1. **Name of faculty: Prof. Mangej Singh**

2. **Department:** Department of Physics, University of Rajasthan, Jaipur

3. **Designation:** Professor

4. **Date Of Birth** - 05/08/1965

5. **Educational Qualifications:**

   - Secondary 1981 Rajasthan Education Board, Ajmer
   - P.U.C 1982 University of Rajasthan,Jaipur
   - B.Sc 1985 University of Rajasthan, Jaipur
   - M.Sc. 1987 Department of Physics, University of Rajasthan, Jaipur
   - Ph.D 1991 Department of Physics, University of Rajasthan, Jaipur,
     Topic : "Electrical Transport and Structural Properties of FeTi & TiNi thin film Metal Hydrides"
   - Joint UGC-CSIR JRF/NET Examination : NET physics Qualified (1989) UGC, New Delhi

6. **Address:** H-22C, Saraswati Nagar, Near Jawahar Circle , Jaipur-302017

7. **Mobile Number: 9829166219(m)**

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9. **Administrative Experiences**

   - **Head of Department of Physics, University of Rajasthan (2024)**
   - **Director, University Science Instrumentational Center (USIC), University of Rajasthan (2024)**
   - **Vice-Principle, University of Maharaj College, Jaipur (2016-18)**
   - **ADSW, University of Rajasthan(2016)**
   - **Dean Student Welfare (DSW) (2018)**
   - **Convener: Unfair Means Committee (2021)**
   - **Member of Revolution Committee**
   - **Member of the Coding Committee**
   - **Reactor of the University of Maharaja College, Jaipur (2010)**
   - **Procter: University of Maharaja College, Jaipur**
   - **NSS Co-Ordinator: University of Maharaja College, Jaipur (2010)**
   - **Convener : Board of studies , University of Rajasthan (2024)**
   - **Coordinator: B.Sc.(Math's Group) and B.Sc. (Major Physics) Syllabus Modification committee according NEP 2020, University of Rajasthan (2024)**
   - **Coordinator: M.Sc. Semester Scheme (I to IV Sem) Syllabus Modification**

committee , University of Rajasthan (2024)

- **External Member of BOS ,Mohanlal Sukhadiya University, Udaipur (2022-24)**
- **External Member of BOS, Vardhman Mahaveer Open University, Kota (2022)**

10. Details of Research Projects:

S. No.	Title of project	Funding Agency	Year of sanction	Year of completion	Funds received (in Lacs)
1	Preparation and characterization of bilayer and multilayer structure of semiconducting thin films	UGC Bhopal	F.No 4s-36/2004-05(MRP) Dt 31 March 2005	2005-2007	0.70 Lacs
2	Role of hydrogen in optical, electrical and magnetic properties of nanostructured multilayer thin film of dilute magnetic semiconductors.	UGC ,New Delhi	F.No.33-4/2007(SR) (PI) Dt.28 Feb2008	2008-2011	7.50Lacs
3	Development of polymer Membrane gas filters for Hydrogen purification	MNRE, New Delhi	No.103/3/2003-NT Dt 7th Nov 2003	2003-2006	16.14 Lacs
4	Nano-filter development and characterization by gas permeation.	UGC, New Delhi	No.F.10-20/2003(SR) Dt 31th March 2003	2003-2006	4.13 Lacs
5	Development of CNT doped polymeric membranes for hydrogen purification	MNRE , New Delhi	No.103/85/2007-NT dated 26th Feb 2008	2008-2010	30 Lacs
6	Functionalized CNT/polymer nano composites for Hydrogen storage and purification, CSIR , New Delhi	CSIR, New Delhi		2010-2013	18 Lacs

11. List of Publications:

S. No	Authors names	Title of paper	Name of Journal	Vol. No.	Pages from – to	Year
1	Hansraj Sharma, Sunil Kumar, Jagavendra Yadav, Jagdish	Temperature treatment effect on the physical and optical properties of	Journal of Materials Science: Materials in	Vol. 35 Issue 1	20	2024

	Prasad, Mangej Singh	ZnO thin film	Electronics			
2	Jagavendra Yadav, Jagdish Prasad, Hansraj Sharma, Sunil Kumar, Mangej Singh	Structural and thermal study of CuInSe2 films	Journal of the Indian Chemical Society	Vol. 100 Issue 9	101066	2023
3	Jagavendra Yadav, Mangej Singh	Effect of heat treatment temperature on preparation and characterization of $CuInSe_2$ thin films	Journal of Materials Science: Materials in Electronics	Vol. 34 Issue 8	692	2023
4	Jagdish Prasad, Jagavendra Yadav, Hansraj Sharma, Sunil Kumar, Mangej Singh	Impact of Annealing on Structural, Optical, and Electrical Characteristics of Spin-Coated Cu_2ZnSnS_4 Thin Films	Russian Journal of General Chemistry	Vol. 93 Issue 10	2663-2671	2023
5	Hemant Kumar, Mangej Singh	Hydrogenation and annealing impact on Si/CdTe junction for solar energy application	International Journal of Hydrogen Energy	Vol. 48 Issue 96	37667 - 37673	2023
6	Hansraj Sharma, Sunil Kumar, Jagavendra Yadav, Jagdish Prasad, Mangej Singh	Effect of Sn incorporation on the Structural and Optical Properties of ZnO Thin Films Prepared by Sol-Gel Method.	Oriental Journal of Chemistry	Vol. 39 Issue 6	1540-1546	2023
7	Jagdish Prasad, Jagavendra Yadav, Hansraj Sharma, Sunil Kumar, Mangej Singh	Impact of Sb Incorporation on the Structural and Optical Properties of CZTS Thin Films Grown by Spin Coating Technique.	Oriental Journal of Chemistry	Vol. 39 Issue 3	596	2023
8	Jagavendra Yadav, Jagdish Prasad, Hansraj Sharma, Sunil Kumar, Mangej Singh	Effect of Zn and Sn incorporation on the crystallinity of spin-coated CuInSe2 thin films	Journal of Materials Science: Materials in Electronics	Vol. 33 Issue 9	1-10	2022
9	Hemant Kumar, Mangej Singh	Effect of Thickness Variation of the N-Type Layer in	Int. J. Thin. Fil. Sci. Tec	Vol. 10 Issue	121-125	2021

		CdS/CdTe Solar Cell		2		
10	Hemant Kumar, Mangej Singh	Impact of hydrogenation and annealing on CdSe/ZnS thin film for solar cell application	Journal of Materials Science: Materials in Electronics	Vol. 31 Issue 15	12926 - 12931	2020
11	Hemant Kumar, Mangej Singh	Effect of Rapid Thermal Annealing on Thermal Evaporated CdSe Thin Film for Solar Cell Application	Advanced Science, Engineering and Medicine	Vol. 12 Issue 7	924-929	2020
12	K.C. Bhamu , R. Khenata, Saleem Ayaz Khan, Mangej Singh,And K.R. Priolkar	Electronic, Optical and Thermoelectric Properties of 2H-CuAlO2: A First-Principles Study	Journal of ELECTRONIC MATERIALS 16 November 2015 ISSN 0361-5235	Vol.45 Issue 1	P 615-623	2016
13	Jitendra Kumar, S.K.Srivastava, Ramesh Sharma, M. Singh, K. C. Bhamu	Elastic and Electronic Properties of TiC and TiN Crystals	Macromol. Symp. 2015, 357, 129–132 (Wiley online library.com)	Vol.357 Issue 1	p129-132	2015
14	Narendra Kumar Agrawal, Mangej Singh, Y. K. Vijay and K. C. Swami	Synthesis and Characterization of Colloidal TiO2 Nanoparticles: Through Titanium Chloride Rich Solutions	Advance science,Engineering and medicine ISSN: 2164-6627 (print); EISSN: 2164-6635 (online)	Vol 6, 1-8,	P595-602	2014
15	Mangej Singh	Effect of Hydrogenation on the Optical Properties of Cobalt and Tantalum Thin Films	Energy Science and Technology ISSN 1923-8460[PRINT]	Vol.5 no.2	P8-15	2013

16	Mangej Singh	Role of Hydrogen in Variation of Electrical, Optical and Magnetic Properties of ZnSe-Fe Bilayer Thin Films Structure	Energy Science and Technology ISSN 1923-8460[PRINT]	Vol. 6, No. 2,	P71-78	2013
17	Mahesh kumar Jangid and Mangej Singh	Effect of hydrogen on Raman spectra, structrral and optical properties of Mg/Al thin films.	Internationa l journal of physics and research (IJPR)ISSN 2250-0030	Vol.2, Issue 4	P15-13	2012
18	Jangid, M.K., and Singh, M.	Hydrogenation and annealing effect on electrical properties of nanostructured Mg/Mn bilayer thin films 37 (4) , pp. 3786-3791(2012)	Internationa l Journal of Hydrogen Energy ISBN 0360-3199	Vol.37 (4)	P3786-3791	2012

19.	S. P. Nehra, Neeraj Kumar, A. Sharma, M. S. Dhaka, M. Singh, Y. Hayashi, and Y. K. Vijay	Preparation and Characterization of Structural, Electrical, Optical and Magnetic Properties of Hydrogenated Multilayer ZnO/Mn Diluted Magnetic Semiconductor Thin Films	J. Spintron. Magn. Nano-material. SSN: 2158-866X (Print); EISSN: 2158-8678 (Online)	Vol. 1, 28-33 (2012)	P28-33	2012
20	Jangid,M.K., Nehra, S.P., Singh, M.	Optical, electrical and Raman properties of annealed hydrogenated Mg/Co bilayer thin films	Journal of Nano- and Electronic Physics ISSN: 2077-6772	Vol 3(1PART3)	P460-468	2011
21	Nehra,S.P. Singh, M.	Effect of vacuum annealing and hydrogenation on ZnSe/Mn multilayer diluted magnetic semiconductor thin films	Vacuum 0042-207X	Vol85(7)	P719-724	2011
22	Satyapal Nehra, Neeraj Kumar, Anshu Sharma, Mahendra S. Dhaka, Mangej Singh, Yasunori Hayashi, and Yogesh K. Vijay	Preparation and Characterization of Electrical, Optical and Magnetic Properties of Hydrogenated Multilayer ZnO/CoThin Films	Mater. Express ISSN: 2158-5849 (Print); EISSN: 2158-5857 (Online)	Vol.1, No.3	P237 - 244	2011
23	Subodh Srivastava, sumitkumar, V.N.singh, M.Singh and Y.K.Vijay	Synthesis and characterization of Tio2 doped polyaniline composites for hydrogen gas sensing.	International Journal of Hydrogen Energy ISBN 0360-3199	Vol.36	P6343 -6355	2011
24	Kumar, A., Sharma, S.S., Srivastava, S.,Nehra,	Study of the junction characteristics of	Optoelectronics and Advanced	Vol.4 (11)	P1701 -1704	2010

	S.P., Kulshrestha, V., Singh, M., Vijay, Y.K.	MWNT doped polymer composite films.	Materials, Rapid Communications . ISSN 1842-6573			
25.	Singh, M., Srivastava, S., Agarwal, S.,Kumar, S., Vijay, Y.K.	Optical properties of d.c. magneto sputtered tantalum and titanium nanostructure thin film metal hydrides.	Bulletin of Materials Science ISSN: 0250-4707 (Print)	Vol.33(5)	P569-573	2010
26	Nehra, S.P., Singh, M.	Hydrogenation effect on electrical, optical and magnetic properties of ZnSe/Co bilayer DMS thin films.	Solid State Communications ISSN: 0038-1098	Vol.150 (33-34)	P1587-1591	2010
27	Nehra, S.P., Sharma, D., Singh, M.,Vijay, Y.K.	Preparation and characterization of vacuum thermal evaporated trilayer Cu/Se/Al thin films.	Journal of Alloys and Compounds ISSN: 0925-8388	Vol502 (1)	P220-224	2010
28.	Nehra, S.P.and Singh, M.	Effect of hydrogen on electrical properties of ZnTe/Mn multilayer diluted magnetic semiconductor thin films	Journal of Optoelectronics Advanced Materials ISSN1454-4164	Vol.12(5)	P1125-1128	2010
29	Nehra, S.P., Singh, M.	Effect of hydrogen on interface of metal-semiconductor Schottky diode	Materials Science in Semiconductor Processing ISSN: 1369-8001	Vol.13(2)	P119-123	2010
30.	Srivastava, S., Sharma,	Study of chemiresistor	Synthetic Metals ISS	Vol.160 (5-6)	P529-534	2010

	S.S., Agrawal, S., Kumar, S., Singh, M., Vijay, Y.K.	type CNT doped polyaniline gas sensor	N: 0379-6779			
31	Tripathi, B., Awasthi, K., Kulshrestha, V.,Sharma, A., Agrawal, S., Kumar, S.,Sharma,S.S., Garg A, Singh M, Vijay, Y.K.	Optical and dynamic mechanical characterization of thin film polymer nanocomposites 24 (1-2) , pp. 57-63(2010)	International Modern Physics B ISSN0217-9792	Vol24 (1-2)	P57-63	2010
32	Jangid,M.K, Nehra S.P, Singh.M	Hydrogenation Effect on Mg/Co Multilayer Thin Films	International Journal of Engineering Science and Technology, **ISSN: 0975–5462 (online version);**	Vol.2 (11)	P6131-6135	2010
33	Jangid,M.K. Nehra S.P, Singh M	Optical and electrical properties of Mg/Co bilayer thin film metal hydrides	International Journal of Engineering Science and Technology ISSN: 0975–5462 (online)	Vol.2 (12)	p7841-7846	2010
34	Srivastava, S., Agrawal, S., Singh, M., Vijay, Y.K., Bhagwat, P.V., Sharma, S.C.	Positron source Ge-68 through copper and bronze irradiated by carbon ions	Physica Status Solidi (C) Current Topics in Solid State Physics ISSN 16101642	Vol.6(11)	P2384-2386	2009
35	Agrawal, S., Srivastava, S., Kumar, S., Sharma, S.S., Tripathi, B., Singh, M., Vijay, Y.K.	Swift heavy ion irradiation effect on Cu-doped CdS nanocrystals embedded in PMMA	Bulletin of Materials Science ISSN: 0250-4707 (Print) 0973-7669 (Online)	Vol.32(6)	P569-573	2009

36	Nehra, S.P., and Singh, M.	Role of hydrogen in CdTe-Mn thin film bilayer structure	Journal of Alloys and Compounds ISSN: 0925-8388	Vol 488(1)	P356-359	2009
37.	Srivastava, S., Sharma, S.S., Kumar, S., Agrawal, S., Singh, M., Vijay, Y.K.	Characterization of gas sensing multi-walled nanotube polyaniline composite films	International Hydrogen Energy ISBN 0360-3199	Vol .34(19)	P8444 -8450	2009
38	Nehra, S.P., Jangid, M.K., Srivastava, S.,Kumar, A., Tripathi, B., Singh, M., Vijay, Y.K.	Role of hydrogen in electrical and structural characteristics of bilayer CdTe/Mn diluted magnetic semiconductor thin films	International Hydrogen Energy 0360-3199	Vol.34(17)	P7306 -7310	2009
39	Sharma, S.S., Tripathi, B., Singh, M., Bhatnagar, D., Vijay, Y.K.	Junction characteristics of polycarbonate e blend on Si substrate	Applied Surface Science ISSN: 0169-4332	Vol.25 5(15)	P7070 -7072 2.032	2009
40	Sharma, A., Kumar, S., Tripathi, B.,Singh, M., Vijay, Y.K.	Aligned CNT/Polymer nanocomposite membranes for hydrogen separation	International Journal of Hydrogen Energy 0360-3199	Vol.34	P3977 -3982	2009
41	Singh M, Arora J.S, Awasthi K, Nathawat R, Vijay Y.K	Preparation and characterization of Zn-Se bilayer structure	Advanced Materials Research ISBN 13 978-0-87849-471-2	Vol.31	P153-157	2008
42	Acharya, N.K., Kulshrestha, V., Awasthi, K., Jain, A.K., Singh, M., Vijay, Y.K.	Hydrogen separation in blended polymer membranes	International Journal of Hydrogen Energy 0360-3199	Vol.33(1)	P327-331	2008
43	Jain, A.K., Acharya,	Study of hydrogen	International Journal of	Vol.33(1)	P346-349	2008

	N.K., Kulshreshtha, V., Awasthi, K., Singh, M., Vijay, Y.K.	transport through porous aluminum and composite membranes	Hydrogen Energy 0360-3199			
44	Mangal, R.K., Tripathi, B., Singh, M., Vijay, Y.K., Rais, A.	Growth and characterization of In-Sb thin film structure	Indian Journal of Pure and Applied Physics 0019-5596 (Print)	Vol.45(12)	P987-990	2007
45	Singh, M., Vijay, Y.K., Sharma, B.K.	A variable electron beam and its irradiation effect on optical and electrical properties of CdS thin films	Pramana - Journal of Physics ISSN: 0304-4289 (print)	Vol.69(4)	P631-638	2007
46	Singh, M., Kulshrestha, V., Tripathi, B.,Awasthi, K., Vijay, Y.K., Rais, A.	Positron lifetime and residual gas analysis studies of MmNi4.5 Al0.5 hydride system.	International Hydrogen Energy 0360-3199	Vol.32	P3376-3380	2007
47.	Nathawat, R., Kumar, A., Kulshrestha, V., Singh, M., Ganesan, V., Phase, D.M.,Vijay, Y.K.	Surface modification study of low energy electron beam irradiated polycarbonate film	Applied Surface Science ISSN: 0169-4332	Vol.253(14)	P5985-5991	2007
48	Vijay, Y.K., Acharya, N.K., Kulshrestha, V., Singh, M., Sharma, B.K., Marshal, D., Choi, J.S.	Modification in microstructure and properties of polymers by 10 keV electron beam	International Journal of Nanoscience Print: 0219-581X Online: 1793-5350	Vol.6(2)	P167-171	2007
49	Kulshrestha, V., Acharya, N.K., Awasthi, K., Nathawat, R., Singh, M., Vijay, Y.K.	Characterization of asymmetric polymeric membranes by gas permeation	Micron ISSN: 0968-4328	ISSN: 0968-4328	Vol.38 (3)	2007

50	Mangal, R.K., Tripathi, B., Singh, M.,Vijay, Y.K. 30 (1) , pp. 5-7(2007)	Study of annealing effects in Al-Sb bilayer thin films Mangal, R.K., Tripathi, B., Singh, M.,Vijay, Y.K. 30 (1) , pp. 5-7(2007)	Bulletin of Materials Science ISSN: 0250-4707 (Print)	Vol.30(1)	P5-7	2007
51	Singh, M., Kulshershtha, V., Kumar, A.,Acharaya, N.K., Vijay, Y.K.	The kinetics of Cr layer coated on TiNi films for hydrogen absorption	Pramana - Journal of Physics ISSN: 0304-4289 (print	Vol.68(1)	P75-81	2007
52	Mangal, R.K., Singh, M., Vijay, Y.K.,Avasthi, D.K.	Study of ion and electron beam irradiation effects in Al-Sb bilayer thin films.	Indian Journal of Pure and Applied Physics ISSN0019-5596 (Print)	Vol.44(9)	P685-689	2006
53	Mangal, R.K., Singh, M., Vijay, Y.K.,Avasthi, D.K.	Preparation of Al-Sb semiconductor by swift heavy ion irradiation	Bulletin of Materials Science ISSN: 0250-4707 (Print)	Vol.29 (7)	P653-657	2006
54	Kulshrestha, V., Awasthi, K., Acharya, N.K., Singh, M., Avasthi, D.K., Vijay, Y.K.	Swift heavy ion irradiated polymeric membranes for gas permeation.	Journal of Applied Polymer Science Print: 0021-8995	Vol.102(3)	P2386-2390	2006
55	Acharya, N.K., Kulshrestha, V., Awasthi, K., Kumar, R., Jain, A.K., Singh, M.,Avasthi, D.K., Vijay, Y.K.	Gas permeation study of Ti-coated, track-etched polymeric membranes	Vacuum 0042-207X	Vol.81(3)	P389-393	2006

56	Tripathi, B., Mangal, R.K., Wate, S., Vijayavargiya, J.K., Kulshrestha, V., Awasthi, K., Singh, M., Vijay, Y.K.	Positron lifetime study in FeCl 3 doped polysulphone polymer	Indian Journal of Pure and Applied Physics 0019-5596 (Print)	Vol.44(10)	P763-766	2006
57	Vijay, Y.K., Kulshrestha, V., Awasthi, K.,Acharya, N.K., Jain, A., Singh, M., (...), Avasthi, D.K.	Characterization of nanocomposite polymeric membrane	Journal of Polymer Research ISSN0021-8995	Vol 13(5)	P357-360	2006
58	Awasthi, K., Kulshrestha, V., Nathawat, R., Acharya, N.K., Singh, M., Avasthi, D.K., Vijay, Y.K.	Conduction nature of conical pores in PET membrane	Polymer Bulletin ISSN0170-0839	Vol.57(5)	P723-728	2006
59	Kulshrestha, V., Awasthi, K., Acharya, N.K., Singh, M., Avasthi, D.K., Vijay, Y.K.	Gas and ion transport through a track-etched large-area polymer film	Desalination 0011-9164	Vol.195(1-3)	P273-280	2006
60	Kulshrestha, V., Acharya, N.K., Awasthi, K., Singh, M., Avasthi, D.K., Vijay, Y.K.	Study of gas permeation for asymmetric track-etched polymer blends	International Journal of Hydrogen Energy 0360-3199	Vol.31(10)	P1266-1270	2006
61	Awasthi, K., Kulshreshtha, V., Tripathi, B., Acharya, N.K., Singh, M., Vijay, Y.K.	Transport through track etched polymeric blend membrane	Bulletin of Materials Science print : 0250-4707	Vol.29(3)	P261-264	2006

62	Awasthi, K., Kulshrestha, V., Acharya, N.K., Singh, M., Vijay, Y.K.	Ion transport through track etched polypropylene membrane.	European Polymer Journal 0014-3057	Vol42(4)	P883-887	2006
63	Singh, M., Arora, J.S., Vijay, Y.K., Sudharshan, M.	Optical, electrical and thermoelectric power studies of Al-Sb thin film bilayer structure	Bulletin of Materials Science print : 0250-4707 electronic :0973-7669	Vol.29(1)	P17-20	2006
64	Vaibhav kulshrestha, kamlendra Awasthi, N.K.Acharya, M.Singh, P.V.Bhagwat. Y.K.Vijay	Structural ,optical, thermal-mechanical , and transport properties of ion-irradiated polymer membranes	Polymer Bulletin 0170-0839	Vol.56	P427-435	2006
65	Kulshrestha, V., Awasthi, K., Acharya, N.K., Singh, M., Vijay, Y.K.	Effect of temperature and α-irradiation on permeability for polymeric membrane	Bulletin of Materials Science	ISSN: 0250-4707 (Print) 0973-7669 (Online)	Vol.28 (7)	2005
66	Singh, M., Vijay, Y.K.	Magneto-resistance and I-V characteristic studies of AlSb and InSb thin film bilayer structure	Indian Journal of Pure and Applied Physics ISSN: 0975-1041 (Online); 0019-5596 (Print)	Vol.43(5)	P383-385	2005
67	Singh,M., Bhahada, K.C., Vijay, Y.K.	Variation of the optical band gap in obliquely deposited selenium thin films.	Indian Journal of Pure and Applied Physics ISSN: 0975-	Vol.43(2)	P129-131	2005

			1041 (Online); 0019-5596 (Print)			
68	Singh, M., Vijay, Y.K.	Preparation and characterization of Zn-Se bilayer thin film structure Singh, M., Vijay, Y.K.	Applied Surface Science ISSN: 0169-4332	Vol.23 9(1)	2004	P79-86
69	Singh, M., Vijay, Y.K.	Electrical, optical and structural properties of indium-antimonide (In-Sb) bilayer film structure	Indian Journal of Pure and Applied Physics ISSN: 0975-1041 (Online); 0019-5596 (Print)	Vol.48(8)	P610-614	2004
70	Singh, M., Jain, I.P.	Mossbauer and positron life-time studies of FeTi and Fe46Ti50Mn4 hydride systems	International Hydrogen Energy 0360-3199	Vol.21(5)	P367-372	1996
71	Singh, M.	The effect of hydrogen pressure on resistivity and charge carrier concentration in FeTi and FeTi-Mn thin films	International Hydrogen Energy 0360-3199	Vol.21(3)	P223-228	1996
72	Bhargava, A., Williamson, A., Singh, M.,Vijay, Y.K., Jain, I.P. 91 (11) , pp. 923-926(1994)	Influence of particle size on positron lifetimes in polycrystalline bismuth	Solid State Communications ISSN 0038-1098	Vol.91(11)	P923-926	1994
73	Singh, M., Bhargava, A., Williamson, A.,Vashistha, M., Vijay,	Effect of a sulphur layer on obliquely deposited titanium thin	International Journal of Hydrogen Energy 0360-3199	Vol.19(8)	P709-712	1994

	Y.K., Jain, I.P.	films for a hydrogen absorption mechanism.				
74	Singh, M., Vijay, Y.K., Jain, I.P.	Effect of hydrogen absorption on electrical resistance and hall effect charge carrier concentration in Fe Ti, Fe Ti Sz, Ti Ni and Ti Ni Sez thin films	International Hydrogen Energy 0360-3199	Vol.17(1)	P29-35	1992
75	Upadhyaya, K.S., Singh, M., Banthia, A.S., Vijay, Y.K., Jain, I.P.	Thickness-dependent hydrogenation of obliquely deposited Fe Ti thin films	International Hydrogen Energy 0360-3199	Vol.17(1)	P37-40	1992
76	Singh, M., Vijay, Y.K., Jain, I.P.	The temperature dependence of Fe Ti and Fe Ti Sz thin films obliquely deposited for the hydrogen absorption-desorption mechanism.	International Hydrogen Energy 0360-3199	Vol 16(1)	P485-490	1991
77	Singh, M., Vijay, Y.K., Jain, I.P.	The effect of a sulfur layer on Fe Ti thin films obliquely deposited for hydrogen storage.	International Hydrogen Energy 0360-3199	Vol.16(2)	P101-104	1991
78	Singh, M., Vuay, Y.K., Jain, I.P.	The effect of selenium layer coating and temperature dependence on Ti Ni thin films obliquely deposited for the hydrogen	International Hydrogen Energy 0360-3199	Vol.16(7)	P477-483	1991

		absorption mechanism				
79	Upadhyay, K.S., Singh, M., Vijay, Y.K., Jain, I.P.	Cyclic charging and discharging of obliquely deposited Fe Ti thin films.	International Hydrogen Energy 0360-3199	Vol.15(12)	P687-870	1990
80	Jain, I.P., Vijay, .K., Upadhyay, K.S., Singh, M.	Kinetics of hydrogen absorption in obliquely deposited Fe Ti thin films	International Hydrogen Energy 0360-3199	Vol.15(5)	P345-348	1990
81	Upadhyay, K.S., Singh, M., Vijay, Y.K., Jain, I.P. Journal of The Less-Common Metals159 (C) , pp. 141-146(1990)	Activation energy of obliquely deposited Fe Ti and Fe Ti Hx thin films	Journal of Less-Common Metals (Now Journal of compound and alloys) ISSN: 0925-8388	Vol.15 9 (C)	P141-146	1990

12. List of Books Published:

Authors names	Title of Book	Name of Publisher	Year
Dr. M. Singh	Electronics and solid-state devices	Publication RBD. Jaipur and New Delhi ISBN: 81-8142-303-08	First Edition 2006-007 Revised 2014-15

13. List of Conferences / Symposium/ Refresher Courses organized

1. **Organizing Secretary:** 26th Annual General Meeting of Material Research Society of India, theme symposium "Materials for Inclusive Development" held on February 9-11, 2015.
2. **Convener-** National Conference on Recent Advances in Material Science and Technology (NCRAMST-2019) Held on February 4, 2019 at the University of Rajasthan, Jaipur
3. **Convener-** National Conference on Advances in Material Science and Technology (NCAMST-2020) Held on February 29-March 1st,2020 at the University of Rajasthan, Jaipur.

13 . List of Conferences / Symposium/ Refresher Courses Attended:

S. No.	Programme	Duration	Organized by
1.	47Th Orientation programme for University & College teachers at ASC, UOR, Jaipur 15Th Jan.2011 to 10th Feb. 2001, sponsored by UGC	15Th Jan. 2001to 10th Feb. 2001	ASC, UOR, Jaipur sponsored by UGC
2	Attended the Refresher course in Physics at A.S.C, UOR, Jaipur (Latest trends in modern physics)	15th jan2004 to 4th Feb 2004	ASC, UOR, Jaipur sponsored by UGC
3	Participated in the Refresher course in Physics (A Refresher course on physics of Materials)	28th Nov. 2011 to 17th Dec.2011	ASC, UOR, Jaipur sponsored by UGC
4.	XX Refresher course in Experimental Physics, held at Manipal Institute of Technology, Manipal.	(May 24th May to June 9Th June 2010)	sponsored by the Indian Academy of Sciences

Participation in subject associations, conferences, seminars, and workshops without paper presentation (Department/ICTP Italy)

- Third International Conference on electro Electroactive Polymers: Materials & Devices, 12- 17 Oct (ICEP-2008), Jaipur
- International Conference on Advanced Workshop on Development of Radiation Resistant Materials, 20 - 24 April 2009, ICTP, Italy.
- International Conference on Research Frontiers in Ultra-Cold Atoms, 4 - 8 May 2009 ICTP, Italy
- International Conference on Superconductor-Insulator Transitions,18 - 23 May 2009 ICTP, Italy
- Attended " Pre- conference school on Neutrons as probes of conductivity matter" (October 5-10,2009, Bhabha, atomic research center, Mumbai)
- Meeting of modern science and school physics: college for school teachers of physics in ICTP from 27th April 2011 to 3rd May 2011 at ICTP, Trieste, Italy
- Workshop on advance oxide interfaces, from 9th May2011 to 12th May 2011 at ICTP, Trieste ,Italy
- Joint ICTP-IAEA advanced school on the role of nuclear technology in hydrogen-based energy systems, from 13th June 2011 to 18th June 2011 at ICTP, Trieste, Italy
- Workshop on materials science for solar fuels from 19th May to 23rd May 2014 at ICTP, Italy
- Workshop on coherent phenomena in Disordered optical system from 26th May to 30th May 2014 at ICTP, Italy
- Participation in the Malviya Mission Teachers Training Programme from 11-23 March 2024, NEP Orientation Course and Sensitization Programme, University of Rajasthan, Jaipur

14. Details of conferences in which chaired a session/invited talk

Role of hydrogen in dilute magnetic semiconductors for future applications of electronic devices (invited talk)	International conference on electron microscopy and XXXV annual meeting of the electron microscope society of India. EMSI-2014, July 7-11 2014	University of Delhi, Delhi	International conference.
Hydrogen as future energy for Environmental compatibility and applications. (invited talk)	International conference on Emerging trends in physics for Environmental monitoring and management(ETPEMM-12) Dec17-19,2012	Punjabi University, Patiala	International Conference
Industrial Research session, (co-chaired)	International Conference on Sustainable Development and Resource Utilization: current trends and perspectives 23-25 Sept 2005	Department of Chemistry, UOR, Jaipur	International Conference
Progress in Non-Conventional energy research and perspective in higher education (Invited lecturer)	Refresher course on Higher Education, Delivered on 29 Dec 2014	ASC, University of Rajasthan, Jaipur	Refresher course
Hydrogen : pollution-free energy source (Invited lecturer)	Refresher course in Chemistry July 2010, Department of Chemistry, University of Rajasthan, Jaipur	ASC. University of Rajasthan, Jaipur	Refresher course.

15. Papers in Conference Proceedings:

S. No.	**Title of the Paper presented**	**Title of Conference/ Seminar**	**Organized by**	**Whether international/ national/state/ regional/college or university level**
1.	Electron irradiation effect on optical band gapof CdS thin films.	DAE, Solid state Physics symposium Dec 26-30 (2003) at Jiwaji University, Gawalior	DAE	National

2.	Characterization of hetro-junction ZnSe-CdS thin film trough UV-VIS spectroscopy & R.B.S	DAE, Solid state Physics symposium Dec 26-30 (2006) at Baraktula University, Bhopal	DAE	National
3.	Positron lifetime in oxides	Third National conference on positron Annihilation and Compton profile, Jan .17-20(1990),UOR, Jaipur	Department of Physics, University of Rajasthan, Jaipur	National
4.	Preparation and characterization of Zn-Se bilayer structure	4th International conference on advance material technologies 1-6July 2007 (ICMAT-07) at Singapore	Material research Society (MRS), Singapure	International
5.	Silicon based (Si/Mn &sSi/Co) Hydrogen gas sensors	International conference on Hydrogen and hydrogen storage methods and materials Jan 3-6, 2009, Bangalore.	Division of Chemical science, IISC, Banglore	International
6.	Optical and Magnetic properties of hydrogenated ZnSe/Fe bilayer semiconductor thin films	16 th international conference on crystal growth (ICCG-16) held from, 8-13 August 2010 at Beijing, China	Shandong University, Jinan at Beijing, China	International
7.	Effect of hydrogenation on structural, optical and Raman spectra properties of Mg/Al bilayer thin films	National conference on Current trends in Materials Research UOR, Jaipur March17-19, 2012	Department of physics, University of Rajasthan, Jaipur	National
8.	Optical, Electrical & thermoelectric power studies of Al-Sb thin film multilayer structure	National symposium on Science &Technology of Vacuum and thin films – IVSNS-2001	Indian Vaccum Society, Mumbai & IISC, Banglore	National
9.	Magneto resistance and I-V characteristic studies of AlSb & Insb thin films	II National Conference on Thermochemical properties Sept.19-21,2002	Department of Physics, UOR, Jaipur	National
10	Hydrogenation Effect on Mg/Mn Multilayer Thin Films	Solid state physics, proceedings of 55DAE solid state physics symposium 2010	AIP conference proceedings 1349, 685-686 (2011)	National

11	Photovoltaic response of RGO doped MEH-PPV: PCBM blend devices	DAE, Solid State Symposium	AIP conference proceedings 1591, 646 (2014)	National
12	Temperature dependence of gas sensing behavior of Tio2 doped PANI composite thin films,	DAE, Solid State Symposium	AIP conference proceedings 1591,693 (2014)	National

16. National / International Awards received

- Research Associate, (R.A) Direct awarded By CSIR, New Delhi (1st Jan 1992 to 8th August1996)
- Pool Scientist of CSIR 1996 (Not joined)
- Regular Associate ship of Abdus Salam International Centre for Theoretical Research, ICTP ,Italy (Jan2008 to 31st Dec 2015)
- Name included in World Who-Who's book edition 2009 on the basis of research work
- EU-India Grid community membership from 05th Feb 2007

17. Membership of technical societies / academic bodies/ National or international organizations (if any)

- Material Research Society, Singapore (member 2007-2009 & 2017-2019)
- International Crystal Growth Society, Beijing (member2010-13)
- Material Research Society of India (life member)
- Life Member, Indian physics Association (IPA), Mumbai and
- Life member Rajasthan University Teachers Association (RUTA).
- Material Research Society Secretary of Rajasthan Chapter MRSI (2015)

Editorial board member

- International journal of physics and research (IJPR) ISSN2250-0030
- Journal Energy Science and Technology (JEST) ISSN 1923-8460

18. Details of Ph. D. students supervised:

Name of student	Year of award	Title of thesis
Vaibhav Kulshresta	Prof. Y.K. Vijay and Dr. Mangej Singh Awarded 2006	Development and characterization of etched polymeric membrane filters
Anil Kumar	Prof. Y.K. Vijay and Dr. Mangej Singh Awarded 2010	Optimization of single layer polymer solar cell parameters and junction characteristics
Satyapal Nehra	Dr. Mangej Singh Awarded 2011	Role of hydrogen in optical ,electrical and magnetic properties of zinc based multilayer thin films of diluted magnetic semiconductors
Subodh Srivastava	Prof. Y.K. Vijay and Dr. Mangej Singh Awarded 2012	Development of Ti,Ta,CNT polymer composite based hydrogen gas sensors
Mahesh kumar Jangid	Dr. Mangej Singh Awarded 2012	Optical.Electrical and Structural properties of nano structured Mg.based thin film metal hydrides
Hemant Kumar	Prof. Mangej Singh Awarded 2023	Preparation and Characterization of CdTe based thin film solar cells
Jagdish Prasad	Prof. Mangej Singh Awarded 2024	Synthesis and characterization of CZTS thin film for solar cell Applications

M. Phil. Student supervised:

Name of Candidate	Title of thesis	Duration	Guide name
Partibha	Study of Metal Silicide structure	2006-2007	Dr. Mangej Singh
Sachindra Sharma	Fabrication of experimental system to study the duty cycle and frequency using IC555	2009-2010	Dr. Mangej Singh

19. **Post Doctoral Fellows (if any):**

- Dr. K.C. Bhamu , D.S. Khothari fellow, UGC New Delhi (2014-15)