Name : **Dr. A. K. Balasubramanian**

Designation : **Associate Professor of Physics**

Department : **Physics**

Date of Joining : **06-07-1987**

Phone no. : **9486165280**

E-mail : **ambalam.b @rediffmail.com**

Educational Qualifications: M.Sc.,M.Phil.,Ph.D., D.C.P.,

Degree	Subject	College / University and Place	Year of completion
B.Sc	Physics	Sourashtra College, Madurai	1984
M.Sc	Physics	N.M.S.S.V.N College, Madurai	1986
M.Phil	Physics	School of Physics, MKU, Madurai	1996
Ph.D	Physics	School of Physics, MKU, Madurai	2009

Specialisation in Teaching:

1. Atomic Physics and Quantum Mechanics
2. Analog Electronics
3. Digital electronics
4. Electricity and Magnetism
5. Optics & Spectroscopy
6. C-Programming
7. Solid State Physics
8. Mathematical Physics

Specialisation in Research: Photoacoustics and computer simulation

Research Interests:

1 Synthesis of Nano materials

1. Photoacoustic Spectroscopy
2. Computer Simulation

Administrative /Academic Position/s (held / currently holding):

Positions held / currently holding	Year - From (month/year) To month/year)
Associate Professor of Physics	January 2006 to till date
Co-ordinator for M.Phil	June 2014 to till date
Dean for Science(Academics)	September 2011 to Augest 2014

Membership in Professional Bodies:

Member Board of Studies in

1. Sourashtra College, Madurai
2. HKRH College, Uthamapalyam.
3. V.H.N.S.N College, Virudhunagar
4. Madurai Kamaraj University, Madurai
5. M.T.N College, Madurai

Publications: Nil

Articles Published in International Journals:

1. Thermal conductivity of ZnSe by molecular dynamics simulation, **A.K.Bala subramanian**, N.Sankar, S.K.Ramakrishnan and K.Ramachandran, Cryst. Res. Technol. **39**, No. 6, 558 – 563, (2004).

2. On the transport of carbon in CdS by photoacoustics, **A.K.Balasubramanian**, N.Sankar and K.Ramachandran NDT.net, vol.**10**, No.9, September (2005).

3. On the phase transformation of CdS to $CdCO_3$by Photoacoustics, **A.K.Bala subramanian**, N.Sankar and K. Ramachandran, Superfices y Vaccio,

   19(1), 8-11, March (2006).

4. Low temperature Raman study on the site symmetry of ZnSe:P, **A.K.Bala subramanian**, T.R.Ravindran, R. Kesavamoorthy and K.Ramachandran, Solid state communications, 1-3, **140**, August (2006).

5. Thermal expansion of ZnSe by Molecular dynamics simulation, **A.K.Bala subramanian** and K.Ramachandran, Journal of Molecular simulation,Vol.**33**, 8, 685-688, July (2007).

6. On the site symmetry of phosphorus doped nano ZnSe, **A.K.Balasubra manian**, N. Sankar and K. Ramachandran, Journal of Physica E, Low Dimensional systems and Nanostrutres,Vol.41, 1301-1305 (2009)

Conference / Seminar Presentations:

1. Thermal conductivity of ZnSe by Molecular dynamics simulation, **A.K.Balasubramanian**, N.Sankar and K.Ramachandran, DAE Solid State Physics symposium held at Punjab University, Chandigarh during December 26-30, 2002.

2. Low Temperature Study On the Thermal Conductivity of ZnSe by Molecular Dynamics Simulation, **A.K.Balasubramanian**, N.Sankar and K.Ramachandran, Regional conference on condensed matter physics held at Nehru college of Arts and Science, puthanampatti, Tiruchy, 2003.

3. On the phase transformation of CdS to $CdCO_3$ by Photoacoustics, **A.K.Balasubramanian**, N.Sankar and K.Ramachandran, DAE Solid State Physics symposium held at Jiwaji University, Gwalior during December 26-30, 2003.

4. Diffusion of carbon in CdS by photoacoustics, **A.K.Balasubramanian**, N.Sankar and K.Ramachandran, Regional conference on Photoacoustics in Condensed Matter Physics and NDT, held at School of Physics, Madurai Kamaraj University, Madurai on 8th and 9th march 2004

5. Low temperature Raman study on the site symmetry of ZnSe:P, **A.K.Balasubra manian**, T.R.Ravindran, R. Kesavamoorthy and K. Ramachandran, National conferenceon Recent Advances in Materials Sciences [NCMS – 2004], held during Feb 16-17 at Periyar University, Salem, 2005.

6. Low temperature Raman study on the site symmetry of ZnSe:P, **A.K.Balasubra manian,** T.R.Ravindran, R.Kesavamoorthy and K.Ramachandran, DAE Solid State Physics symposium held at BARC, Mumbai during December 26-30,2005

7. On the site symmetry of ZnSe:P, **A.K.Balasubramanian**, T.R.Ravindran, R.Kesavamoorthy and K.Ramachandran, 2nd National Symposium on Crystal Growth of

Laser Related Materials, held at SSN college of Engineering, Kalavakkam during December 19-21, 2005.

8. Thermal expansion of ZnSe by Molecular dynamics simulation, **A.K.Balasubramanian** and K.Ramachandran, 3rd National Symposium on Crystal Growth of Laser Related Materials, held at SSN college of Engineering, Kalavakkam during December 19-21, 2006.

9. Thermal expansion of ZnSe by Molecular dynamics simulation, **A. K. Bala subramanian** and K.Ramachandran, DAE Solid State Physics symposium held at Barkatullah University of Bhopal, Bhopal, during December 26-30, 2006.

10. Growth and characterization of nano ZnSe, **A.K. Balasubramanian** and K. Ramachandran, National Conference on SMART Materials and Recent Technologies, held at Sri Venkateswara University, Tirupati, during February 22-23, 2007.

11. Growth, characterization and thermal diffusion in nano ZnSe, **A.K.Balasubra manian** and K.Ramachandran, DAE Solid State Physics symposium held at University of Mysore, Mysore, during December 27-31, 2007.

12. On the site symmetry of phosphorus doped nano ZnSe, **A.K.Balasubramanian**, N.Sankar and K.Ramachandran, DAE, Solid State Physics symposium to be held at BARC, Mumbai, during December 16-20, 2008.

13. **Gas sensing properties of SnO_2 combined Cu-Mn ferrite nanocomposites**
M. Balaji, R. A. Jeyaram, P. Madheswaran and A. K. Balasubramanian
International workshop on Advanced Functional Materials And Devices (IWAFMD-2017) held at Manonmaniam Sundaranar University,Tirunelveli- 627012, Tamil Nadu, India during 8-12, January 2017.

14. **Synthesis and characterization of CuO And Al Doped CuO films Perpared By Sol – Gel Spin coating technique**
M. Balaji, A.K. Balasubramanian and S. Chithra Devi
National Conference on Emerging trends in Materials 2017 held at Mary Matha College of Arts and Science, Periyakulam East – 625604, Tamil Nadu, India on 6th March 2017.

15. **Effect of Al^{3+} Ions on SnO_2 Materials**

M. Balaji, A. K. Balasubramanian and V. Anjali Devi
National Conference on Emerging trends in Materials 2017 held at Mary Matha College of Arts and Science, Periyakulam East – 625604, Tamil Nadu, India on 6th March 2017.

Lectures / Talks given:

1. SN college, Madurai-Science day talk on Sir C.V.Raman
2. Sermathai Vasan College, Madurai
3. Sri Parasakthi College for Women, Courtallam
4. V.V.V. College for Women, Virudhunagar

Awards / Fellowships: Nil

The name of the student and the title of the Ph.D Thesis : Nil

Other activities / information / academic credentials you would like to mention:

Acted as member in various committees like test, time-table calendar, magazine etc., constituted by the college. Acted as Secretary of Sourashtra College Alumni Association (SCAAN) for two years. Now the member of Board of Studies constituted by the Madurai kamaraj University.