

Government Arts college (Autonomous), Coimbatore – 18
Performance - Teacher Appraisal Report

i) General Information

a) Name : Dr.R.N.EMERSON

b) Address (Residential): No.4,I main Street,
Angelgarden
Karunya nagar
Coimabtores-641114
Mobile No.:9443751816



c) Designation : Associate Professor

d) Department : PG& Research Department of Physics

e) Date of Birth : 04.07.1971

f) Area of Specialization: Solid State Physics

A) Academic Qualifications

Exam.passed	Board/University	Subjects	Year	Division/Grade/Merit etc.
High School	Board of secondary Education	Tamil, English, Mathematics, Science , History&Geography	1986	I
Higher secondary	Board of Higher secondary Education	Tamil, English, Maths,Physics, Chemistry ,Banking	1988	I
Bachelor's DegreeB.Sc	Madurai Kamaraj University	Physics Allied: Maths,Chemistry	1991	I

Master's Degree M.Sc	Manonmaniam Sundaranar University	Physics	1993	II
Research Degree(s) 1. M Phil	Annamalai University	Physics	1996	I
2. Ph.D	Anna University	Physics	2008	Highly Commended
Other degree M.C.A	Indira Gandhi National Open University, Delhi	Computer applications	2011	I
Account Test for Executive Officer	TNPSC	Departmental Exam	2011	Government of Tamilnadu Bulletin- may 2011

ii) Research Experience & Training

Research	Title of the Work/Thesis	University Where the Work was Carried out
M.Phil.	Magnetic Susceptibility measurements of Single Crystals	Annamalai University
Ph.D.	Studies on the effect of Additives on magnetic and structural properties of Electrodeposited CoNiP hard magnetic films	Anna University
Post Doctoral	-	-

Publication (give a list separately)	List Enclosed (Appendix A)	
Research Guidance (give names of Students guided successfully)	List enclosed (Appendix B)	
Training (Please specify)	Physics for Higher secondary School Teachers	State education research training Institute

B) Research Projects carried out

Title of the Project	Name of Funding Agency	Duration	Remarks
Development of electrodeposited CoPtP hard magnetic films for MEMS applications	UGC(Major Project 41-851/2012(SR)-Rs.12,91,800)	3Yrs	Completed

C) Seminars, Conferences, Symposia Workshops etc. attended *(If necessary give a separate list)*

Name of the Seminar/ Conference/Symposia Workshop,etc.	Name of the Sponsoring Agency	Place and Date
Please Refer Appendix – C		

iii) Teaching Experience

Courses Taught	Name of University/ College/Institution	Duration
U.G. BE First Year and Second Year BSc physics	Karunya Deemed University 1. Government Arts and Science college Udagamandalam 2. Chikkanna government Arts college , Tirupur 3. Governmet arts college, Coimbatore	2001 to 2009 2009 to till date
PG MSc Physics	1. Government Arts and Science college, Udagamandalam 2. Chikkanna government Arts college , Tirupur 3. Governmet arts college, Coimbatore	2009 to till date
1. M.Phil	1. Karunya University 2. Government Arts and Science college, Udagamandalam 3. Chikkanna government Arts college , Tirupur 4. Governmet arts college, Coimbatore	2007 till date
2. Ph.D.,	1. Karunya University 2. Government Arts and Science college, Udagamandalam	

	3. Chikkanna government Arts college , Tirupur 4. Governmet arts college, Coimbatore	2007 to till date
Others (if any)	Distance Education, Bharthiar University UG and PG classes	2012 to till date

Total Teaching Experience (in years and months) :

- a) Under-Graduate (Pass) : 14 Years to till date
- b) Under-Graduate (Hons) : NA
- c) Post-Graduate : 06 Years to till date

viii) Innovations/ Contributions in Teaching (If necessary give a separate list)

- a) Design of curriculum : Board of study member for designing the Curriculum in Karunya deemed University
- b) Teaching Methods : Lecturing , Group discussion, Seminar and Power point presentation.
- c) Laboratory experiments : Conducting Practical experiment in the Laboratory, viva-voce
- d) Evaluation Methods : Conducting frequent tests, Modal exam, Assignment writing, projects
- e) Preparation of resource material : Prepared study materials for UG and PG, Journals and Magazines
- f) Remedial Teaching / Students : Special coaching classes, attention given to slow learners
- g) Any other higher classes. : Motivating students to prepare for studies, NET/SET coaching

Service *(If necessary give a separate list)*

a) Please give a short account of your contribution to:

- i) Community work such as values of National integration, secularism, Democracy, socialism, humanism, Peace, scientific temper, flood or Drought relief, small family norms : Creating awareness about the basic values, Interpersonal skills, social skills and prosocial behavior among students and members in the community. etc.

- ii) National Literacy Mission : Creating awareness about the Importance and value of literacy.

b) Positions held/Leadership role with Extension Work and National Service Scheme (NSS) or (NCC) or any other similar activity. : Resource person for training the Government School teachers

D. Participation in Corporate Life

Please give a short account your contribution to:

Please give a short account of your contribution to:

- a) College/University/Institution : Helping the Principal, HOD in the Departmental activities, Maintaining Discipline in the campus, Motivating the Students to join all the extra curricular Activities
- b) Co-curricular Activities : Conducting the all festival celebration and doing the Cultural activities
- c) Enrichment of Campus Life : For research activities
- d) Students welfare and Discipline : Periodical counselling to the students, Their Parents and family members in The Guidance and Counselling center.

- e) Membership/Participation in Bodies/ Committees on Education and National Development : Member- Board of studies, Syllabus framing, External and Internal examiner in Theory and practical examinations.
- f) Professional Organization of Teachers. : Taking classes for Distance education, Bharathiar University
- g) Members of professional bodies, Societies etc.. : Life member of Indian Society for Technical Education , no.LM38571
- h) Editorship of journals : -----
- i) Any other information : Reviewer of Journal of Optoelectronics and Advanced materials

F. Any other information

Nil



(Signature of the Teacher)

APPENDIX – A

Research Experience & Training : List of Publications

I. Publications (International / National):

1. R.N.Emerson,et.al, Electrodeposition of CoNiP magnetic thin films from Ammonium Chloride based Electrolyte, J.Electrochemical Society of India 54 (2) pp74-77 (2004)
2. R.N.Emerson et.al, Mechanical and magnetic properties of nanostructured CoNiP films, Pramana, Journal of Physics 67(2) pp.341-349 (2006)
3. R.N.Emerson,et.al Effect of Phosphorous source material on the electrodeposition of CoNiP magnetic films, Journal of Applied Sciences,6(1) pp.227-232 (2006)
4. R. N.Emerson.et.al , Effect of phosphorous acid and urea on electrodeposited CoNiP magnetic films, J.Chil.Chem.Soc 52 (4) pp.1322-1325 (2007)
5. R. N.Emerson.et.al , Magnetic properties and Microstructural Characterization of nanostructured FePt films fabricated by electrodeposition, International journal of pure and applied physics,5(2)pp165-173 (2009)
6. R. N.Emerson.et.al ,Development of nanostructured stress free Pt rich FePt films for MEMS applications,American journal of applied sciences 6(6),1175-1179 (2009)
7. R. N.Emerson.et.al ,Effect of bath temperature on themagnetic and mechanical properties of nanostructured FePtP hard magnetic films,Optoelectronics and advanced materials-rapid communications ,4(7),976-981 (2010)
8. R. N.Emerson.et.al ,Effects of current density on electrodeposited CoMnP thin films,ARPN journal of engineering and applied sciences,5(7) (2010)
9. R. N.Emerson.et.al ,, Effect of organic additives on the magnetic properties of nanocrystalline hard magnetic films, Digest journal of nanomaterials and biostructures,6(1) pp9-12 (2011)
10. R. N.Emerson.et.al ,Preparation and charecterisation of urea doped CoPtP thin films, Journal of nanoscience and nanotechnology,1(2),pp35-38 (2013)
11. R. N.Emerson.et.al ,Mechanical and magnetic properties of nano structured CoPtP films for MEMES applications,International journal of pure and applied physics,vol.9,pp13-20(2013)

12. R. N.Emerson.et.al, Structural influence of copper substrate on magnetic properties of Electrodeposited CoPtP films for MEMS applications, Journal of material science,materials in electronics,vol.26no12,(2015)
13. R. N.Emerson.et.al ,High performance super capacitor cobalt oxide thin films by the influence of copper substrate, International journal of pure and applied physics,vol.14,pp115-124(2018)
14. R. N.Emerson.et.al ,Electrodeposition of nano crystalline cobalt oxide on porous copper electrode for super capacitor, Journal of material science,materials in electronics,vol.30 no2,(2019)
15. R. N.Emerson.et.al ,Electrochemical performance of Mn doped Co₃O₄ thin film electrodes by electrodeposition methods,International journal for research in applied science and Engineering technology,vol.7 issue.4,(2019)
16. R. N.Emerson.et.al , Comparative study of NiMnCo₃O₄ thin film electrodes for supercapacitor applications,, International journal of advances in scientific research 5(4)e5142 (2019)
17. R. N.Emerson.et.al ,Synthesis and charectrisation of NiFeCo₃O₄ Ternary thin films electrodes for Supercapacitors applications by galvanostatic method, Advanced science engineering and medicine , vol11,1-9,2019
18. R. N.Emerson.et.al , Influence of iron as a dopent in cobalt oxide electrode for the application of high performance specific capacitance with excellent cycle stability,Journal of emerging technology and innovative research,Vol.6 ,2019

APPENDIX-B*C.Research Experience & Training : Research Guidance***I. M.Phil,(Physics)**

S.No.	Name of the Scholar	Year	FT/PT	University	Pursuing/ Completed/ Awaiting for Viva
1.	S.Fancy Jeyarani	2005	PT	Annamalai University	Completed
2.	B.Sivagami	2009	FT	Karunya University	Completed
3.	J.Mamallan	2014	FT	Bharathiar University	Completed
4.	M.Poonkothai	2018	FT	Bharathiar University	completed
5.	P.Emili angel	2019	FT	Bharathiar University	Completed

II. Ph.D., (Physics)

S.No.	Name of the Scholar	Year	FT/PT	University	Pursuing/ Completed/ Awaiting for Viva
1.	Mr.M.Ezhil Inban	2012	PT	Bharathiar University	completed
2.	Mrs.M.Kalyani	2019	PT	Bharathiar university	completed
3.	Mr.Amirtharaj	2019	PT	Bharathiar University	Pursuing
4	Mrs.L.Banupriya	2020	FT	Bharathiar university	Pursuing
5	Mr.Muthukumar	2022	PT	Bharathiar University	Pursuing

APPENDIX – C

E. Seminars, Conferences, Symposia Workshops etc. attended:

Conference Conducted

1. National Conference of Nano materials on 17-18 October 2008, by Karunya University Coimbatore

Conferences Attended

1. R. N.Emerson.et.al, Electrodeposition of nano structured magnetic film,Proceedings of National sminar on resent advances in nano science and technology , Periar university , Salem, 1,p15, 2005
2. R. N.Emerson.et.al,Variation of magnetic sceptibility by ionic substitution in the mixture of different ratios of paramagnetic and diamagnetic materials, Proceeding of 9th national seminar on crystal growth, crystal growth center anna university,C-10, pp111,2006
3. R. N.Emerson.et.al, Structural and magnetic properties of electrodeposited FePt films, Proceedings of National Conference of nano materials, Karunya University,p178,2008.
4. R. N.Emerson.et.al, Electrodeposition of cui films for thermoelectric devices, Proceedings of international conference on Optics and photonics technology 2023