

## BIO – DATA

Name : Dr A.K.BALASUBRAMANIAN

Sex : Male

Date of Birth : 21-09-1964      Age : 59 Years

Nationality : Indian

Religion : Hindu

Community : Backward Class

Caste : Sourashtra

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

UG graduation with class : Sourashtra College, Madurai (1981-1984); I class

PG graduation with class : S.Vellaichamy Nadar College, Madurai (1984-1986); I class,  
University IV Rank with medal

M.Phil Study : Madurai Kamaraj University, Madurai (1994-1995); I class

Research Study : Madurai Kamaraj University, Madurai (2003-2008)

Marital Status : Married

Occupation : Head & Associate Professor of Physics

Official Address : Department of Physics,  
Sourashtra College,  
Madurai – 625 004

Phone number : 0452 2370942

Month & Year of Joining the  
College service : 6-7-1987

Year of Pass

(i) M.Phil : August 1996

(ii) Ph.D : August 2009

Residential Address : 60/3 “Sri Ramana”  
Sambandar Street 6<sup>th</sup>  
Alagappan Nagar,  
Madurai – 625 003



Phone number : Cell : 9486165280

Email Id : [ambalam.b@rediffmail.com](mailto:ambalam.b@rediffmail.com)

Area of Research : Photoacoustics, Computer simulation and Nano materials

Papers Published : 7 papers in the leading international journals and 1 paper is communicated.

Conferences attended : 15 National and State level conferences held in various parts of India.

Seminar Participation : More than 15 number of Seminars in and outside Madurai.

Guest Lectures delivered : Four Guest lectures delivered.

Courses attended : So far 4 refresher courses and one orientation courses attended.

**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
9. Solid State Physics

**Specialisation in Research: Photoacoustics and computer simulation**

**Research Interests:**

1. Synthesis of Nano materials
2. Photoacoustic Spectroscopy
3. Computer Simulation

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

Positions held / currently holding	Year - From (month/year) To month/year)
Head and Associate Professor of Physics	From June 2019 to till date
Co-ordinator for M.Phil	June 2014 to May 2018
Dean for Science(Academics)	September 2011 to August 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<sub>3</sub> 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.Balasubramanian**, N. Sankar and K. Ramachandran, Journal of Physica E, Low Dimensional systems and Nanostructures, Vol.41, 1301-1305 (2009)
7. Preparation and characterization of CuSn,CuZr,SnZr and CuSnZr thin films deposited by SILAR method. M.Balaji, S.Chitra devi, A.K.Balasubramanian and N.R.Senthilkumar Vacuum Journal, Vol. 161(2019) 338-346

### 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<sub>3</sub> 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 8<sup>th</sup> and 9<sup>th</sup> march 2004
5. Low temperature Raman study on the site symmetry of ZnSe:P, **A.K.Balasubramanian**, T.R.Ravindran, R. Kesavamoorthy and K. Ramachandran, National conference on 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.Balasubramanian**, 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, 2<sup>nd</sup> 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, 3<sup>rd</sup> 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. Balasubramanian** 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.Balasubramanian** 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<sub>2</sub> combined Cu-Mn ferrite nanocomposites**  
**M. Balaji**, R. A. Jeyaram, P. Madheswaran and A. K. Balasubramanian  
International workshop on Advanced Functional Materials And Devices (IWAFFMD-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 Prepared 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 6<sup>th</sup> March 2017.
15. **Effect of Al<sup>3+</sup> Ions on SnO<sub>2</sub> 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 6<sup>th</sup> 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 Services** : 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 and now being the executive Committee member.  
Acted as a member in NAAC committee  
Acted as Dean for the period of three years (2011-2014)  
Acted as M.Phil co-ordinator for four years (2014-2018)