

**NAME** : A. SHEELA VIMALA RANI  
**POSITION** : ASSOCIATE PROFESSOR  
**FACULTY OF** : PHYSICS  
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**LANGUAGES PROFICIENCY**

**READ** : TAMIL & ENGLISH

**WRITE** : TAMIL & ENGLISH

**SPEAK** : TAMIL & ENGLISH

**1. QUALIFICATION**

S. No.	DEGREE / DIPLOMA / CERTIFICATE	DISCIPLINE	NAME OF THE INSTITUTION	YEAR OF PASSING
1.	UG	PHYSICS	ST. MARY'S COLLEGE, TUTICORIN	1984
2.	PG	PHYSICS	AMERICAN COLLEGE, MADURAI	1986
3.	M.PHIL.	PHYSICS	AMERICAN COLLEGE, MADURAI	1992
4.	PH.D.	PHYSICS	MADURAI KAMARAJ UNIVERSITY, MADURAI	2017

**2. TEACHING EXPERIENCE**

S. No	INSTITUTION	FROM – TO
1.	FATIMA COLLEGE (AUTONOMOUS), MADURAI	12.08.1986 - TILL DATE

**3. POSITION HELD IN FATIMA**

S. No.	NAME OF THE POSITION	DURATION
1.	AICUF ADVISOR	1993 - 1995
2.	WOMEN CELL CO-ORDINATOR	1997 - 2001
3.	COLLEGE UNION ADVISOR	2007 - 2010
4.	CO-ORDINATOR - EXTENSION ACTIVITIES	2010 - 2011
5.	MEMBER, MAGAZINE COMMITTEE	2015 ONWARDS

**4. POSITION HELD OUTSIDE**

S. No.	POSITION	NAME OF THE INSTITUTION	DURATION
1.	EXAMINER	THE AMERICAN COLLEGE, MADURAI	2009 - 2012
2.	PRACTICAL EXAMINER	M. K. UNIVERSITY COLLEGE, MADURAI	2010 - 2012
3.	MEMBER OF BOARD OF STUDIES	ST. MARY'S COLLEGE, TUTICORIN	2011 - 2013

## 5. ORIENTATION/REFRESHER/TRAINING PROGRAMMES/FDP ATTENDED

S. No.	PROGRAMMES	THEME	ORGANIZED BY	DATE
1.	ORIENTATION PROGRAMME	-	MADURAI KAMARAJ UNIVERSITY	23.05.1988 - 20.06.1988
2.	REFRESHER COURSE	ENERGY SCIENCE	MADURAI KAMARAJ UNIVERSITY	26.02.1996 - 18.03.1996
3.	REFRESHER COURSE	CONDENSED MATTER	MADURAI KAMARAJ UNIVERSITY	27.03.1999 - 18.04.1999
4.	REFRESHER COURSE	PHYSICS	GANDHIGRAM UNIVERSITY	03.12.2001 - 23.12.2001

## 6. NATIONAL/INTERNATIONAL SEMINAR, WORKSHOP, CONFERENCE & SYMPOSIUM

S. No.	PROGRAM	SPONSORED BY	ORGANIZED BY	DATE	PARTICIPATED / PRESENTED	TITLE OF THE PAPER
1.	SEMINAR ON "REMOTE SENSING AND ITS APPLICATIONS"	AIACHE	LADY DOAK COLLEGE, MADURAI	FEB. 07 & 08, 2001	PARTICIPATED	-
2.	NATIONAL CONFERENCE ON "NANOSCIENCE AND ITS APPLICATIONS"	UGC	HOLY CROSS COLLEGE	2004	PARTICIPATED	-
3.	NATIONAL CONFERENCE ON "APPLICATION ORIENTED NANOMATERIALS"	UGC	ALAGAPPA UNIVERSITY	MAR. 10 & 11, 2005	PARTICIPATED	-
4.	SEMINAR ON "CONCEPTS OF LITHIUM ION BATTERY"	DAE	KALASALINGAM UNIVERSITY	SEP. 03, 2009	PARTICIPATED	-
5.	NATIONAL SEMINAR ON "RECENT ADVANCES IN NANOSCIENCE"	TNSCST, TANCHE	P.S.G.R. KRISHNAMMAL COLLEGE FOR WOMEN	DEC. 16 & 17, 2009	PRESENTED	DEVELOPMENT OF CATHODE MATERIALS FOR LITHIUM BATTERIES
6.	NATIONAL SEMINAR ON "RENEWABLE ENERGY RECOURSES"	UGC	YADAVA COLLEGE	MAR. 05, 2010	PARTICIPATED	-
7.	NATIONAL CONFERENCE ON "ADVANCED ENERGY MATERIALS"	UGC	ALAGAPPA UNIVERSITY	MAR. 10 & 11, 2010	PARTICIPATED	-
8.	NATIONAL CONFERENCE ON "NANOTECHNOLOGY AND IT'S NANOMATERIALS"	UGC	SARATUCKER COLLEGE	SEP. 2008	PARTICIPATED	-
9.	INTERNATIONAL CONFERENCE ON "NANOMATERIALS AND NANOTECHNOLOGY"	IUPAC	KS RANGASAMY COLLEGE OF TECHNOLOGY	DEC. 13 - 16, 2010	PARTICIPATED	-
10.	NATIONAL CONFERENCE ON "RECENT TRENDS IN PHYSICS"	UGC	THE STANDARD FIREWORKS RAJARATHINAM COLLEGE FOR WOMEN	DEC. 29 & 30, 2010	PRESENTED	SYNTHESIS AND CHARACTERISTICS OF AL DOPED $\text{LiMn}_2\text{O}_4$ NANOCRYSTALLINE POWDER FOR LITHIUM BATTERIES

11.	INTERNATIONAL CONFERENCE ON "ADVANCED MATERIALS AND ITS APPLICATIONS"	MMRC	KALASALINGAM UNIVERSITY	MAR. 04 & 05, 2011	PARTICIPATED	-
12.	INTERNATIONAL CONFERENCE ON "NANOSCIENCE AND NANO TECHNOLOGY"	CIT & CENTRE FOR RESEARCH AND ADVANCED STUDIES OF IPN MEXICO	CIT COIMBATORE	JULY 06 - 08, 2011	PARTICIPATED	-
13.	6TH ASIAN CONFERENCE ON "ELECTROCHEMICAL POWER SOURCES"	CECRI AND IISC BANGALORE	HOTEL GREEN PARK CHENNAI	JAN. 05 - 08, 2012	PARTICIPATED	-
14.	INTERNATIONAL WORKSHOP ON "ADVANCED ENERGY MATERIALS"	UGC-SAP, DST-FIST AND DST PURSE	ALAGAPPA UNIVERSITY , KARAUKUDI	FEB. 09 & 10, 2012	PARTICIPATED	-
15.	NATIONAL CONFERENCE ON "NANO MATERIALS"	UGC	HOLY CROSS COLLEGE, NAGER COIL	DEC. 19 & 20, 2012	PRESENTED	SYNTHESIS AND CHARACTERISATIONS OF $\text{LiMn}_2\text{O}_4$ NANOCRYSTALLINE POWDER FOR LITHIUM BATTERIES
16.	NATIONAL CONFERENCE "ADVANCED MATERIALS"	UGC	ST. MARYS COLLEGE, TUTICORIN	OCT. 12, 2013	PRESENTED	SYNTHESIS OF NEWER CATHODE MATERIALS FOR LITHIUM ION BATTERIES
17.	INTERNATIONAL CONFERENCE ON "NANOSCIENCE AND NANOTECHNOLOGY"	-	SRM UNIVERSITY CHENNAI	MAR. 18 - 20, 2013	PRESENTED	SYNTHESIS AND CHARACTERISATIONS OF $\text{LiMn}_{2-x}\text{Al}_x\text{O}_4$ FOR LITHIUM BATTERIES
18.	INTERNATIONAL CONFERENCE ON "NANO ELECTRONIC SCIENCE AND TECHNOLOGY"	-	SRIVASAVI COLLEGE, ERODE	FEB. 14 & 15, 2014	PRESENTED	NEWER NANOCATHODE MATERIALS FOR LITHIUM ION BATTERIES
19.	STATE LEVEL SEMINAR ON "RECENT TRENDS IN SOLAR TECHNOLOGIES"	-	THE AMERICAN COLLEGE, MADURAI	FEB. 20, 2014	PARTICIPATED	-
20.	NATIONAL SEMINAR ON "CRYSTAL GROWTH"	INDIAN ASSOCIATION OF CRYSTAL GROWTH	SSN COLLEGE OF ENGINEERING, CHENNAI	FEB. 24 - 26, 2014	PRESENTED	SYNTHESIS AND CHARACTERISTICS OF NI DOPED $\text{LiMnO}_4$ FOR LITHIUM BATTERIES
21.	NATIONAL SEMINAR ON "CRYSTAL GROWTH AND APPLICATIONS"	UGC	MADURAI KAMRAJ UNIV	SEP. 29 - OCT. 01, 2014	PRESENTED	SYNTHESIS AND CHARACTERISTICS OF CO DOPED $\text{LiMnO}_4$ FOR LITHIUM BATTERIES
22.	WORKSHOP ON "WHY PHYSICS IN ENGINEERING"	TEQIP	THIYAGARAJAR ENGINEERING COLLEGE MADURAI	OCT. 05 - 06, 2015	PARTICIPATED	-
23.	INTERNATIONAL CONFERENCE ON "NANOMATERIALS FOR ENERGY, ENVIRONMENT, CATALYSIS AND SENSORS (ICNEECs-15)"	UGC	SCHOOL OF CHEMISTRY, MADURAI KAMARAJ UNIVERSITY	DEC. 11 & 12, 2015	PRESENTED	EFFECT OF TRIVALENT METAL ION DOPING ON $\text{LiMnO}_4$ AS CATHODE FOR LITHIUM ION BATTERIES

24.	NATIONAL SEMINAR ON "NUCLEAR ENERGY FOR FUTURE GENERATIONS"	KUNDANKULAM NUCLEAR POWER PROJECT	KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, VIRUDHUNAGAR	FEB. 26, 2016	PRESENTED	RADIATIONS IN MEDICAL FIELD
25.	SCIENCE ACADEMY LECTURE WORKSHOP ON "EMERGING TRENDS IN APPLIED PHYSICS"	INDIAN SCIENCE ACADEMIES	DEVANGA ARTS COLLEGE, ARUPPUKOTTAI	MAR. 18 & 19, 2016	PARTICIPATED	-
26.	INTERNATIONAL CONFERENCE ON "ENERGY APPLICATIONS EAPP 2016"	-	SATYABAMA UNIVERSITY AND INSTITUTE JEAN LAMOUR, UNIVERSITY OF LORRAINE	JUNE 27 – 29, 2016	PRESENTED	SYNTHESIS AND CHARACTERISATION OF NANOPARTICLE SIZED CATHODE MATERIALS FOR ENERGY APPLICATIONS IN LI-ION BATTERY
27.	INTERNATIONAL CONFERENCE ON "MATERIALS AND TECHNOLOGY"	-	SRI RAMASAMY NAIDU MEMORIAL COLLEGE	FEB. 21 - 22, 2018	PRESENTED	SYNTHESIS AND CHARACTERISATION OF TIN OXIDE NANOCRYSTALLINE METAL OXIDE BY SOLGEL METHOD

## 7. ARTICLES PUBLISHED IN JOURNALS/MAGAZINES

S. No.	JOURNAL NAME	TITLE OF THE ARTICLE	MONTH / YEAR	VOL. No.	ISSUE NO.	PAGE No.	ISSN	PUBLISHER
1.	ASIAN JOURNAL OF CHEMISTRY	SYNTHESIS AND CHARACTERISTICS OF NANOCRYSTALLINE $\text{LiAlxMn}_{2-x}\text{O}_4$ CATHODE MATERIAL FOR LI –ION BATTERIES	2013	25	-	S394 - S396	0970-7077	ASIAN JOURNAL OF CHEMISTRY
2.	JOURNAL OF CHEMICAL SCIENCE REVIEW AND LETTERS	EFFECTS OF DIFFERENT METAL ION DOPING ON NANO CRYSTALLINE $\text{LiMn}_2\text{O}_4$ AS CATHODES FOR LITHIUM IONS BATTERIES	2014	3	11	224 – 230	2278-6783	AUFAU PERIODICALS
3.	INTERNATIONAL JOURNAL OF ADVANCED SCIENCE AND TECHNOLOGY	EFFECTS OF NI-ION DOPING ON NANOCRYSTALLINE SPINEL $\text{LiMn}_2\text{O}_4$ PREPARED BY SOLID STATE COMBUSTION METHOD	2014	-	3	156 – 158	-	SERSC: SCIENCE & ENGINEERING RESEARCH SUPPORT SOCIETY
4.	INTERNATIONAL JOURNAL OF MULTI FUNCTIONAL MATERIALS AND PHOTOSCIENCE	DEVELOPMENT OF NEW ELECTRODE MATERIALS FOR LITHIUM ION BATTERIES	2015	-	-	-	-	SERIALS PUBLICATIONS
5.	JOURNAL OF NANO SCIENCE ENGINEERING AND TRENDS	SYNTHESIS AND CHARACTERIZATION OF NANO CRYSTALLINE $\text{LiMn}_2\text{O}_4$ POWDER FOR LI-OIN BATTERIES	2015	-	-	1-6	-	MAT JOURNAL
6.	JOURNAL OF CHEMICAL SCIENCE REVIEW AND LETTERS	SYNTHESIS AND PHYSICAL CHARACTERISTICS OF NANO CRYSTALLINE $\text{LiMn}_2\text{O}_4$ POWDER USING COMBUSTION METHOD	2015	-	-	97-102	2278-6783	AUFAU PERIODICALS

## 8. PROJECT UNDERTAKEN

S. No.	TITLE OF PROJECT	POSITION	SPONSORED BY	DATE /YEAR	SANCTIONED AMOUNT (₹)
1.	PREPARATION OF NANOPARTICLE SIZE CATHODE MATERIALS FOR HIGH VOLTAGE LITHIUM CELLS AND THEIR CHARACTERIZATION	CO-INVESTIGATOR	DST	2006 - 2009	10,00,000

## 9. CONSULTANCY + RADIO TALK/TV SHOWS)

S. No.	THEME	RADIO/TV SHOWS	ORGANIZED BY	PLACE	DATE
1.	STARS - BLACK HOLES, NEUTRON STARS	RADIO TALK	TAMILNADU SCIENCE FORUM	ALL INDIA RADIO – MADURAI	26.12.2009
2.	NANO SCIENCE AND TECHNOLOGY	GUEST LECTURE	MANGAYARKARASI B.ED. COLLEGE, MADURAI	MANGAYARKARASI B.ED. COLLEGE, MADURAI	28.02.2012
3.	NANO SCIENCE IN DAY TODAY LIFE	GUEST LECTURE	MANGAYARKARASI ARTS AND SCIENCE COLLEGE, MADURAI	MANGAYARKARASI ARTS AND SCIENCE COLLEGE, MADURAI	28.02.2014