

**KNOWLEDGE ASSET 2022-23**

Name: Dr.M.SUMITHRA  
 Designation: Assistant professor of Physics  
 Department: H&S  
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Experience (in years): 19      Teaching:      19      Research: 6  
 Others(if any, specify):

**1. Educational / Technical qualifications:**

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1.	B.Sc(sOU)	2002	Maths,physics,computers
2.	M.Sc(Nizam college,OU)	2004	Physics(EC)
3.	Diploma(UTL telecom)	2006	Embedded systems
4.	Ph.D(JNTUH)	2018	Physics(Nanotechnology)

**2. Teaching and Learning:**

**2.1. Teaching Interests:**

Engineering physics, Applied physics theory and laboratory sessions,Lasers, Quantum mechanics, fiber optic communication, principles of communication, Classical mechanics, statistical mechanics, mathematical physics, electronic devices theory and lab, computational methods using C-language theory and lab, microprocessors theory and lab, nanotechnology.

**2.2. Novel Teaching & Learning Techniques adopted:**

PPT, Videos, research-oriented Concept maps, group discussion, testing prior knowledge, KWL charts, Think-Pair-Share, latest technology implemented on basic concepts, Match the following

**2.3. Involvement in curriculum updating / Design:**

- Engineering physics Lab incharge
- Actively participated in admission section

**3. Co-curricular and Extra-Curricular Activities**

3.1. Interests and Hobbies: Mentoring and counselling students, encouraging students towards research, Exploring new Teaching-Learning Methodologies,

3.2. CCA/ECA Organized:

3.3. CCA/ECA participated:

3.4. Counselling and Mentoring Activity:

3.5. Committees involved in:

Department level: Organising committee in Induction program

Institute Level:

**4. Conference / Workshop / Seminar / Guest Lectures :**

4.1 Conducted:

4.2 Attended: 7

### 5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures:

5.2. Articles / Chapters published in Books:

5.3. Books published as single author or as editor:

5.4. Projects Guided :

a) UG : Internship guided three student

b) PG :

5.5. Research Interests : Nanotechnology, metal nanoparticles, Indian traditional nanomedicine (Ayurveda)

5.6. Ph.D students :

a) Enrolled :

b) Submitted :

c) Awarded :

### 5.7. Papers published in reviewed journals :

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Characterization of SnO <sub>2</sub> Nanoparticles in the traditionally prepared Ayurvedic medicine	Materials Today: Proceedings 2 ( 2015 ) 4636 - 4639	ISSN: 2214-7853	3.2	International
2	Morphological change of silver nanoparticles by the effect of synthesis parameter	Materials Today: Proceedings Volume 3, Issue 6, 2016, 2278-2283	ISSN: 2214-7853	3.2	International
3	Characterization of Silver nanoparticles prepared by herbo metallic method	IJESRT 5(12)2016,967-972	ISSN: 2277-9655	1.8	International
4	Morphological growth study of extended branches of silver nanodendrites using piper betel leaf extract	Materials Today: Proceedings Volume 3, Issue 6, 2016, 2278-2283	ISSN: 2214-7853	3.2	International

### 5.8. Papers presented at National / International Journals :

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
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1	Sol-gel Synthesis and Characteristics of Fe <sub>2</sub> O <sub>3</sub> nanoparticle	NCONSEA	National	2012
2	Sample measuring polarimetry at the surface of a wood material	ICMST	International	2012
3	Synthesis of SnO <sub>2</sub> nano particles with medicinal herbs	NANOS	International	2015
4	Large scale preparation of ZnO nanospheres by the traditional Indian herbal method and characterization by latest technology	IDMMNS	National	2018
5	Characterization of SnO <sub>2</sub> Nanoparticles in the traditionally prepared Ayurvedic medicine	ICONSEA	International	2014
6	Morphological change of silver nanoparticles by the effect of synthesis parameter	RAINSAT	International	2015
7	Synthesis and characterization of Silver nano dendrites	VCAN	International	2020

5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

6. Awards / Honors received:

7. Motto: Treat every student as your own kid.