

# Masood Alam

Professor  
Applied Sciences and Technology



## Basic Detail

First Name	Masood
Middle Name	
Last Name	Alam
Employment-id	MA0954
Designation	Professor
Faculty / Office / School / Centres	Faculty of Engineering & Technology
Department	Applied Sciences and Technology
Social Category	General
Date of Birth	15/04/1958
Are you physically challenged ?	no
Gender	Male
Selection Mode	CAS
Date of Joining the Institution	22/09/1985
Date of Joining Teaching Profession	23/09/1985
Highest Qualification	PhD
Additional / Eligibility Qualification	
No. of Years spent exclusively in other than teaching job	NIL
Religion	Islam
Office Address	Room No-121, Environmental Science Laboratory, D/o Applied Sciences & Humanities, F/o Engineering & Technology, Jamia Millia Islamia, New Delhi-110025
Residential Address	I Block (52 A), Abul Fazal Enclave-I, Jamia Nagar, New Delhi-110025 (India)
Field of Specialization	Analytical Chemistry, Environmental Studies, Water
Broad Discipline Group Category	Analytical of Applied Chemistry
Broad Discipline Group	
Email-id (Primary)	malam@jmi.ac.in
Email-id (Secondary)	
h-index	10
i10-index.	10

## Empoyement Profile

### (i) Empoyement Profile in JMI

#	Designation	From	To
1	Professor	20/01/2004	Till Date
2	Reader	20/01/1996	19/01/2004
3	Senior Lecturer	22/09/1990	19/01/1996
4	Lecturer	22/09/1985	21/09/1990

### (ii) Promotion Details

#	Date of Promotion	Designation
1	20/01/2004	Professor

### (iii) Teaching Appointment before joining JMI

#	Job Title	Employeer	From	To
1				

### (iv) Industry Experience

#	Position	Name of the Industry	From	To
1				

## Academic Qualification (From Highest Degree)

### (i) Academic Qualification (From Highest Degree)

#	Examination	Board/ University	Year	Division/ Grade	Subjects
1	Ph.D.	Aligarh Muslim University	1983	First	Analytical Chemistry
2	M.Phil.	Aligarh Muslim University	1981	First	Analytical Chemistry
3	M.Sc.	Aligarh Muslim University	1979	First	Analytical Chemistry
4	B.Sc.	Aligarh Muslim University	1977	First	Chemistry

### (ii) Highest Academic Degree when Joined JMI

Ph.D.

## Academic/ Administrative Responsibilities Outside the University

### (i) Academic/Administrative Responsibilities within the University

#	Position	University / Faculty / Department / Centre Level	From	To
1	Assistant Warden	Kellat House & SRK Hostels, Jamia Millia Islamia	1985	1987
2	Warden	Kellat House & SRK Hostels, Jamia Millia Islamia	1987	1989
3	Senior Warden	Pink House & New Boys Hostel, Jamia Millia Islamia	1989	1994
4	Co-ordinator for B.Sc. Engg. I Yr. course	Faculty of Engineering and Technology, Jamia Millia Islamia	1991	1996
5	Programme co-ordinator	NSS, Jamia Millia Islamia		
6	Chairman of Board of Studies (BOS)	Deptt of Applied Sciences & Hum. Faculty of Engineering & Tech, JMI	1999	2002
7	Chairman of Board of Studies (BOS)	Deptt of Applied Sciences & Hum. Faculty of Engineering & Tech, JMI	2005	2008
8	Member Faculty Committee	Faculty of Engineering and Technology, Jamia Millia Islamia	2002	Till date
9	Head of Department	Deptt of Applied Sciences & Hum., Faculty of Engg. & Technology, Jamia Millia Islamia	Dec., 1999	Dec., 2002
10	Head of Department	Deptt of Applied Sciences & Hum., Faculty of Engg. & Technology, Jamia Millia Islamia	Dec., 2005	Dec., 2008
11	Fire Officer	Jamia Millia Islamia	25/05/2005	Till date
12	Tabulator (B. Tech. Engg. & M.Sc. Electronics)	Deptt of Applied Sciences & Hum., Faculty of Engg. & Technology, Jamia Millia Islamia	1990	Till date
13	Tabulator (M.A. and M.Phil.)	F/o Social Sciences, Jamia Millia Islamia	2006	2009
14	Member Discipline Committee, Admission Review Committee, Anti Ragging Squad	Jamia Millia Islamia	2006	Till date
15	Member Cultural Committee	Jamia Millia Islamia	2006	2014
16	President Indoor games	Jamia Millia Islamia		
17	Security Officer	Jamia Millia Islamia	Sep., 1998	25/05/2005
18	Security Adviser	Jamia Millia Islamia	25/05/2005	2014
19	Proctor	Jamia Millia Islamia	1994	1997
20	Proctor	Jamia Millia Islamia	27/07/2006	2013
21	Chief Proctor	Jamia Millia Islamia	2013	2014

### (ii) Academic/Administrative Responsibilities outside the University

#	Position	Institution	From	To
1	Member, Academic Council	Al-Falah School of Engineering & Technology, Dhauj, Faridabad	2009	Till date

## Awards / Fellowships

### (i) Awards

#	Year of Award	Name of the Award	Awarding Agency/Organization
1			

### (ii) Fellowships

#	Year of Award	Name of the Fellowship	Awarding Organization	From (Month/ Year)	To (Month/ Year)
1	1980	Junior Research Fellowship	CSIR	1980	1982
2	1982	Senior Research Fellowship	CSIR	1982	1985

**(iii) Extension and Co-curricular & field based activities**

#	Name of Activity	Place of Activity	From (Month/Year)	To (Month/Year)	Beneficiary
1					

**Curriculum Development****(i) Curriculum Development**

#	Name	Level	Offered Under CBCS	Beneficiary Department/Center
1				

**(ii) Course Taught at Postgraduate and Undergraduate Levels**

#	Course Name	Level	Offered Under CBCS	Beneficiary Department/Center
1	Engineering Chemistry	Under Graduate	NA	Applied Sciences and Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia, NewDelhi
2	Engineering Materials	Under Graduate	NA	Applied Sciences and Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia, NewDelhi

**(iii) Project Guided**

#	Title of Project	Name of Student	Level	Duration (From)	Duration (To)	Student Affiliation
1	Removal of Heavy Metals Using Agricultural Wastes	Rashmi Chaudhary	PG	March, 2012	May, 2012	C.C.S. U, Meerut
2	Adsorption of Pesticides By Agricultural Wastes	Pratima Chaudhary	PG	January, 2011	April, 2011	C.C.S. U, Meerut

**Details of Major R&D Submitted/Ongoing/Completed Projects****(i) Details of Major R&D Submitted/Ongoing/Completed Projects**

#	Title of Project	Funding Agency	Sanctioned Grant (Rs.)	Date of Sanction	Year	Status
1	Studies of Physico-chemical and Toxicological studies of Yamuna river in Delhi	MHRD	10 Lakhs	12/01/1993	1994	Completed
2	Modernization of Chemistry Lab	MODROB-AICTE	5 Lakhs	30/03/1999	2001	Completed
3	Modernization of Applied Chemistry Lab	MODROB-AICTE	7.5 Lakhs	24/03/1999	2001	Completed
4	Physico-chemical studies of Industrial effluents in Delhi	TAPTEC-AICTE	10 Lakhs	27/03/1999	2001	Completed

**(ii) Details PhD Student guided/ Enrolled**

#	Name of the PhD Student	Title of Thesis	Role	Year	Awarded / Enrolment
1	Anwar Ahmad	Physico-chemical & toxicological studies of Industrial effluents	Supervisor		Award
2	Brajesh K. Shrivastava	Assessment of groundwater quality & environmental studies of soil & industrial effluent of vidarbha region	Supervisor	2007	Award
3	Nidhi Adya	Corrosion analysis of Titanium as dental implant with indigenous base metal alloys: invitro & invivo conditions	Supervisor		Award
4	Bobin Saluja	Three dimensional finite element stress analysis to evaluate the effect of design variability of various endosseous cylindrical titanium dental implants supporting prosthesis	Supervisor	2010	Award
5	Sumbul Rais	The studies of Persistent Organic Pesticides / other pollutants in different samples (milk, water etc) using HPLC/AAS & other techniques in Delhi.	Supervisor	2011	Award
6	Mohd. Aslam	Physico-chemical & toxicological studies of groundwater samples & water bodies in rural areas of Delhi & removal of toxic elements using different adsorbents	Supervisor	2010	Award
7	Anuradhsa Shukla	Real world on road emission of in-use vehicles for different types of fuels	Supervisor	2011	Award
8	Shumaila	Synthesis and characterization of polyanilinic nanocomposites	Supervisor		Award
9	Firoz Ali Ansari	Assessment & Adsorption of heavy metal ions and organic pollutants from waste water and other samples using new adsorbents	Supervisor	2016	Award
10	Sajid Ali	The studies and removal of pollutants of the effluents collected from Industries of NCT- Delhi by using new adsorbents and their effects on crop plants	Supervisor	2013	Enrolment
11	Priya Kumari	Synthesis, characterization and applications of new adsorbents in removal of pollutants from various solutions	Supervisor	2015	Enrolment
12	Zafar Iqbal	Synthesis and characterization of nanocatalyst for C-H Activation	Supervisor	2017	Enrolment
13	Mohd Saquib Tanweer	Synthesis, characterization and applications of Polyaniline based composites as an efficient adsorbent for the removal of various dyes from aqueous solutions	Supervisor	2018	Enrolment
14	Harshvardhan Chauhan	Development of doped nanoparticles for the conversion of plants based biomass to biodiesel	Supervisor	2018	Enrolment

**(iii) Detail of M.Phil Student Guided/ Enrolled**

#	Name of the M.Phil Student	Title of Thesis	Role	Year	Year of Award/ Enrolment
1			Supervisor		

## Participation in Workshop / Symposia / Conferences / Colloquia / Seminar / School etc.

### (i) Participation in Workshop / Symposia / Conferences / Colloquia / Seminar / School etc.

#	Date(s)	Title of Paper	Level of Event	Role	Event organized by	venue
1	19/09/2006	Applications of Conducting Polymers and Nano materials in Science & Technology	national	Chairperson	Jamia Millia Islamia	JMI, New Delhi
2	03/12/2008	Polymer Science and Technology-vision and scenario	national	Chairperson	Jamia Millia Islamia	JMI, New Delhi
3	28/04/2014	Nanotechnology and Renewable Energy	national	Chairperson	Department of Applied Sciences and Humanities	JMI, New Delhi

## Membership of Learned Societies

### (i) Membership of Learned Societies

#	Types of Membership	Organozation	Membership No. if any
1	Life Member	Indian Society for Technical Education	

### (ii) Academic Foreign Visits

#	Name of Institute / University	Duration of Visit	Programm
1			

## Publication

### (i) Journals

#	Author(s)	Title of paper	Journal (Full Name)	Volume (No.)	Page Number	Year	Impact Factor if any	ISSN Number	Name of the Publisher	Whether you are the main author	Whether peer review	Level of Publisher	UGC Listed
54	Priya Kumari and Masood Alam	Biogenic Synthesis of Ag Nanoparticles Using Ocimum tenuiflorum and Tinospora cordifolia Plant Extract	Recent Innovations in Chemical Engineering	11		2018		24055204, 24055212	Bentham Science Publishers B.V.		Yes	International	Yes
53	Fakhar, N., Siddiqui, W. A., & Alam, M.,	Novel Polymeric Adsorbent for the Remediation of Cu (II) Ions from Water	In Advances in Polymer Sciences and Technology		47-63	2018			Springer		Yes	International	Yes
52	Sajid Ali, Masood Alam	Growth of Solanum melongena in effluent of Okhla industrial area	International Journal of Recent Scientific Research	9		2018		0976-3031			Yes	International	Yes

51	Priya Kumari, Masood Alam	Adsorption Isotherm Models and Kinetics for Chlorpyrifos Adsorption from aqueous solutions onto bottom ash using batch experiments	International Journal of Science and Research	1		2018		?2319-7064	International Journal of Science and Research (IJSR)		Yes	International	Yes
50	F. A. Ansari, M. Alam	Sorption of Nickel ions onto chemically modified Parthenium hysterophorous L. and their quantitative determination by titration	journal of water and environment science	1	1-10	2017		2605-6070	JWES		Yes	International	Yes
49	M Aslam, P Arulazhagan, S Rais, M Alam	Adsorption of Zn <sup>2+</sup> and Ni <sup>2+</sup> ions from aqueous solution onto Phyllanthus debilis: kinetics & equilibrium studies	Environment Engineering & Management Journal (EEMJ)	15(7)		2016		1582-9596	Gheorghe Asachi Technical University of Iasi, Maria Gavrilescu/Gheorghe Asachi Technical University of Iasi, Romania, GH ASACHI TECH		Yes	International	Yes
48	Sajid Ali and Masood Alam	Effect of mixed Industrial Effluent on the growth of Abemoschus Esculentus	International Journal of Science and Technology	6	14	2015		2049-7318	IJST Publication		Yes	International	Yes
47	Sajid Ali, Masood Alam, Tabassum Akhtar	The effect of industrial effluents on crop plants: a review	International Journal of Research in Engineering IT and Social Sciences	5 (4)	28	2015		2250-0588	Indus Foundation for Education, Research and Social Welfare		Yes	International	Yes
46	Shumaila, Masood Alam, Azher M Siddiqui and Mushahid Husain	Field emission characteristics of polyaniline/Se nanocomposites	Journal of Nanoscience and Nanotechnology	14	1-5	2014		15334880	American Scientific Publishers		Yes	International	Yes
45	Tabassum Akhtar and Masood Alam	Surface Area Study of the Nanocrystalline Zinc Oxide Synthesized by Reverse Micellar Method	International Journal of Scientific Research	3 (12)	1-3	2014		2277 - 8179	Sara Book Publication		Yes	International	Yes
44	Firoz Ali Ansari and Masood Alam	Kinetics and Equilibrium Isotherm Studies of Endrin and o, p DDT Adsorption on Low Cost Adsorbent, Parthenium hysterophorous Activated with Nitric Acid and Methanol	International Journal of Science and Research	3 (11)	2182-2	2014		?2319-7064	International Journal of Science and Research (IJSR)		Yes	International	Yes

43	Firoz Ali Ansari and Masood Alam	Parthenium Hysterophorous Weed: Novel Adsorbent for the Removal of Pesticides Mixture From Aqueous Solution	Indian journal of Applied Research	4 (11)	439-441	2014		2249 - 555X	Sara Book Publication				
42	Tabassum Akhtar and Masood Alam	Synthesis and Characterization of Zinc Oxide Nanoparticles via a Novel Reverse-Micella Route	International Journal of Science and Research	3 (11)	1361-1364	2014		2319-7064	International Journal of Science and Research (IJSR)		Yes	International	Yes
41	Tabassum Akhtar and Masood Alam	A Novel Ion-Selective Electrode of Polythiophene based on Surfactant assisted Dilute Polymerization Method	Sensor Letters	12	1637-1640	2014		1546198X, 15461971	American Scientific Publishers		Yes	International	Yes
40	Tabassum Akhtar and Masood Alam	Preparation and Dielectric properties of Polythiophene/C Oxide Nanocomposite	Advanced Science Letters	20	1509-1512	2014		19366612, 19367317	American Scientific Publishers		Yes	International	Yes
39	Tabassum Akhtar and Masood Alam	Synthesis, Characterization and Electrical Conductivity of Zinc Oxide Nanoparticles Embedded in Polythiophene Nanocomposites	Science of Advanced Materials	6(8)	1752-1755	2014		19472943, 19472935	American Scientific Publishers		Yes	International	Yes
38	G Lakshmi, M Alam, AM Siddiqui, M Husain	Samarium Chloride (SmCl <sub>3</sub> ) Doped Poly (o-Toluidine): Synthesis and Characterization	Science of Advanced Materials	5 (1)	64-70	2013		19472943, 19472935	American Scientific Publishers		Yes	International	Yes
37	Mohd Aslam, Sumbul Rais, Masood Alam and Arulazhagan Pugazhendi	Adsorption of Hg(II) from Aqueous Solution Using Adulsa (Justicia adhatoda) Leaves Powder: Kinetic and Equilibrium Studies	Journal of Chemistry		1-11	2013		2090-9063	Hindawi Publications		Yes	International	Yes
36	Mohd Aslam, Sumbul Rais and Masood Alam	Quantification of Organochlorine Pesticide Residues in the Buffalo Milk Samples of Delhi City, India	Journal of Environment Protection	4	964-971	2013		02537141	Scientific Publishers				



35	Alam, M., Siddiqui, A. M., & Husain, M	A study on the synthesis, characterization and properties of polyaniline/magnesium boride nanocomposites	Polymer International	63 (8)	1465-1472	2013		09598103, 10970126	John Wiley & Sons Inc.		Yes	International	Yes
34	Shumaila, G. B. V. S. Lakshmi, Masood Alam, Azher M. Siddiqui and M. Husain	Samarium Chloride (SmCl <sub>3</sub> ) Doped Poly(o-Toluidine) Synthesis and Characterization	Science of Advanced Materials	5	1-7	2013		19472943, 19472935	American Scientific Publishers		Yes	International	Yes
33	Shumaila, M. Alam, A. M. Siddiqui and M. Husain	Synthesis, characterization and properties of Se nanowires intercalated polyaniline/Se nanocomposites	eXPRESS Polymer Letters	7 (9)	723-730	2013		1788618X	Budapesti Muszaki Egyetem, Department of Polymer Engineering		Yes	International	Yes
32	Mohd Aslam, Masood Alam and Sumbul Rais	Detection of Atrazine and Simazine in Ground Water of Delhi using High Performance Liquid Chromatography with Ultraviolet Detector,	Current World Environment	8 (2)	323-327	2013		0973-4929	Enviro Research Publishers		Yes	International	Yes
31	Bobin Saluja, Masood Alam, Ravindranath, A. Mubeen, Nidhi Adya, JYOTI Bhardwaj and A. Dhiraj	Effect of length and diameter on stress distribution pattern of INDIDENT dental implants by finite element analysis	Journal of Dental Implants	2	16-25	2012		0974-6781	Wolters Kluwer Medknow		Yes	International	Yes
30	M. Abdullah Dar, R. K. Kotnala, Vivek Verma, Jyoti Shah, W. A. Siddiqui and Masood Alam	High Magneto-Crystalline Anisotropic Core-Shell Structured Mn <sub>0.5</sub> Zn <sub>0.5</sub> Fe <sub>2</sub> Nanocomposites Prepared by in Situ Emulsion Polymerization	Journal of Physical Chemistry C	116	5277-5283	2012		19327455, 19327447	American Chemical Society		Yes	International	Yes
29	Shumaila, G. B. V. S. Lakshmi, Masood Alam, Azher M. Siddiqui, M. Zulfequar and M. Husain	Influence of Aging on Electrical, Optical and Morphological Properties of Polyaniline	Science of Advanced Materials	4	227-231	2012		19472943, 19472935	American Scientific Publishers		Yes	International	Yes
28	Mohd Aslam, Devendra Kumar Verma, Rajesh Dhakerya, Sumbul Rais, Masood Alam and Firoz Ali Ansari	Bioindicator: A Comparative Study on Uptake and Accumulation of Heavy Metals in Some Plant's Leaves of M.G. Road, Agra City, India	Research Journal of Environment and Earth Sciences	4(12)	1060-1065	2012		2041-0484	Maxwell Scientific Publication Corp.		Yes	International	Yes

27	Masood Alam, Sumbul Rais, Mohd Aslam	Hydrochemical investigation and quality assessment of ground water in rural areas of Delhi, India	Environ. Earth Sci	66	97–110	2012		18666280	Springer Verlag		Yes	International	Yes
26	Shumaila, G.B.V.S. Lakshmi, Masood Alam, Azher M. Siddiqui, M. Zulfequar and M. Husain	Synthesis and characterization of Se doped polyaniline	Current Applied Physics	11	217-221	2011		15671739	Elsevier BV		Yes	International	Yes
25	Mohammad Abdullah Dar, W. A. Siddiqui and Masood Alam	Effect of sintering temperature on the structural and dielectric properties of zinc cadmium ferrites prepared by egg white technique	Modern Physics Letters B	24	1907	2010		02179849	World Scientific Publishing Co		Yes	International	Yes
24	Anuradha Shukla, Masood Alam	Assessment of real world on-road vehicle emissions under dynamic urban traffic conditions in Delhi	International Journal of Urban Sciences	14 (2)	207-221	2010		21616779, 12265934	Taylor and Francis Ltd.		Yes	International	Yes
23	M Alam, S Rais, M Aslam	Role of Azadirachta indica (Neem) biomass in the removal of Ni (II) from aqueous solution	Desalination & Water Treatment	21	220-221	2010		19443986, 19443994	Desalination Publications		Yes	International	Yes
22	Masood Alam, Mohd Aslam and Sumbul Rais	Adsorption of Zinc (II) and Nickel (II) from aqueous solution using Syzygium aromaticum (cloves): Kinetic and isotherm studies	Rasayan Journal of Chemistry	2(4)	791-801	2009		09741496, 09760083	Rasayan Journal				
21	Masood Alam, Mohd Aslam and Sumbul Rais	Gas Chromatography Determination of Pesticide Residues in Groundwater, Delhi	Pesticide Research Journal	20(2A)	79-82	2009		0970-6763	Society of Pesticide Science India		Yes	International	Yes
20	Masood Alam, Sumbul Rais and Mohd Aslam	Hydro-chemical survey of groundwater of Delhi, India	Journal of Chemistry	6 (2)	429 – 436	2009		2090-9063	Hindawi Publications		Yes	International	Yes
19	BK Shrivastava, M Alam	Studies on physico-chemical characteristics and heavy metals in Kelo river along city stretch in Raigarh, Chattisgarh	Nature Environment and Pollution Technology	6 (4)	609	2007		09726268	Technoscience Publications				

18	Brajesh K Shrivatava and Masood Alam	Quality of sponge Iron effluent and their impact on nearby soil and ground water in Raigarh District	Indian Journal of Environme Protection	27 (5)	433-43	2007		02537141	Scientific Publishers				
17	Brajesh K Shrivatava and Masood Alam	Quantitative assessment of Water consumption for manufacturing package drinking water at Rail Neer Plant – A case Study	Journal of Scientific and Industrial Research	66	227-23	2007		09751084, 00224456	Scientific Publishers				
16	Brajesh Shrivastava and Masood Alam	Assesment of ground water quality for physico-chemical heavy metal & bacteriological (Coliform) contamination in and around Raigarh city	Current World Environme	1(2)	125-13	2006		0973-4929	Enviro Research Publishers		Yes	International	Yes
15	H.C. Kataria, Siddiqui Qureshi and Masood Alam	Physico-chemical characteristics of Borewells water of Kolar road area of Bhopal city	Current World Environme	1	77-79	2006		0973-4929	Enviro Research Publishers		Yes	International	Yes
14	N.Adya, M. Alam, T. Ravindranath, A. Mubeen and B. Saluja	Corrosion in titanium dental implants: literature review	Journal of Indian Prosthodor Society	5	126-13	2005		09724052	Medknow Publications				
13	Anwar Ahmad and Masood Alam	Sequestration and remediation of heavy metals by Brassica sp at Hindan River sites	Indian Journal of Chemical Technolog	11	555 – 559	2004		0971457X, 09750991	Scientific Publishers				
12	Anwar Ahmad and Masood Alam	Studies of Chemical contamination and Toxic Pollutants in West Delhi – India	Asian journal of Chemistry	16	163-16	2004		09707077	Chemic Publishing Co.				
11	Masood Alam	Physico-Chemical and Toxicological Studies of Industrial effluents in and around Delhi and Ground Water quality of some areas in Delhi City	Chemical and Environme Research	12 (1 &2)	5- 13	2003		0971-2151	Karakush Publ. & Media				
10	S.A. Iqbal, Masood Alam, Ibraheem and Sadaf Farooqui	Physico-Chemical Studies of Halali River Reservoir with special reference to Water quality	Oriental Journal of Chemistry	18 (1)	151-15	2002		0970020X, 22315039	Scientific Publishers				



**(iii) Books & Monographs**

#	Author(s)	Title of Book / Monographs	Total no of pages	Year of Publication	Name of Publisher	ISBN Number	Level of Publisher
1	Dr. Masood Alam	Experiments in Engineering Chemistry			Cadplan Publishers, New Delhi		National
2	Dr. Masood Alam and Mohd Aslam	Removal of Heavy Metals and ground water pollution in Delhi, India			VDM Verlag Dr. Muller, Germany		International

**(iv) Edited Book / Chapter**

#	Editor(s)	Title of Book / Chapter	Volume. and Page number	Total no. Page Number	Year of publication	Name of Publisher	ISBN number	level of Publisher
1								
2								

**(v) Details of Patent**

#	Name of the Inventor(s)	Title	Application no.	Status	Date of Filing	Patent Awarding Agency	National / International
1							

**(vi) Publication of articles in newspapers, magazines or other publications (not covered in above categories); radio talks; television programmes**

#	Title	Nature of Publication	Date of Publication	Place of Publication	Mode of Publication	Level of Publisher
1						National