy and Applications' CRC press (to be published 2012)
(a) 1. 2	Disordered superconductors: A simple model manifesting pseudogap and BCS-BEC crossover: P. Dey ar Saurabh Basu in Condensed Matter Theories (Vol. 24) World Scientific (2010) Catalytic Nanoparticle driven Self-Propulsion of Polymer Microspheres: Evolution and Opportunities, by K Dey, P.K. Choudhury and Saurabh Basu in 'Nanoscale Spectrocopy and Applications' CRC press (to be published 2012) Research Papers in refereed journals Competition between external and synthetic magnetic fields on a spin-1 ultracold Bose gas, Sk. Noor Nabi and Saurabh Basu, Europhysics Letters, 116 (2016) 46001 Spin Hall conductance in a Y-shaped junction device in presence of tunable spin-orbit coupling, S. Gangu
(a) 1. 2 (b) 1	Disordered superconductors: A simple model manifesting pseudogap and BCS-BEC crossover: P. Dey ar Saurabh Basu in Condensed Matter Theories (Vol. 24) World Scientific (2010) Catalytic Nanoparticle driven Self-Propulsion of Polymer Microspheres: Evolution and Opportunities, by K Dey, P.K. Choudhury and Saurabh Basu in 'Nanoscale Spectrocopy and Applications' CRC press (to be published 2012) Research Papers in refereed journals Competition between external and synthetic magnetic fields on a spin-1 ultracold Bose gas, Sk. Noor Nabi and Saurabh Basu, Europhysics Letters, 116 (2016) 46001

	5	Interplay of the Rashba spin-orbit coupling and disorder in the conductance properties of four terminal junction devices, Sudin Ganguly and Saurabh Basu, Eur. Phys. Journal B, vol. 89, page – 103 (2016) (8 Pages)
	6	Multiple charge-density-wave transitions in single crystalline, Lu ₂ Ir ₃ Si ₅ , N.S. Sangeetha, A. Thamizhavel, C.V. Tomy, Saurabh Basu, A.M. Awasthi, P. Rajak, S. Bhattacharya, S. Ramkrishnan and D. Pal, Physical
-	7	Review B, vol. 91, 205131 (2015) (9 pages) Tunneling dynamics of correlated bosons in a double well potential, S. Dutta, A. Barman, A. Khan and
F	'	Saurabh Basu, Eur. Phys. J B, vol. 88, p 139 (2015) (8 pages)
	8	Anisotropic quantum transport in two dimensions – hints of emergence of a metallic behavior, S. Ganguly and Saurabh Basu, Eur. Phys. J B, vol. 88, p 396 (2015) (7 pages)
	9	Phase diagram of multi-component bosonic mixtures: emergence of mixed superfluid and insulating phases, A. Barman and Saurabh Basu, J. Phys. B: At. Mol. Opt. Phys. Vol. 48, p-055301 (2015) (8 pages)
	10	Phase diagram of correlated bosons with harmonic confinement, A. Barman and Saurabh Basu, JPS, Conf. Proc. vol. 3, p 016007 (2014) (6 pages)
	11	Phase diagram of trapped bosons in a kagome lattice – application of inhomogeneous mean field theory, A. Barman and Saurabh Basu, J. Phys. B: At. Mol. Opt. Phys. Vol. 47, p-025302 (2014) (9 pages)
	12	Investigating dirty crossover through fidelity susceptibility and density of states, A. Khan, Saurabh Basu and B. Tanatar, Int. J. Mod. Phys. B, vol 14, 1450083 (2014) (12 pages)
	13	Electron pairing and evidence of a BCS-BEC crossover in d-wave superconductors, S.K. Das, A. Khan and Saurabh Basu, Physica B, vol. 410, p 99-104 (2013)
	14	Understanding the Bose glass phase via a percolation scenario, A. Barman, S. Dutta, A. Khan and Saurabh Basu, Eur. Phys. J B, vol. 86, p 308 (2013)
	15	The Phase diagram of bosons in a tripartite lattice – emergence of exotic density ordered phases, A. Barman and Saurabh Basu, J. Phys. B: At. Mol. Opt. Phys. Vol. 46, p-125303 (2013) (6 pages)
	16.	The pH taxis of an intelligent catalytic microbot: K. K. Dey, S. Bhandari, D. Bandypadhyay, Saurabh Basu and A. Chattopadhyay, Small 2013 (Doi: 10.1002/smll.2012022312)
	17.	Disorder induced BCS-BEC crossover in an ultracold Fermi gas: A. Khan, Saurabh Basu and B. Tanatar, J. Supercond Nov. Magn. Vol 26, p-191-1895 (2013)
-	18.	Interplay of superconductivity and charge density wave ordering in pseudoternary alloy compounds: Lu ₂ Ir ₃ (Si _{1-x} Ge _x) ₅ , Lu ₂ (Ir _{1-x} Rh _x) ₃ Si ₅ and (Lu{ _{1-x} }Sc{ _x }) ₂ Ir ₃ Si ₅ , N. S. Sangeetha, A. Thamizhavel, C. V Tomy, Saurabh Basu, A. Ramakrishnan and D. Pal, Physical Review B, vol. 86, 024524 (2012)
	19.	Effect of disorder in BCS-BEC crossover, A. Khan, Saurabh Basu and S. W. Kim, Journal of Physics B: At Mol. Opt. Phys , vol 45, p 135302 (2012)
	20.	Interplay of optical potential and condensate properties for bosons in different optical lattice geometries,
		A. Barman and Saurabh Basu, Journal of Physics B, : At Mol. Opt. Phys, vol 45, p-105303 (2012)
	21.	A comparison of harmonic confinement and disorder in inducing localization effects in a superconductor, P. Dey, A. Khan, Saurabh Basu and B. Tanatar, International Journal of Modern Physics: Conference series , vol 11 p-127 (2012)
	22.	Magnetic ordering and crystal field effects in R₂Ir₃Sn₅ (R = La-Nd, Gd-Tm) system, N.S. Sangeetha, A. Thamizhavel, C.V. Tomy, Saurabh Basu, S. Ramakrishnan and D. Pal, Physical Review B, vol 84,p-064430 (2011)
	23.	Stable magnetic chemical locomotive with Pd Nanoparticle incorporated Ferromagnetic Oxide, K.K. Dey, K.K. Senapat, P. Phukan, Saurabh Basu and A. Chattopadhyay, The Journal of Physical Chemistry C, vol 115, 12708 (2011)
	24.	Effect of harmonic confinement on correlation studies of a spin polarized s-wave superconductor, P. Dey and Saurabh Basu, Physica C, vol 471, p-463 (2011)
	25.	Participation ratio and Fidelity analyses as tools to study BCS-BEC crossover, P. Dey, D. Sarkar, A. Khan and Saurabh Basu, European Physical Journal B, vol 81, p-95 (2011)
	26.	Current and Spin correlations in FFLO state of a s-wave superconductor, Journal of Physics: Conference series, vol 273, p-012072 (2011) by P. Dey, Saurabh Basu and R. Kishore

27.	Catalytic gold nanoparticle driven pH specific chemical locomotion, Journal of Colloid and Interface Science, vol 348, p-335 (2010) by K.K. Dey, B. Panda, A. Paul, Saurabh Basu, and A Chattopadhyay
28.	Importance of interlayer pair tunneling: A variational perspective, Physica C, vol 471,
	p-1 (2010) by A. Medhi and Saurabh Basu
29.	Phase diagram for a t-J bilayer: role of interlayer couplings, European Physical Journal B, vol. 72, p-583 (2009), by A.Medhi, Saurabh Basu and C.Y. Kadolkar
30.	Some clues in the investigation of the FFLO phase in superconductors, Journal of Physics Condensed Matter, vol. 21, p-355062 (2009), P. Dey, Saurabh Basu and R. Kishore
31.	BCS-BEC Crossover, potential vs. kinetic energy driven pairing for anisotropic superconductors, Physica B vol 403, p-1026 (2008) by P. Dey and Saurabh Basu
32.	Veering the motion of a chemical locomotive in a liquid, The journal of Chemical Physics, vol 129, p-121101 (2008) by K.K. Dey, D. Sharma, Saurabh Basu and A. Chattopadhyay (Also in October 6, 2008 issue of Virtual Journal of Nanoscale Science & Technology)
33.	Role of disorder in inducing a BCS-BEC crossover, Journal of Physics, Condensed Matter, vol 20, p-485205 (2008) by P. Dey and Saurabh Basu
34.	Chemical locomotives based on polymer supported catalytic nanoparticles, Journal of Physical Chemistry (Letters), vol 112, p-2797 (2008), by A. Agarwal, K.K. Dey, A. Paul, Saurabh Basu and A. Chattopadhyay
35.	d-wave correlations for anisotropic superconductors, Indian Journal of Physics , vol-82, p-289 (2008), by P. Dey and Saurabh Basu
36.	Variational Monte Carlo study of magnetic correlations in bilayer <i>t-J</i> model, Indian Journal of Physics, vol-82 p-257 (2008), by A. Medhi, Saurabh Basu and C.Y. Kadolkar
37.	Stability of the Gutzwiller projected BCS wavefunction in <i>t-J</i> bilayers, Physica C , vol 451, p-13 (2007) by A. Medhi, Saurabh Basu and C.Y. Kadolkar
38.	BCS @ 50: Derivation of gap equations in different lattice geometries, ICTP preprint (refereed), IC/2007/64 by P. Dey, C.Y. Kadolkar and Saurabh Basu
39.	Two electrons in a honeycomb lattice, Modern Physics Letters B , vol 21, p-391 (2007) by Saurabh Basu , C.Y. Kadolkar and N. Goveas
40.	Coexistence of magnetism and superconductivity in a <i>t-J</i> bilayer, Physical Review B, vol. 76, p-235122 (2007 by A.Medhi, Saurabh Basu and C.Y. Kadolkar
41.	Non-magnetic impurities in a two-leg ladder, Journal of Applied Physics, vol 101, 09D504 (2007) by A. Medhi, Saurabh Basu and C.Y. Kadolkar
42.	Hopping anisotropies – a candidate for BCS-BEC crossover, Physical Review B, vol 75, p-174512 (2007) by P Dey and Saurabh Basu
42.	Quantum Monte Carlo study of the Hubbard model doped with nonmagnetic impurities, Physica B , vol 378-380, p-430 (2006) by A. Medhi, Saurabh Basu and C.Y. Kadolkar
44.	Gap function in an anisotropic superconductor, Physica B, vol 378-380, p-315 (2006) by Saurabh Basu
45.	Phase diagram of the <i>t-J</i> model on a honeycomb lattice, Physical Review B, vol 76, p-235122 (2007), by C.Y. Kadolkar and Saurabh Basu

46.	
	Examining a Square to a triangular lattice interpolation: bound states in two dimensional t-J models, Physic Status Solidi (B) , vol 242, p-1431 (2005) by Saurabh Basu and RJ. Gooding (Collaboration with R.J. Gooding at Queens Univ. Canada)
47.	Increasing superconducting Tc's by a factor of 1000 with large hopping anisotropies in two-dimensional t-J model systems, Physical Review B, vol. 66, p-144507 (2002), Saurabh Basu, A.C. Jones and R. J. Gooding
48.	A model of pairing enhanced by stripelike correlations, Physica B, vol 52-53, p-312 (2002), by Saurabh Basu, P.W. Leung
49	Enhanced Bound State formation via Stripe-Like Hopping anisotropies, Physical Review B , vol 63, p-100506 (Rapid Communications), by Saurabh Basu , P.W. Leung and R.J. Gooding
50.	Disorder Effects upon the Raman spectrum in an Antiferromagnet, Phys. Stat. Sol. (b), vol 25, p-379 (2001), by Saurabh Basu
51.	Hopping disorder, magnon energy renormalization and two-magnon Raman scattering in an Antiferromagnet, Physical Review B, vol 55, 12338 (1997), by Saurabh Basu and A. Singh
52.	Two Magnon Raman scattering in a Mott-Hubbard Antiferromagnet , Physical Review B , vol 54, 6356 (1996), by Saurabh Basu and A. Singh
53	Self consistent study of impurity doped Mott-Hubbard insulator. Physical Review B, vol 53, 6406 (1996), by Saurabh Basu and A. Singh
54	Gap States in a doped Mott Hubbard insulator, Pramana Journal of Physics (Letters), vol 44, p-L77 (1995), by Saurabh Basu and A. Singh
55	Gap states, local moments and magnetic dynamics in a Mott-Hubbard Antiferromagnet doped with static impurities, Physical Review B, vol 53, 6406 (1996), by P. Sen, Saurabh Basu and A. Singh
	impurities, Physical Review B, vol 53, 6406 (1996), by P. Sen, Saurabh Basu and A. Singh
(ii) I	impurities, Physical Review B, vol 53, 6406 (1996), by P. Sen, Saurabh Basu and A. Singh Recent conferences attended Research Papers in non-refereed journals / conferences
(ii) I	impurities, Physical Review B, vol 53, 6406 (1996), by P. Sen, Saurabh Basu and A. Singh Recent conferences attended Research Papers in non-refereed journals / conferences SCES (2016) at Hangzhou, China (2016)
(ii) I	impurities, Physical Review B, vol 53, 6406 (1996), by P. Sen, Saurabh Basu and A. Singh Recent conferences attended Research Papers in non-refereed journals / conferences SCES (2016) at Hangzhou, China (2016) Gordon Research conferences (2015)
(ii) I 1 2 3	impurities, Physical Review B, vol 53, 6406 (1996), by P. Sen, Saurabh Basu and A. Singh Recent conferences attended Research Papers in non-refereed journals / conferences SCES (2016) at Hangzhou, China (2016) Gordon Research conferences (2015) Gordon Research conferences (2013)
(ii) I 1 2 3 4	impurities, Physical Review B, vol 53, 6406 (1996), by P. Sen, Saurabh Basu and A. Singh Recent conferences attended Research Papers in non-refereed journals / conferences SCES (2016) at Hangzhou, China (2016) Gordon Research conferences (2015) Gordon Research conferences (2013) AIP Conf. Proc. Vol. 1591, p 102-103 (2014)
(ii) I 1 2 3 4 5	impurities, Physical Review B, vol 53, 6406 (1996), by P. Sen, Saurabh Basu and A. Singh Recent conferences attended Research Papers in non-refereed journals / conferences SCES (2016) at Hangzhou, China (2016) Gordon Research conferences (2015) Gordon Research conferences (2013) AIP Conf. Proc. Vol. 1591, p 102-103 (2014) Gordon Research conferences (2011)
(ii) I 1 2 3 4 5 6	impurities, Physical Review B, vol 53, 6406 (1996), by P. Sen, Saurabh Basu and A. Singh Recent conferences attended Research Papers in non-refereed journals / conferences SCES (2016) at Hangzhou, China (2016) Gordon Research conferences (2015) Gordon Research conferences (2013) AIP Conf. Proc. Vol. 1591, p 102-103 (2014) Gordon Research conferences (2011) SCES (2011) Research Papers in non-refereed journals / conferences Catalytic Nanoparticles driven pH Specific Chemical Locomotion, Frontiers in Chemical Sciences (FICS 2010),
(ii) I 1 2 3 4 5 6 (iii)	impurities, Physical Review B, vol 53, 6406 (1996), by P. Sen, Saurabh Basu and A. Singh Recent conferences attended Research Papers in non-refereed journals / conferences SCES (2016) at Hangzhou, China (2016) Gordon Research conferences (2015) Gordon Research conferences (2013) AIP Conf. Proc. Vol. 1591, p 102-103 (2014) Gordon Research conferences (2011) SCES (2011) Research Papers in non-refereed journals / conferences Catalytic Nanoparticles driven pH Specific Chemical Locomotion, Frontiers in Chemical Sciences (FICS 2010), to be held in Indian Institute of Technology Guwahati, India, during December 3-4, 2010 by K.K. Dey, Saurabh Basu

	4.	BCS-BEC crossover – real space analysis using participation ratio, Condensed Matter Days, August 2010 by P Dey and Saurabh Basu
	5.	Current and Spin correlations in FFLO state of a s-wave superconductor , Strongly Correlated electron systems (SCES) in Santa Fe, USA (27 th June to 2 nd July, 2010) by P. Dey, Saurabh Basu and R. Kishore (Collaboration with R. Kishore, Brazil)
	6.	Participation ratio across BCS-BEC crossover, Gordon Research Conferences meeting in South Hadley, USA (13th -18th June, 2010) by Saurabh Basu
	7	Transport and magnetic properties of R₂Ir₃Sn₅(R=La,Ce,Pr,Nd) systems , DAE Solid State Physics Symposium (2010) by N. S. Sangeetha, A. Thamizhavel, Saurabh Basu, S. Ramakrishnan and D. Pal (Collaboration with TIFR group)
	8.	Chemical Locomotion as a Possible Source of Electricity, International Conference on Advanced Nanomaterials & Nanotechnology (ICANN- 2009), at Centre for Nanotechnology, IIT Guwahati, India, during December 09- 11, 2009, by K.K. Dey, Saurabh Basu and A. Chattopadhyay
	9.	Fulde-Ferrel-Larkin-Ovchinnikov states in a s-wave superconductor, Discussion meeting in Statistical & Condensed Matter Physics" in IIT Guwahati, India (October, 2009), by P. Dey and Saurabh Basu
	10	Why Fulde-Ferrell-Larkin-Ovchinnikov state is elusive in experiments: A note from the theoretician's desk, DAE Solid State Physics Symposium (2009). by P. Dey and Saurabh Basu
	11	Transport and Magnetic Properties of Lu₂ (Ir _{1-x} Rh _x)₃Si₅, DAE Solid State Physics Symposium (2009), N. S. Sangeetha, Saurabh Basu , A. Thamizhavel, A. K. Grover, S. Ramakrishnan, D. Pal (Collaboration with TIFR group)
	12	BCS-BEC crossover: A study of the interplay between density and the interparticle interaction strength, DAE Solid State Physics Symposium (2008), P. Dey and Saurabh Basu
	13	Phase diagram for a t-J bilayer: A variational Monte Carlo study, DAE Solid State Physics Symposium (2008), A. Medhi, Saurabh Basu and C.Y. Kadolkar
	14	Controlled Motion of Chemical Locomotives in a Liquid, Future Directions of Advanced Materials Research (FDAMR); a discussion Meeting at Shimla, India, during April 16-19, 2008, by K.K. Dey, Saurabh Basu, A. Chattopadhyay
	15	Disordered superconductors: A simple model manifesting pseudogap and BCS-BEC crossover, CMT32-Loughborough, UK, (August, 2008), by P. Dey and Saurabh Basu
	16	Designing Chemical Locomotives using Pd Nanoparticles , National Conference on Frontiers in Chemical Engineering (NCFCE-2007), at Department of Chemical Engineering, IIT Guwahati, India, during December 12-14, (2007) by K.K. Dey, Saurabh Basu , A. Chattopadhyay
	17	Condensation energy for a BCS-BEC crossover, DAE Solid State Physics Symposium (2007) by P. Dey and Saurabh Basu
	18	Effect of interplanar exchange coupling on the superconducting and magnetic properties of bilayer t-J model, DAE Solid State Physics Symposium (2007) by A. Medhi, Saurabh Basu and C.Y. Kadolkar
	19	Does BCS-BEC crossover explains Pseudogap ? Physics Academy of the North East (PANE) (Guwahati,March 2007) by P. Dey and Saurabh Basu
	20	Coexistence of superconductivity and antiferromagnetism in a bilayer t-J model, DAE Solid State Physics Symposium (2006) by A. Medhi, Saurabh Basu and C.Y. Kadolkar
	21	Variational Monte Carlo study of magnetic correlations of bilayer t-J model, Condensed Matter Days Symposium (2006) by A. Medhi, Saurabh Basu and C.Y. Kadolkar

22	<i>d</i> - wave Correlations for anisotropic Superconductors, Condensed Matter Days Symposium (2006), by P. Dey and Saurabh Basu
23	Thermodynamics of noninteracting electrons, Condensed Matter Days Symposium (2006), by Saurabh Basu and C.Y. Kadolkar
24	Pairing in a Honeycomb Lattice – An Exact Diagonalization Study, DAE Solid State Physics Symposium (2005) by A. C.Y. Kadolkar, Saurabh Basu and N. Goveas
25	Spin Correlation Studies in a t-J Bilayer, DAE Solid State Physics Symposium (2005), by A. Medhi, Saurabh Basu and C.Y. Kadolkar
26	Enhanced superconductivity in bilayered systems, APS March Meeting, 2005 (Los Angeles, CA) by Saurabh Basu and R.J. Gooding (Collaboration with R.J. Gooding at Queens Univ. Canada)
27	T=0 superconducting properties of a 2D plane of exchange coupled chains, APS March Meeting, 2004 (Montreal, Canada) by Saurabh Basu and R.J. Gooding (Collaboration with R.J. Gooding at Queens Univ. Canada)
28	A model of pairing enhanced by stripe like correlations , Strongly correlated electron systems (SCES), in Ann Arbor, (MI) August, 2001, Saurabh Basu, P.W. Leung and R. J. Gooding
29	Discussion meeting on High-Tc superconductivity, Univ. Of Toronto, Canada (September, 2000)
30	Conference on correlated electron systems at ICTP, Italy May (1997)
31	School on Condensed Matter and Computational Physics at ICTP, Italy May (1995)
32	Golden Jubilee celebration of TIFR (SUJAYATA) in September (1996)
33	Bose and 20th Century Physics in Kolkata, December (1993)