

# Curriculum Vitae

---

## Ashish Kumar Singh

Associate Professor (Since Oct-2019)

Department of Chemistry

Guru Ghasidas University

Bilaspur-495009 (C. G.)

Mob. No.: +91 9450209554

Email: [ashish.bhuchem@gmail.com](mailto:ashish.bhuchem@gmail.com)

Website: <https://sites.google.com/site/ashishbhuchem/>



---

### Education

Banaras Hindu University                      Ph.D.                      Inorganic Chemistry                      **2011**  
**Topic:** Synthetic, spectral and structural aspects of some transition metal complexes based on substituted pyridyl/imidazolyl ligands

Banaras Hindu University                      M.Sc.                      Chemistry                      **2007**

Banaras Hindu University                      B.Sc.                      Chemistry                      **2005**

### Fellowships, Awards and Honours

INSA-INSPIRE Faculty Fellowship                      **2016**

Fast-Track Young Scientist (DST)                      **2015**

Dr. D. S. Kothari Postdoctoral Fellowship                      **2013**

JSPS Postdoctoral Fellowship                      **2011**

CSIR-UGC NET-Junior Research Fellowship+LS                      **2006 & 2007**

First Position in M. Sc. Chemistry (Inorganic Section)                      **2007**

Graduate Aptitude Test in Engineering (GATE) (**All India Rank 73**)                      **2007**

### Research Experience

JSPS Postdoctoral Fellow (AIST, Ikeda, Osaka)                      **2011-2013 (2 Y)**

Study of new liquid phase nitrogen based chemical hydrogen storage materials

(*Supervisor: Prof. Qiang Xu*)

D. S. Kothari Postdoctoral Fellow (IISc, Bangalore)                      **2013-2016 (2 Y 7.5 M)**

Designing strategies for immobilization of homogeneous chiral catalyst on magnetic nanoparticle

for their facile recovery (*Supervisor: Prof. B. R. Jagirdar*)

Fast-Track Young Scientist (SMST, IIT(BHU))                      **2016 (5.3 M)**

Hydrogen generation from liquid-phase chemical hydrogen storage materials: Strategies and

developing new methodology (*Mentor: Prof. Rajiv Prakash and Dr. A. K. Singh*)

DST INSPIRE Faculty (SMST, IIT(BHU))                      **2016-2019 (3 Y, 2M)**

Developing strategies for efficient hydrogen generation from chemical hydrogen storage materials

# Curriculum Vitae

## Publications and Citations

**Total Publications = 49 (+2), Citation = 1552, Av. Cit. = 34, Impact Factor = 196.819, Av. IF = 4.02, H index = 20, Patents: 02, Conf.: 10, Conf. Proc.: 02: ResearcherID: H-5863-2011**

### List of Publications

Sl. No.	Author (s)	Year	Title	Complete Reference of Journal	Impact Factor of Journal	ISSN/ ISBN No.
1	J.-Q. Liu,* Z.-D. Luo,a Y. Pan, <b>Ashish Kumar Singh</b> ,* M. Trivedi, A. Kumar*	2019	Recent developments in luminescent coordination polymers: Designing strategies, sensing application and theoretical evidences	<i>Coord. Chem. Rev.</i> , Accepted (03/12/2019)	13.476	00108545
2	S. Dev G., Vikas Sharma,* <b>Ashish Singh</b> , V. S. Baghel, M. Yanagida, A. Nagataki, N. Tripathi*	2019	Raman spectroscopic study of ZnO/NiO nanocomposites based on spatial correlation model	<i>RSC Adv.</i> 9, 26956-26960	3.049	20462069
3	Pranjalee Yadav, Sarita Gond, Ashish Kumar Singh, Vinod P. Singh*	2019	A pyrene-thiophene based probe for aggregation induced emission enhancement (AIEE) and naked-eye detection of fluoride ions	<i>J. Luminescence.</i> 215, 116704	2.961	00222313
4	V. P. Singh, R. Dwivedi, D. P. Singh, S. Singh, <b>Ashish Kumar Singh</b> , B. S. Chauhan and S. Srikrishna	2019	Logic gate behavior and intracellular application of a fluorescent molecular switch for the detection of Fe <sup>3+</sup> and cascade sensing of F <sup>-</sup> in pure aqueous media	<i>Org. Biomol. Chem.</i> 17, 7497-7506	3.49	14770539
5	S. Pal, U. P. Azad, <b>Ashish Kumar Singh</b> ,* D. Kumar, R. Prakash	2019	Studies on some spinel oxides based electrocatalysts for oxygen evolution and capacitive applications	<i>Electrochim. Acta</i> 320, 134584	5.383	00134686
6	X.-Y. Ling, J. Wang, C. Gong, L. Lu, <b>Ashish Kumar Singh</b> , A. Kumar, H. Sakiyama, Q. Yang, J. Liu	2019	Modular construction, magnetism and photocatalytic properties of two new metal-organic frameworks based on a semi-rigid tetracarboxylate ligand	<i>J. Solid State Chem.</i> 277, 673-679	2.291	00224596
7	A. K. Singh,* J. Prasad, U. P. Azad, <b>Ashish Kumar Singh</b> , R. Prakash, K. Singh, A. Srivastava, A. A. Alaferdova, S. A. Moshkalev	2019	Vanadium doped few-layer ultrathin MoS <sub>2</sub> nanosheets on reduced graphene oxide for high-performance hydrogen evolution reaction	<i>RSC Adv.</i> 9, 22232-22239	3.049	20462069
8	P. Yadav, <b>Ashish Kumar Singh</b> , C. Upadhyay, V. P. Singh	2019	Photoluminescence behaviour of a stimuli responsive Schiff base: Aggregation induced emission and piezochromism	<i>Dyes &amp; Pigments</i> 160, 731-739	4.018	01437208
9	S. K. S. Patel, K. Dewangan, S. K. Srivastav, N. K. Verma, P. Jena, <b>Ashish Kumar Singh</b> , N. S. Gajbhiye	2018	Synthesis of $\alpha$ -MoO <sub>3</sub> nanofibers for enhanced field-emission properties	<i>Adv. Mater. Lett.</i> 9 585-589	NA	0976397X
10	U. P. Azad, M. Singh, S. Ghosh, <b>Ashish Kumar Singh</b> ,* V. Ganesan, A.K. Singh, R. Prakash	2018	Facile Synthesis of BSCF Perovskite Oxide as Enhanced Bifunctional Oxygen Electrocatalysis	<i>Int. J. Hyd Energy.</i> 43, 20671-20679	4.084	03603199
11	A. Singh, M. Trivedi, P. Singh, G. Kociok-Köhn, U. P. Azad, <b>Ashish Kumar Singh</b> * A. Kumar*	2018	Copper(I) tertiary phosphine xanthate complexes as single source precursors for copper sulfide and their application in the OER	<i>New J. Chem.</i> , 42, 18759-18764	3.069	11440546

## Curriculum Vitae

12	U. P. Azad, S. Ghosh, C. Verma, <b>Ashish Kumar Singh</b> ,* A. K. Singh,* R. Prakash	2018	Study of Capacitive Behavior of MOF Derived Nanocarbon Polyhedron	<i>Chemistry Select</i> 3, 6107–6111	1.716	23656549
13	A. Singh, R. Yadav, G. Kociok-Köhn, M. Trivedi, U. P. Azad, <b>Ashish Kumar Singh</b> ,* A. Kumar*	2018	Syntheses of nickel sulfides from 1,2-bis(diphenylphosphino)ethane nickel(II)dithiolates and their application in the oxygen evolution reaction	<i>Int. J. Hyd Energy</i> , 43, 5985–5995	4.084	03603199
14	S. Ghosh, U. P. Azad, <b>Ashish Kumar Singh</b> ,* A. K. Singh, R. Prakash	2017	Facile Synthesis of MoS <sub>x</sub> and MoS <sub>x</sub> -rGO Composite: Excellent Electrocatalyst for Hydrogen Evolution Reaction	<i>Chemistry Select</i> , 2, 11590–11598	1.716	23656549
15	R. Yadav, Ashish Kumar Singh, Y. Waghadkar, G. Kociok-Köhn, A. Kumar,* R. Chauhan,* S. Rane, S. Gosavi	2017	1,2-bis(diphenylphosphino)ethane nickel(II) O,O'-dialkyldithiophosphates as Potential Precursors for Nickel Sulfides	<i>New Journal of Chemistry</i> , 41, 1327–1333	3.069	11440546
16	D. P. Singh, R. Dwivedi, <b>Ashish Kumar Singh</b> , B. Koch, P. Singh, V. P. Singh*	2017	A dihydrazone based “turn-on” fluorescent probe for selective determination of Al <sup>3+</sup> ions in aqueous ethanol	<i>Sens. Actuat. B.</i> , 238, 128–137	6.393	09254005
17	R. Chauhan, R. Yadav, <b>Ashish Kumar Singh</b> , M. Trivedi, G. Kociok-Köhn, A. Kumar,* S. Gosavi, S. Rane	2016	Ferrocenyl Chalcones with Phenolic and Pyridyl Anchors as Potential Sensitizers in Dye-Sensitized Solar Cells	<i>RSC Advances</i> , 6, 97664–97675	3.049	20462069
18	<b>Ashish Kumar Singh</b> ,* Suryabhan Singh and Abhinav Kumar	2016	Hydrogen energy future with formic acid: arenewable chemical hydrogen storage system	<i>Catal. Sci. Technol.</i> , 6, 12–40	5.726	20444753
19	<b>Ashish Kumar Singh</b> and Qiang Xu*	2014	Highly-dispersed surfactant-free bimetallic Ni-Pt nanoparticles as high-performance catalyst for hydrogen generation from hydrous hydrazine	<i>Int. J. Hyd Energy</i> , 39, 9128–9134	4.084	03603199
20	<b>Ashish Kumar Singh</b> , Daya Shankar Pandey*, Qiang Xu* and Pierre Braunstein*	2014	Recent advances in supramolecular and biological aspects of arene ruthenium(II) complexes(Invited Review)	<i>Coord. Chem. Rev.</i> , 270–271, 31–56	13.476	00108545
21	<b>Ashish Kumar Singh</b> and QiangXu*	2013	Metal-organic framework supported bimetallic Ni-Pt nanoparticles as high-performance catalysts for hydrogen generation from hydrous hydrazine	<i>Chemcatchem</i> , 5, 3000–3004	4.495	18673899
22	KengoAranishi, <b>Ashish Kumar Singh</b> , and QiangXu*	2013	Dendrimer-encapsulated bimetallic Pt-Ni nanoparticles as highly efficient catalysts for hydrogen generation from chemical hydrogen storage materials	<i>Chemcatchem</i> , 5, 2248–2252	4.495	18673899
23	<b>Ashish Kumar Singh</b> and QiangXu*	2013	Synergistic catalysis over bimetallic alloy nanoparticles (Invited review)	<i>Chemcatchem</i> , 5, 652–676	4.495	18673899
24	Di-Chang Zhong, KengoAranishi, <b>Ashish Kumar Singh</b> , Umit B. Demirci and QiangXu* (Inside cover page)	2012	Synergistic effect of Rh-Ni catalysts on the highly-efficient dehydrogenation of aqueous hydrazine borane for chemical hydrogen storage	<i>Chem. Commun.</i> , 48, 11945–11947	6.164	13597345
25	<b>Ashish Kumar Singh</b> , Mahendra Yadav, KengoAranishi and QiangXu*	2012	Temperature-induced selectivity enhancement in hydrogen generation from Rh-Ni nanoparticle-catalyzed decomposition of hydrous hydrazine	<i>Int. J. Hyd Energy</i> , 37, 18915–18919	4.084	03603199
26	MahendraYadav, <b>Ashish Kumar Singh</b> , Nobuko Tsumori, QiangXu	2012	Palladium silica nanosphere-catalyzed decomposition of formic acid for chemical hydrogen storage	<i>J. Mater. Chem.</i> , 22, 19146–19150	10.733	20507488
27	Sanjay Kumar Singh,† <b>Ashish Kumar</b>	2011	Noble-metal-free bimetallic nanoparticle-catalyzed selective	<i>J. Am. Chem. Soc.</i> , 133, 19638–19641	14.695	00027863

## Curriculum Vitae

	<b>Singh</b> , <sup>‡</sup> KengoAranishi, and QiangXu* ( <sup>‡</sup> = Equal contribution)		hydrogen generation from hydrous hydrazine for chemical hydrogen storage			
28	Prashant Kumar, <b>Ashish Kumar Singh</b> , RampalPandey, Daya Shankar Pandey*	2011	Bio-catalysts and catalysts based on ruthenium(II) polypyridyl complexes imparting diphenyl-(2-pyridyl)-phosphine as a co-ligand	<i>J. Organomet Chem.</i> , 696, 3454–3464	2.066	0022328X
29	R. Pandey, P. Kumar, <b>Ashish Kumar Singh</b> , M. Shahid, P.-Z. Li, S. K. Singh, Q. Xu, A. Misra, D. S. Pandey*	2011	Fluorescent zinc(II) complex exhibiting “On-Off-On” switching toward Cu <sup>2+</sup> and Ag <sup>+</sup> ions	<i>Inorg. Chem.</i> , 50, 3189–3197	4.850	00201669
30	Prashant Kumar, <b>Ashish Kumar Singh</b> , Mahendra Yadav, Pei-Zhou Li, Sanjay Kumar Singh, Qiang Xu, Daya Shankar Pandey*	2011	Synthesis and characterization of ruthenium(II) complexes based on diphenyl-2-pyridylphosphine and their applications in transfer hydrogenation of ketones	<i>Inorg. Chim. Acta</i> , 368, 124–131	2.433	00201693
31	<b>Ashish Kumar Singh</b> , Mahendra Yadav, and Daya Shankar Pandey*	2011	Synthesis and characterization of 3d metal complexes based on 1-(4-Nitrophenyl)-imidazole	<i>Bull. Chem. Soc. Jpn</i> , 84, 205–210	4.431	00092673
32	Mahendra Yadav, <b>Ashish Kumar Singh</b> , Daya Shankar Pandey*	2011	Heteroleptic half-sandwich Ru(II), Rh(III) and Ir(III) complexes based on 5-ferrocenyldipyromethene	<i>J. Organomet. Chem.</i> , 696, 758–763	2.066	0022328X
33	Prashant Kumar, <b>Ashish Kumar Singh</b> , Rampal Pandey, Pei-Zhou Li, Sanjay Kumar Singh, Qiang Xu, Daya Shankar Pandey*	2010	Synthesis, characterization and reactivity of arene ruthenium compounds based on 2,2'-dipyridylamine and di-2-pyridylbenzylamine and their applications in catalytic hydrogen transfer of ketones	<i>J. Organomet. Chem.</i> , 695, 2205–2212	2.066	0022328X
34	Rakesh Kumar Gupta, <b>Ashish Kumar Singh</b> , Mahendra Yadav, Prashant Kumar, Sanjay Kumar Singh, Pei-zhou Li, Qiang Xu, Daya Shankar Pandey*	2010	Synthesis and characterization of Ru(IV) and Rh(I) complexes containing phenyl-imidazole ligands	<i>J. Organomet. Chem.</i> , 695, 1924–1931	2.066	0022328X
35	<b>Ashish Kumar Singh</b> , MahendraYadav, RampalPandey, Prashant Kumar, Daya Shankar Pandey*	2010	Half-sandwich ruthenium, rhodium and iridium complexes containing dipyridylamine based ligands	<i>J. Organomet. Chem.</i> , 695, 1932–1939	2.066	0022328X
36	Sudhakar Dhar Dwivedi, Santosh Kumar Dubey, <b>Ashish Kumar Singh</b> , Krishna Kumar Pandey, Daya Shankar Pandey*	2010	New ruthenium(II) thiolato complexes: Synthesis, reactivity, spectral, structural and DFT studies	<i>Inorg. Chim. Acta</i> , 363, 2095–2103	2.433	00201693
37	Prashant Kumar, MahendraYadav, <b>Ashish Kumar Singh</b> , Daya Shankar Pandey *	2010	Synthesis and characterization of some novel ruthenium(II) complexes containing thiolate ligands	<i>J. Organomet. Chem.</i> , 695, 994–1001	2.066	0022328X
38	<b>Ashish Kumar Singh</b> , MahendraYadav, Sanjay Kumar, SailajaSunkari, Daya Shankar Pandey,*	2010	Extended molecular networks based on Zn and Cd imparting N-substituted imidazole	<i>Inorg. Chim. Acta</i> , 363, 995–1000	2.433	00201693
39	MahendraYadav, <b>Ashish Kumar Singh</b> , RampalPandey, Daya Shankar Pandey *	2010	Synthesis and characterization of complexes imparting N-pyridyl bonded <i>meso</i> -pyridyl substituted dipyrromethanes	<i>J. Organomet. Chem.</i> , 695, 841–849	2.066	0022328X
40	<b>Ashish Kumar Singh</b> , Prashant Kumar, MahendraYadav, Daya Shankar Pandey*	2010	Synthesis, characterisation and theoretical studies on some <i>piano-stool</i> ruthenium and rhodium complexes containing substituted phenyl imidazole	<i>J. Organomet. Chem.</i> , 695, 567–573	2.066	0022328X

## Curriculum Vitae

			ligands			
41	Prashant Kumar, Mahendra Yadav, <b>Ashish Kumar Singh</b> , Daya Shankar Pandey*	2010	Synthetic, spectral, structural, and catalytic aspects of some piano-stool complexes containing 2-(2-diphenylphosphanylethyl)pyridine	<i>Eur. J. Inorg. Chem.</i> , 2010, 704–715	2.578	14341948
42	Prashant Kumar, <b>Ashish Kumar Singh</b> , Sanjeev Sharma, Daya Shankar Pandey*	2009	Structures, preparation and catalytic activity of ruthenium cyclopentadienyl complexes based on pyridyl-phosphine ligand	<i>J. Organomet. Chem.</i> , 694, 3643–3652	2.066	0022328X
43	<b>Ashish Kumar Singh</b> , Mahendra Yadav, Prashant Kumar, Sanjay Kumar Singh, Sailaja Sunkari, Daya Shankar Pandey*	2009	Novel structures based on 1-(4-cyanophenyl)-imidazole resulting from weak bonding interactions	<i>J. Mol. Str.</i> , 935, 1–7	2.011	00222860
44	Prashant Kumar, <b>Ashish Kumar Singh</b> , Jitendra Kumar Saxena, Daya Shankar Pandey*	2009	Synthesis, and characterization of ruthenium(II) polypyridyl complexes containing $\alpha$ -amino acids and its DNA binding behavior	<i>J. Organomet. Chem.</i> , 694, 3570–3579	2.066	0022328X
45	<b>Ashish Kumar Singh</b> , Sudhakar Dhar Dwivedi, Santosh Kumar Dubey, Sanjay Kumar Singh, Sanjeev Sharma, Daya Shankar Pandey,* Ru-Qiang Zou, Qiang Xu	2009	Synthesis and reactivity of homo-bimetallic Rh and Ir complexes containing a N,O-donor Schiff base	<i>J. Organomet. Chem.</i> , 694, 3084–3090	2.066	0022328X
46	Mahendra Yadav, <b>Ashish Kumar Singh</b> , Daya Shankar Pandey*	2009	First Examples of Heteroleptic Dipyrrin/ $\eta^5$ -Pentamethylcyclopentadienyl Rhodium/Iridium (III) Complexes and Their Catalytic Activity	<i>Organometallics</i> , 28, 4713–4723	4.100	02767333
47	Mahendra Yadav, <b>Ashish Kumar Singh</b> , Biswajit Maiti, Daya Shankar Pandey*	2009	Heteroleptic arene ruthenium complexes based on meso-substituted dipyrrins: Synthesis, structure, reactivity, and electrochemical Studies	<i>Inorg. Chem.</i> , 48, 7593–7603	4.850	00201669
48	Mahendra Yadav, Prashant Kumar, <b>Ashish Kumar Singh</b> , Joan Ribas, Daya Shankar Pandey*	2009	First examples of homo-/heteroleptic bi-/tri-nuclear complexes containing 5-ferrocenyl-dipyrrromethene	<i>Dalton Trans.</i> , 2009, 9929–9934	4.052	14779226
49	Sudhakar D. Dwivedi, <b>Ashish K. Singh</b> , Sanjay K. Singh, Sanjeev Sharma, Manish Chandra, Daya S. Pandey*	2008	Ruthenium complexes containing pyridine-2-carbaldehyde azine as a synthon in the synthesis of bi-/trimetallic complexes	<i>Eur. J. Inorg. Chem.</i> , 2008, 5666–5673	2.578	14341948

### Patents

S.No	Author(s)	Year	Title	Application No. (Date)
1.	Qiang Xu, Sanjay Kumar Singh, <b>Ashish Kumar Singh</b>	<b>2011</b>	Method and catalysts for hydrogen generation	Japanese Patent 2010-195165 (Application date: Sep., 07, 2011) (Registration date: May 29, 2015)
2.	Qiang Xu, Sanjay Kumar Singh, <b>Ashish Kumar Singh</b>	<b>2013</b>	Catalyst for generating hydrogen and method for generating hydrogen	<i>U.S. Patent</i> , 2013, 20130059217 (Application date: Sep., 07, 2011) (Publication date: March 07, 2013)

### Papers presented in conferences

## Curriculum Vitae

S.No	Author(s)	Year	Title	Presenting Author/Publisher
1	<b>Uday Pratap Azad,</b> Ashish Kumar Singh,* Rajiv Prakash, Akhilesh Kumar Singh	<b>2018</b>	Preparation and characterization of perovskite based cheap catalyst for oxygen evolution reaction	Poster Presentation, Institute day, IIT(BHU), 16-17 <sup>th</sup> February 2018
2	<b>Ashish Kumar Singh</b>	<b>2017</b>	Study on liquid phase chemical hydrogen storage materials	Invited Talk, International Conference, RARIET- 2017, AP Goyal Shimla University, HP, India, 17 <sup>th</sup> -18 <sup>th</sup> November
3	<b>Ashish Kumar Singh*</b> and Uday Pratap Azad	<b>2017</b>	Room Temperature synthesis of Amorphous MoS <sub>x</sub> Nanoparticles for Hydrogen Evolution Reaction	Poster presentation, 20 <sup>th</sup> CRSI National Symposium in Chemistry, Gauhati University, 2-4 <sup>th</sup> February
4	<b>Ashish Kumar Singh</b> and Qiang Xu (Oral Presentation)	<b>2012</b>	Metal-Nanoparticle Catalyzed Hydrogen Generation From Hydrous Hydrazine for Chemical Hydrogen Storage	Oral Presentation, International symposium on metal-hydrogen systems, at Kyoto terra hall, Kyoto
5	<b>Ashish Kumar Singh</b> and Qiang Xu	<b>2012</b>	Noble-metal-free bimetallic nanoparticle catalyzed hydrogen generation from hydrous hydrazine	Oral Presentation, 92 <sup>th</sup> annual meeting of chemical society of Japan (CSJ), at hiroshi campus, keio university, Tokyo
6	<b>Ashish Kumar Singh,</b> Amit Kumar, Arnab Biswas and Daya S. Pandey	<b>2011</b>	Half-Sandwich Ru/Rh/Ir Complexes: Synthesis and Applications	Poster Presentation, 13 <sup>th</sup> CRSI National Symposium in Chemistry, NISER, Bhubaneswar
7	<b>Ashish Kumar Singh</b> and Daya Shankar Pandey	<b>2010</b>	Half-sandwich piano-stool complexes containing dipyrindyl amine and dipyrindyl ketone based ligands	Poster Presentation, International Symposium on Frontiers in Inorganic Chemistry (FIC-2010), IACS, Kolkata
8	<b>Ashish Kumar Singh,</b> Prashant Kumar, Rampal Pandey and Daya S. Pandey	<b>2010</b>	Synthesis and characterization of new cationic half sandwich bi-/tri-metallic complexes of Ru/Rh/Ir based on Dipyrindyl amine based ligands	Poster Presentation, 12 <sup>th</sup> CRSI National Symposium in Chemistry, ICT, Hyderabad
9	<b>Ashish Kumar Singh,</b> Prashant. Kumar and Daya S. Pandey	<b>2009</b>	Heteroleptic Dipyrin/ $\eta^5$ -pentamethylcyclopentadienyl rhodium/iridium and their catalytic activity	Poster Presentation, Modern Trends in Inorganic Chemistry (MTIC-XIII), IISc, Bangalore
10	<b>Ashish Kumar Singh, S.</b> Sharma, S.K. Singh and D.S. Pandey	<b>2008</b>	Cationic Homo/Hetero Bi- and Tri-nuclear Ruthenium Complexes	<b>Ashish Kumar Singh,</b> 10 <sup>th</sup> CRSI National Symposium in Chemistry, IISc, Bangalore

### Papers in Conferences (Proceedings)

S.No	Author(s)	Year	Title	Presenting Author/Conference	Publisher
1	Sourav Ghosh , Uday Pratap Azad, and <b>Ashish Kumar Singh</b>	<b>2019</b>	Synthesis of colloidal MoS <sub>x</sub> nanoparticles and their transformation into carbon supported MoS <sub>2</sub> nanocomposite	Ashish Kumar Singh, Oral Presentation, International Conference on Advances in Basic Sciences (ICABS), GDC Memorial College, District Bhiwani, Haryana	AIP Concerence Proceedings, 2142, 150025 (2019)
2	Uday Pratap Azad, Sandeep Kumar, <b>Ashish Kumar Singh,</b> Rajiv Prakash and Akhilesh Kumar Singh	<b>2019</b>	MOF Derived Co/C and Co <sub>3</sub> O <sub>4</sub> /C Polyhedron for Hydrogen Evolution Reaction	Uday Pratap Azad, Poster Presentation, International Conference on Advances in Basic Sciences (ICABS), GDC Memorial College, District Bhiwani, Haryana	AIP Concerence Proceedings, 2142, 180006 (2019)

## Curriculum Vitae

---

3	Vivekanand, Sandeep Kumar, Uday Pratap Azad and <b>Ashish Kumar Singh</b>	2019	Ni-Fe/rGO Composite Catalysts for Electrochemical Water Splitting	International Meeting on Energy Storage Devices (IMESD), IIT Roorkee	AIP Concerence Proceedings
---	---	------	---	--	----------------------------

### Book

S.N.	Book Title	Authors	ISSN/ ISBN No.	Publisher
1	Reversible Hydrogen Storage: Formic Acid Economy	Ashish Kumar Singh, Akhilesh Kumar Singh, Abhinav Kumar	978-613-9-85671-8	Lambert Academic Publisher