

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

**i) General Information**

a) Name : **Dr. P. PONNUSAMY**

b) Address (Residential) : No. 1, College Nagar,  
GKR Nagar Extension  
Chinniyampalayam  
Coimbatore-641062

Mobile No : 9791532046

c) Designation : Associate Professor & Head

d) Department : Mathematics

e) Date of Birth : 18.11.1964

f) Area of Specialization : SOLID/FLUID MECHANICS & NANO MATERIALS

**A) Academic Qualifications M.Sc., M.Phil., Ph.D., B.G.L.,**



<b>Exam Passed</b>	<b>Subjects</b>	<b>Board/ University</b>	<b>Year</b>	<b>Division/ Grade/ Merit, etc.</b>
High School	Tamil, English, Maths, Science, History & Geography	Secondary School Education	March,1981	FIRST CLASS
Higher Secondary	Tamil, English, Maths, Physics, Chemistry, Biology	Higher Secondary School Education	April,1983	SECOND CLASS
Bachelor's Degree (s)	B.Sc, Maths	Bharathidasan University, Trichy	April,1986	SECOND CLASS

Master's Degree (s)	M.Sc, Maths	Bharathidasan University, Trichy	April,1988	FIRST CLASS
Research Degree (s)	1. M.Phil, Maths	Bharathidasan University, Trichy	March,1990	FIRST CLASS
	2. Ph.D	Anna University, Chennai	November,2006	-
Other Diploma/ Certificates etc.	-	-	-	-

## ii) Research Experience & Training

Research Stage	Title of work / Thesis	University where the work was carried out
M. Phil. or Equivalent	VERTEX COLOURING OF GRAPHS	Bharathidasan University, Trichy
Ph. D.	VIBRATION OF CYLINDERS IMMERSED IN A FLUID	Anna University, Chennai
Post-Doctoral	NIL	-
Publications (give a list separately)	Please refer <b>Appendix - A</b>	
Research Guidance (give names of students guided successfully)	Please refer <b>Appendix - B</b>	
Training (please specify)	-	

**B) Research Projects carried out**

S. No.	Title of the Project	Name of the Funding Agency	Duration	Remarks
1	Wave Propagation in a Generalized Thermoelastic Plate of Arbitrary Cross-Sections	UGC, Hyderabad	Feb,2009 to Feb,2011	Completed
2	Dispersion Analysis of non-homogeneous electro-magneto-elastic of arbitrary cross-section	UGC, NewDelhi	December,2010 to December,2013	Completed

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

Name of the Seminars / Conferences / Symposia / Workshops etc	Name of the Sponsoring Agency	Place and Date
1. National Conference on Computational Methods in Continuum Mechanics	UGC, Hyderabad	Department of Mathematics, Govt. Arts College, Coimbatore
2. National Seminar on Mathematical Computation	Tamil Nadu State Council for Higher Education	Department of Mathematics, Govt. Arts College, Coimbatore

**iii) Teaching Experience**

Courses Taught	Name of the University / College / Institution	Duration
iv) UG (BA / B.Sc., etc. Pass) (BA / B.Sc., etc. Hons.)	1. Govt. Arts College, Tiruvannamalai 2. Govt. Arts College, Coimbatore-18	August,1996 to November,2005 November,2005 to Till the date
v) PG (MA / M.Sc., etc.)	Govt. Arts College, Coimbatore-18	November,2005 to Till the date
vi) M. Phil.	Govt. Arts College,	November,2005 to Till the date

	Coimbatore-18	
vii) Any other	-	-

**Total Teaching Experience (in years and months):**

- a) Under-graduate (Pass) : 22 years  
b) Under-graduate (Hons.) : -  
c) Post-graduate : 18 years

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

a) Design of Curriculum :	Framing the Syllabus for UG and PG Classes
b) Teaching methods :	Teaching using the Board
c) Laboratory experiments :	-
d) Evaluation methods :	Internal Examinations, Seminars and Assignment
e) Preparation of resource material including books, reading materials, laboratory manuals etc.:	Preparing the resource materials only for teaching
f) Remedial Teaching / Student Counseling (academic) :	Giving counseling to students those who are weaker in their subjects
g) Any other :	-

**ix) Extension Work/ Community 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 etc.

ii) National Literacy Mission

b) Positions held / leadership role played in organizations linked with Extension Work National Service Scheme (NSS), or NCC or any other similar activity

#### **D. Participation in Corporate Life**

Please give a short account your contribution to:

a) College/ University / Institution	Discipline committee member
b) Co-curricular Activities	-
c) Enrichment of Campus Life (Hostels, sports, games, cultural activities)	-
d) Students Welfare and Discipline	Marinating the Student Discipline in the College
e) Membership / Participation in Bodies / Committees on Education and National Development	Board of Studies members in Colleges and Universities
f) Professional Organization of Teachers	-

#### **E.**

(a) Membership of Professional Bodies, Societies etc.

(b) Editorship of Journals

#### **F. Any other information**

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**(Signature of the Teacher)**

## **Appendix – A**

### **LIST OF PAPERS PUBLISHED IN THE NATIONAL / INTERNATIONAL JOURNALS**

P. Ponnusamy (2016), “ Elastic waves in generalized thermo-piezoelectric transversely isotropic circular bar immersed in fluid”, Advances in Applied Mathematics and Mechanics, 8 (1), 82-103.

P. Ponnusamy and A. Ammuthalakshmi (2014), “ Dispersion analysis of non-homogeneous transversely isotropic electro-magneto-elastic plate of arbitrary cross-section, Elixir Appl. Math. 72, 25487- 25500.

P. Ponnusamy and A. Ammuthalakshmi (2014), “ Dispersion analysis of non-homogeneous transversely isotropic electro-magneto-elastic plate of polygonal cross-section, Elixir Appl. Math. 72, 25473-25486..

P. Ponnusamy (2013), “ Wave propagation in a solid bar of circular cross-section immersed in fluid”, Int. Journal of Pressure Vessels and Piping, 105-106, 12-18.

P. Ponnusamy (2013) , “ Free vibration analysis of generalized thermoelastic doubly connected plate of polygonal shape”, Science Publishing, 1(1), 1-16.

P.Ponnusamy and R.Selvamani (2013), “Wave propagation in magneto thermo elastic cylindrical panel”, European journal of Mechanics-A solids, 39, 76-85.

P.Ponnusamy and R.Selvamani (2013), “Generalized thermo elastic wave propagation in a cylindrical panel embedded on elastic medium”, Journal of KSIAM, 17(1), 1-15.

P. Ponnusamy (2012), “ Wave propagation in ring shaped electro-magneto-elastic plate of polygonal cross-sections”, Elixir Appl. Math. 51, 10817-10828.

P. Ponnusamy and R. Selvamani (2012), “ Dispersion analysis of generalized magneto-thermoelastic waves in a transversely isotropic cylindrical panel”, Journal of Thermal Stresses, 35 (12), 1119-1142.

P. Ponnusamy (2012), “Dispersion analysis of generalized thermo elastic plate of polygonal cross-sections”, Journal of Applied Mathematical Modelling”, 36, 3343-3358.

P. Ponnusamy (2012), “ Stress wave propagation in electro-magneto-elastic plate of arbitrary cross-sections, Int. Journal of scientific and Engineering Research, 3(8), 1-28.

P. Ponnusamy and R. Selvamani (2012), “ Wave propagation in a generalized thermoelastic plate embedded in elastic medium”, Interaction and Multiscale Mechanics, 5(1), 13-26.

P.Ponnusamy and R.Selvamani (2012), “ Damping of generalized thermo elastic waves in a homogeneous isotropic plate”, Materials Physics and Mechanics, 14, 64-73.

P.Ponnusamy and R.Selvamani (2012), “ Wave propagation in a generalized thermo elastic plate embedded on elastic medium”, Interaction and multiscale mechanics, 5, 13-26.

P.Ponnusamy and R.Selvamani (2012), “ Wave propagation in a cylindrical panel embedded on elastic medium”, International journal of Mathematics and Scientific Computing, 1(2), 106-111.

P. Ponnusamy (2011), “ Wave Propagation in thermo-elastic plate of arbitrary cross-sections”, Journal of Multidiscipline Modeling in Materials and Structures, 7(3), 329-350.

P. Ponnusamy (2011), “Three-dimensional dispersion analysis of a transversely isotropic solid cylinder of elliptic inner and outer cross-section immersed in a fluid”, Elixir Journal of Mech. Engg., 39, 5033-5040.

P. Ponnusamy and M. Rajagopal (2011) “Wave Propagation in a Transversely thermoelastic cylinder of arbitrary cross-section”, Journal of ActaMechanica, 24(6), 527-538.

**Note: The above paper is placed in the TOP 25 Hottest article**

P.Ponnusamy and R.Selvamani (2011), “ Wave propagation in a thermo elastic cylindrical panel embedded on elastic medium”,International journal of applied mathematics and mechanics, 7 (19), 83-96.

P.Ponnusamy and R.Selvamani (2011), "Wave Propagation in a Homogenous Isotropic Thermo elastic Cylindrical Panel", International Journal of Computational Science and Mathematics, 3 (2) , 215-226.

P.Ponnusamy and R.Selvamani (2011), "Wave Propagation in a Homogenous Isotropic Generalized Thermo elastic Cylindrical Panel", Elixir journal of Appli. Math., 36, 3429-3433.

P.Ponnusamy and R.Selvamani (2011), "Wave Propagation in a Homogeneous Isotropic Cylindrical Panel", International Journal of Advances in Theoretical and Applied Mathematics, 6 (2), 171-181.

P.Ponnusamy and R.Selvamani (2011), " Mathematical modeling of waves in a homogeneous isotropic rotating cylindrical panel", Romanian journal of mathematics and computer science, 1, 12-28.

P.Ponnusamy and R.Selvamani (2011), "Modeling of Flexural Waves in a Homogeneous Isotropic Rotating Cylindrical Panel", Advances in Physics Theories And Applications, 1,16-25.

P. Ponnusamy and R. Selvamani (2011), "Modeling of flexural waves in a homogeneous isotropic rotating cylindrical panel", Advances in physics Theories and Applications, 1, 15-25.

P. Ponnusamy and R. Selvamani (2011), "Wave propagation in a homogeneous isotropic thermo elastic cylindrical panel", International Journal of Computational Science and Mathematics, 3(2), 215-226.

P. Ponnusamy and R. Selvamani (2011), "Wave propagation in a homogeneous isotropic generalized thermo elastic cylindrical panel", Elixir Journal of Appl. Math. 36, 3429-3433.

P. Ponnusamy (2010) "Wave propagation in a generalized thermo elastic thick plate of polygonal cross-sections", Int. J. Material Physics. Vol. 1, No. 1, 27-54.

P. Ponnusamy and M. Rajagopal (2010), "Wave propagation in a homogeneous transversely isotropic thermo elastic solid cylinder of polygonal cross- section", J.Vibration and control. Vol.16 No.5, 647-664.

P. Ponnusamy and M. Rajagopal (2009), "Wave Propagation in a Transversely isotropic cylinder of arbitrary cross-section immersed in fluid", International European Journal of Mechanics /A Solid, Vol. 29, 158-165.

P. Ponnusamy (2007) "Wave Propagation in a generalized thermoelastic solid cylinder of arbitrary cross Section" International Journal of Solid and Structures. 44,5336-5348.

**Note: The above paper is placed in the TOP 25 Hottest article**

Venkatesan M. and Ponnusamy P. (2008) "Wave Propagation in a Hollow Cylinder of Arbitrary Inner and Outer Cross Sections Immersed in a fluid", J. Advances in Vib. Engg..91-109.

Venkatesan M. and Ponnusamy P(2007). "Wave Propagation in a Generalized Thermoelastic Solid Cylinder of Arbitrary Cross Section Immersed in a Fluid", Int. J. Mechanical Scince. 49,741-751.

Venkatesan M. and Ponnusamy P. (2003)," Wave Propagation in a Solid Cylinder of Polygonal Cross section immersed in fluid", Indian J. Pure Appl. Math. 34(9), 1381-1391.

Venkatesan M. and Ponnusamy P. (2002), "Wave Propagation in a Solid Cylinder of Arbitrary Cross-section immersed in fluid", J. Acoust. Soc. Am. 112, 936-942.

### **LIST OF PAPERS PUBLISHED IN THE NATIONAL CONFERENCES**

P. Ponnusamy and M. Rajagopal " Wave Propagation in a Transversely isotropic Thermoelastic Cylinder of Arbitrary Cross-section", UGC Sponsored Natonal Conference on Computational Methods in Continuum Mechanics, CMCM(2009), Govt. Arts C ollege(Aautonomous), Coimbatore-641 018, 2009.

- P. Ponnusamy and M. Rajagopal (2008), “ Wave propagation in Transversely isotropic Cylindrical Panel immersed in Fluid”, UGC Sponsored National Conference on Pure and Applied Mathematics, Sri Ramasamy Naidu College, Sattur.
- P. Ponnusamy and R. Selvamani “ Three-dimensional Vibration analysis of generalized Thermoelastic cylindrical Panel”, UGC Sponsored National Conference on Computational Methods in Continuum Mechanics, CMCM(2009), Govt. Arts College(Autonomous), Coimbatore-641 018, 2009.
- P. Ponnusamy “Wave propagation in Fluid-Loaded Transversely isotropic Circular Cylinder”, UGC Sponsored National Conference on Computational Methods in Continuum Mechanics, CMCM(2009)Govt. Arts College(Autonomous), Coimbatore-641 018, 2009.
- P. Ponnusamy and A. Thangaraj (2006), “Wave propagation in a transversely isotropic circular cylinder”, national conference on Differential equations and applications, September, 28-29.
- P. Ponnusamy and R. Saravanan (2006), “ Wave propagation in a transversely isotropic thermoelastic solid circular cylinder”, National conference on Differential equations and applications, September, 28-29.
- Venkatesan M. and Ponnusamy P. “Free Vibration of a Thermoelastic solid cylinder of Elliptic Cross-section”, Indian Institute of Technology, Roorkee, 71<sup>st</sup> Annual Conference of Indian Mathematical Society, December, 26-29, 2005.
- Venkatesan M. and Ponnusamy P. “Vibration of Rings of Arbitrary Shape Immersed in a fluid” Anna University, Chennai-25
- Venkatesan M. and Ponnusamy P. (2002), “Wave Propagation in a Thermoelastic Solid Cylinder”, Proc. of Math. Soc., B. H. U. 18, 21-29.
- Venkatesan M. and Ponnusamy P. (2001), “Transient Waves in a Transversely Isotropic Disk”, Proc. of National Symposium on Acoustics (NSA – 2001), 29, 204-210.

**PAPERS PUBLISHED IN THE NATIONAL / INTERNATIONAL JOURNALS**  
**/CONFERENCES**

**MATERIAL & NANO MATERIALS**

Ponnusamy P. and Amuthalakshmi A. (2015), “Dispersion analysis of thermo magnetic effect on double layered nanoplate embedded in an elastic medium”, Journal of Computational and Theoretical Nanoscience, Vol. 12, No. 8, pp. 1729–1736.

Ponnusamy P. and Amuthalakshmi A. (2015), “Influence of thermal and magnetic field on vibration of double walled carbon nanotubes using nonlocal Timoshenko beam theory”, 2<sup>nd</sup> International Conference on Nanomaterials and Technologies, Procedia Materials Science, Vol. 10, pp. 243-253.

Ponnusamy P. and Amuthalakshmi A. (2014), “Thermal effect on wave propagation of carbon nanotubes embedded in an elastic medium”, Journal of Computational and Theoretical Nanoscience, Vol. 11, No. 6, pp. 1542-1549.

Ponnusamy P. and Amuthalakshmi A. (2014), “Influence of thermal and longitudinal magnetic field on vibration response of a fluid conveying double walled carbon nanotube embedded in an elastic medium”, Journal of Computational and Theoretical Nanoscience, Vol. 11, No. 12, pp. 2570-2577.

Ponnusamy P. and Amuthalakshmi A. (2013), “Free vibration analysis of double-walled simply supported carbon nanotube”, International Journal of Mechanics and Applications, Vol. 3, No. 3, pp. 53-62.

Ponnusamy P. and Amuthalakshmi A. (2013), “Vibration analysis of a viscous fluid conveying double walled carbon nanotube”, Proceedings of the International Conference on Advanced Nanomaterials and Emerging Engineering Technologies, IEEE, pp. 231-236.

P.Ponnusamy and R.Selvamani (2012), “Mathematical Modeling of Waves in a Circular plate embedded on elastic medium”, International conference conducted by C.I.T ,Coimbatore.

P.Ponnusamy and R.Selvamani (2012) “Three dimensional vibration in generalized thermo elastic rotating circular plate”, International conference conducted by D.G.VaishnavCollege,Chennai.

P.Ponnusamy and R.Selvamani (2011), “Thickness shear vibration in a transversely isotropic piezo electric cylindrical panel”, International conference conducted by PSG,Coimbatore.

P.Ponnusamy and R.Selvamani, ‘Vibration of generalized thermo elastic cylindrical panel’ presented in National conference conducted by Govt Arts College ,Coimbatore.

P.Ponnusamy and R.Selvamani ‘Vibration of isotropic cylindrical panel’ presented in National conference conducted by Dept of Mathematics , KalingarKarunanidhi Institute of Technology, Coimbatore.

P.Ponnusamy and R.Selvamani ‘Wave propagation in a piezo composite cylindrical panel’ presented in National conference conducted by IIT Madras.

P.Ponnusamy and R.Selvamani ,‘Wave propagation in a homogeneous isotropic cylindrical panel’ presented in National conference conducted by karunyaUniversity,Coimbatore.

### **Appendix – B**

#### **Research Guidance (give names of students guided successfully):**

##### **M.Phil (Mathematics)**

<b>S. No</b>	<b>Name</b>	<b>University</b>
1	Geetha .R	Bharathiar University
2	Dakshayani .K	Bharathiar University
3	Dhanalakshmi .S	Bharathiar University

##### **Ph.D (Mathematics)**

<b>S. No</b>	<b>Name</b>	<b>University</b>
1	M. Rajagopal	Bharathiar University

2	R. Selvamani	Bharathiar University
3	A. Amuthalakshmi	Bharathiar University