BIO-DATA

1. Name of the Applicant Dr. R.Sayanna

2. Present Designation Vice-Chancellor,

Kakatiya University, Warangal

Professor of Physics (Rtd)

Osmania University, Hyderabad

3. Date of Birth 18/08/1955

4. Social Background Scheduled Caste (SC)

5. Educational Qualifications : M.Sc. Physics, Osmania University 1980

: Ph.D. Physics, Osmania University, 1988

(Title of Ph.D. Thesis: "The Study of Defects of in some Mn+2 doped Alkalihalide Crystals")

6. Total Teaching Experience 34 years

Government Junior Lecturer 1981 – 1983 (2 years)
Lecturer in Government Degree College
Assistant Professor, Osmania University 1989 – 1991 (2 years)
Associate Professor, Osmania University 1991 – 1999(8 years)
Professor, Osmania University 1999- 2015 (16 years)

Service Details:

7. Assistant Professor 5/6/1989 to 10/09/1991 8. Associate Professor 11/9/1991 to 17/09/1999 9. Professor 18/9/1999 to 31/08/2015

10. Date of Retirement 31/08/2015

Research Publications in Reputed Journals: Please see the enclosure Annexure I

11. Papers4212. National Journals2613. International Journals1614. Books Published2

15. **Books Edited** Semiconductor devices Analog and Digital Electronics

for M.SC. (Physics),

Dr. B.R. Ambedkar open University, Hyderabad

16. Published Books: Micro wave Devices and communication systems

for M.SC. (Physics),

Dr. B.R. Ambedkar open University, Hyderabad

Research Projects Completed

17. Minor Projects

02

OU-DST-PURE-Programme

"Spectroscopic,transport studies and solid state battery applications of mixed alkali-alkaline earth oxide borate glasses"

UGC-UPE- Focussed Area Research

"Preparation and physical characterization of Metal Oxide Based core/shell Nanostructures of photovoltaics"

18. Major Projects

nil

19. Total Projects

02

20. Number of M.Phils Guided

Not applicable

21. Number of Phd's Guided

2 awarded + 5 Working

Reputed Awards

22. National Awards

Nil

23. International Awards

Nil

Seminars Attended

Please see enclosure - Annexure II

24. National seminars

12

25. International seminars

05

26. Total

17

Membership in reputed academic bodies

27. National bodies

02

- a. Indian Science Congress : Life Member
- **b.** Society for Advancement in Solid State Sciences : Founder Member

28. International Bodies

Nil

Administrative positions held

29. Name of the position	32 Period
Head , Department of Physics , Osmania University	1 sept 2014 to 31 Aug 2015
Chairman, Board of Studies Physics	2013-2014
Chairman ,Board of Studies in HLS	2013-2014
Chairman ,Board of Studies Electronics	2010-2012
Director, Publications and Press, OU	2007-2008

Additional Controller of Examinations (Post Graduate	
courses)	1996-2000
Additional Controller of Examinations UG	2005-2006
Chairman, BOS in Physics, Telangana University	2013

Other details

33. Cases/Enquries Nil

34. Present Status Nil

35. Any other Information

Member - Academic and other Committees

- Member of Academic Senate, Osmania University 2006- 2015
- Coordinator for UGC-Refresher course in Physics
- Member, Board of Studies in Physics , Palauru University Mahabubnagar 2012-2015
- Member, Board of Studies in Physics, Satavahana University, Karimnagar 2013-2014.
- Member, Board of Studies in Physics, Mahatma Gandhi University Nalgonda 2012-2015.
- Member of Faculty of Informatics 2012-2015.
- Member of Departmental Committee 2005 2014
- Member of Editorial Board ,Osmania University Annual Report 2001 2002,2002-2003
- Member, Board of Studies in H L S 2001 2003
- Member ,Board of Studies in Electronics 1998 2000.
- Member of Board of Studies in Physics (PG) 1993 1995.
- Member of Inspection Committee for Starting BCA and B. Sc. Courses in affiliated colleges.
- Osmania University Nominee as a Member of Selection Committee and Governing Body for Affiliated Colleges.
- Panel Member of Selection Committee for B S R B, Hyderabad.

Annexure I

Papers Published in Journals

1. The Role of Thermal Pretreatment on Production of Z1 Centres in Nacl: Tb Crystals.

K.NARASIMHA REDDY, J.SIVA KUMAR, **R.SAYANNA**, U.V.SUBBA RAO J.Mater. Sci. Lett(UK) 4 (1985) 1489 - 1491.

2. Glow Curves of Thermally Pretreated Kcl: Mn²⁺ Crystals.

R.SAYANNA, K.NARASIMHA REDDY

Crystal Research & Technology 21 (1986) 265 – 268.

3. The Role of impurity Precipitation on Ionic Conductivity of Nacl:Sr. System K.NARASIMHA REDDY, **R.SAYANNA**Crystal Research & Technology 21 (1986) 269 – 272.

4. Effects of Mechanical and Thermal deformation on thermo luminescence of Kcl:Mn crystals **R.SAYANNA**, K.NARASIMHA REDDY

Crystal Latt. Def. and Amroph Mat. 17, 273 (1987).

5. Variable Dark-Field and phase contrast Microscopy by Image plane Holography V.Jagan Mohan Rao and **R.Sayanna**J.P.A.P.Vol. 8 No.3 (May - June 1996) PP 111 – 129.

6. Experiments for obtaining the Transmittance Vs. Exposure Curves for Kodak-SO-253 and Kodak-131 Holographic Films and Plates

M.Prahlad Rao, S.Subramanyam, R.Sayanna and O.P.Bajpai

J.P.A.P. Vol.11 No.1 (Jan - Feb 1999) PP24-35.

7. Phase Contrast Imaging from Non-Central Apodisation Gopa Dutta, **R.Sayanna**, S.subramanyam and G. Nirmala J.P.A.P Vol.11 No.1A (Jan - Feb 1999) PP 1-13.

8. Optimization of Non-linear holograms of Extended Objects Recorded with

AGFA 10E75 Holographic Films

M.Prahlad Rao, RSayanna, S.Subramanyam and O.P.Bajpai

J.P.A.P. Vol.11 No.1A (Jan - Feb 1999) PP14-20.

9. Spatial Resolution of Coded-Aperture Imaging Systems in Multiplexed Tomography with Linear and Quadratic Super-Resolving Filters

B.Gnana Sagar, T.prabhakar Rao, D.karunasagar, **R.sayanna** and P.K.Mondal J.P.A.P. Vol.11 No.3A, (May-June 1999) pp. 130-135.

10. Lateral Resolution of Apodised Two-Annuli Coded-Aperture Imaging Systems in Multiplexed Tomography

T.Prabhakar Rao, D.karunasagar, S.L. Goud and R.Sayanna

J.P.A.P. Vol.11 No.3A, (May – June 1999) pp. 121 – 129.

11. Effects of defocusing on the sparrow limits for apodized optical systems

Keshavulu, R.Sayanna, D.Karuna Sagar and S.L.Goud

Optics communications Vol. 217, Issues 1-6, (1 March 2003), pp.59-67.

12. Hanning pupils in altering the radius of a circle enclosing a given percentage of the total flux in the image

D.Karuna Sagar, **R.Sayanna** and S.L.Goud

Journal of Pure and Applied Physics, Vol 16, No. 2, 2004 (7).

13. Two Point Resolution of a Apodised Apertures with Hanning Amplitude Filters

D.Karuna Sagar, R.Sayanna and S.L.Goud

Journal of Pure and Applied Physics, Vol 16, No. 5-A, 2004 (34).

14. Influence of the degree of coherence on the peak intensity ratios in the images of two point objects of unequal brightness

D.Karuna Sagar, R.Sayanna and S.L.Goud

Journal of Pure and Applied Physics, Vol 16, No. 6-A, 2004 (16-19).

15. Signatures of 'Active' and 'Break' phases of Indian Summer monsoon in Subsurface Agro data.

Anita.G., M.Ravichandran and R.Sayanna

Environmental Geochemistry, Vol 8, No.1&2, 2005 (237-243).

16. Seasonal and Intraseasonal SST and Winds in the North Indian Ocean,

Anitha.G., M. Ravichandran and R. Sayanna,

Proceedings of the 1st International Indian Geography Congress, October 5 - 7, 2006, Hyderabad, India, pp179.

17. Surface Buoyancy Flux in Bay of Bengal and Arabian Sea.,

Anitha.G., M. Ravichandran and R. Sayanna,

Annals of Geophysicea, 2008, 26(3), 395-400.

18. EPR and Optical Studies on Mixed Alkali-Alkaline Earth Oxide Borate Glasses Doped with Cu²⁺ion

G. Srinivas, B. Ramesh, Md. Shareefuddin, M.N Chary, and R. Sayanna.

Proceedings of the National conference on Applied Physics and Materials Science (July- 2013), ISBN: 978-93-82570-10-3.

19. Two Point Resolution of an Apodised Optical System with Annular Apertures

K. Vinod kumar, D. Karuna Sagar, R. Sayanna.

Proceedings of the National conference On Applied Physics and Materials Science (July-2013), ISBN: 978-93-82570-10-3. Vol. 2, Issue 9, September 2013, ISSN: 2319-8753.

20. Electrical Conduction and Colossal Magneto resistive Effect of Vinyl Alcohol polymer electrolytes

K.Alakanandana, A.R.Subrahmanyam, **R.Sayanna**, and J.Siva Kumar

Proceedings of the National conference on Applied Physics and Materials Science (July- 2013), ISBN: 978-93-82570-10-3.

- 21. Point Spread Functions of Defocused Optical Systems with Hanning Amplitude Filters K. Vinod Kumar¹, B. Sambaiah², D. Karuna Sagar³ and **R. Sayanna⁴** Publication in International Journal of Innovative Research in Science, Engineering and Technology (An ISO 3297: 2007 Certified Organization) Vol. 2, Issue 9, September 2013, ISSN: 2319-8753.
- 22. Resolution of Two Point Objects with Primary Spherical Aberration under Incoherent Illumination

K. Vinod Kumar, D. Karuna Sagar, R. Sayanna

International journal of innovative research & development.Vol.2, Sept-2013, ISSN: 2278 – 0211.

23. Annealing Effect on Structural, Optical and Electrical Properties of V2O5 Thin Film by Dip Coting

Y.Vijayakumar, R. Sayanna and M.V.Ramana Reddy

Publication in International Journal of Asian Journal of Applied Science, 2014, ISSN- 1996-3343, DOI-10.3923.

- 24. Synthesis and Characterization of Polyaniline(PANI)blends A.R.Subrahmanyam, K.Alakanandana, M.Jaipal Reddy, **R.Sayanna**, and J.Siva Kumar Journal of Synthetic Matals, 2014.
- 25. Structural and Electrical studies of Malonic acid doped PVA electrolytes for electrochemical cells

K.Alakanandana, A.R.Subrahmanyam, **R.Sayanna**, and J.Siva Kumar Journal of Polymer Science B, 2014.

- 26. Characterization of C₂H₂O₄ doped with PAV solid Polymer Electrolyte K.Alakanandana,A.R.Subrahmanyam, **R.Sayanna**, and J.Siva Kumar Journal of Polymer Engineering, 2014, DOI 10.1515.
- 27. Defect of Focus in Resolving Two Point Objects K. Vinod Kumar, D. Karuna Sagar, R. Sayanna International Journal of Innovative Research &Studies, Vol.3, April-2014, ISSN: 2319-9725.
- 28. Resolution of Two Point Objects under Partial Coherence Illumination with Apodised Apertures of Defocused Optical System K.Vinod Kumar, **R. Sayanna**, D. Karuna Sagar,

Proceedings of the 2nd National Conference on Applied Physics and Materials Science (August-2014), ISBN: 978-93-82570-37-0.

29. Structural, Optical and Transport Characterization of Polymer Blend (PVC/PEG) Electrolyte System

Ch.Ramesh, M.Maheshwar Reddy, M.Jaipal Reddy, J.Siva Kumar, R.Sayanna,-

Proceedings Of the 2nd National conference on Applied Physics and Materials Science (August-2014), ISBN: 978-93-82570-37-0.

30. Physical, Optical and Structural Studies on binary mixed Alkali-Alkaline Earth Oxide Borate Glasses

G. Srinivas, J. Siva Kumar, Md. Shareefuddin, M.N Chary, and R. **Sayanna**. Proceedings of the 2nd National conference on Applied Physics and Materials Science (August-2014), ISBN: 978-93-82570-37-0.

31. Optical and FTIR Studies Of Alkaline Earth Zinc Bismuth Borate Glasses. B.Ramesh, D.Komaraiah, Md.Shareefuddin, **R.Sayanna**, National Conference on Engineering Materials, Energy and Environment (2015), ISBN: 978 93 83038 32 9.

32. Thermal and Optical Studies of mixed Alkali-Alkaline Earth oxide Borate Glasses G. Srinivas, J. Siva Kumar, Md. Shareefuddin, M.N Chary, and **R. Sayanna**. Proceedings of National Conference on Environmental Radiation and Functional Materials March-2015Vol.3. 2015. ISSN: 2321-7758.

33. Structural and Optical Properties of Europium Doped Alkaline Earth Zinc Bismuth Borate Glasses

RAMESH BODA, SRINIVAS.G, KOMARAIAH.D, SHAREEFUDDIN. MD, M.N CHARY, SAYANNA.R

Proceedings of National Conference on Environmental Radiation and Functional Materials March-2015, Vol.3. ISSN: 2321-7758.

34. Structural and Optical properties of nano structured TiO₂ thin films prepared by Sol-gel spin coating technique

Durgam Komaraiah, P.Madhukar, Y.Vijayakumar, M.V.Ramana Reddy and **R.Sayanna**. Proceedings of National Conference on Environmental Radiation and Functional Materials March-2015, Vol.3. ISSN: 2321-7758.

35. UV-Vis Absorption and Structural Studies of Eu³⁺ Ions Doped Alkali Zinc Bismuth Borate Glasses,

Ramesh Boda, G.Srinivas, D.Komaraiah, Md. Shareefuddin, M.N. Chary, **R.Sayanna** Int.J. of Innovative Research in Science, Engineering and Technology, (An ISO 3297: 2007 Certified Organization) Vol. 4, Issue 8, August 2015.

36. Structural and UV-Vis absorption studies of Alkaline Earth Zinc Bismuth Borate Glasses Doped with Eu³⁺ ions

Ramesh Boda, G.Srinivas, D.Komaraiah, Md. Shareefuddin, M.N. Chary, **R.Sayanna**, IOSR Journal of Applied Physics, e-ISSN: 2278-4861.Volume 7, Issue 4 Ver. II (Aug. 2015), PP 27-34.

37. Structural and Optical Properties of Europium Doped Calcium Zinc Bismuth Borate Glasses Ramesh Boda, G.Srinivas, D.Komaraiah, Md.Shareefuddin, M.N Chary, **R.Sayanna** Proceedings of the third national conference on applied physics and materials science, August 2015, ISBN: 978-93-82570-64-6.

- 38. Spectroscopic Studies on Li₂O-K₂O-MgOBaO-B₂O₃ Glasses G.Srinivas, Ramesh Boda, J. Siva Kumar, Md. Shareefuddin, M.N. Chary, **R. Sayanna** International Journal of Innovative Research in Science, Engineering and Technology (An ISO 3297: 2007 Certified Organization) Vol. 4, Issue 8, August 2015.
- 39. Composition Effect on some Physical Properties, Optical Absorption and FTIR Spectra of Borate Glasses
 - G. Srinivas, J. Siva Kumar, Md. Shareefuddin, M.N Chary, and **R. Sayanna**. Proceedings of the third national conference on applied physics and materials science, August 2015, ISBN: 978-93-82570-64-6.
- 40. Multiplexer-Based Design of Adders/Subtractors and Logic Gates for Low Power VLSI Applications

Ramesh Boda, M.Charitha, B.Yakub, R.Sayanna,

IOSR Journal of VLSI and Signal Processing, Volume 5, Issue 6, Ver. II (Dec. 2015), PP 59-66, e-ISSN: 2319 – 4200, p-ISSN No.: 2319 – 4197.

- 41. Mixed alkali effect in physical and optical properties of xK₂O-(25-x) Na₂O-12.5MgO-12.5BaO-50B₂O₃ Glasses
 - G. Srinivas, B. Ramesh, J. Siva Kumar, Md. Shareefuddin, M. N Chary, **R. Sayanna**. Journal of Taibah University for Science (Accepted Manuscript on Nov. 16, 2015).
- 42. Optical and Electron Paramagnetic Resonance Studies of VO2+ doped Mixed Alkali -Alkaline Earth Oxide Borate Glass System
 - G. Srinivas, J. Siva Kumar, Md. Shareefuddin, M.N Chary, and R. Sayanna.

Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B (Accepted Manuscript on Dec. 16, 2015)

Annexure II

Seminars Attended

Deformation effects on Thermo luminescence of KCl:Mn crystals
 R.Sayanna, S.Ramalingaiah, M.Salgram and K. Narasimha Reddy
 First National Seminar on Defects in insulating solids, Dept. of Physics, RIT, Jamshedpur (November 6 - 8, 1985).

2. Glow Curves of Deformed KCl:Mn Crystals

R.Sayanna, ,M.Salgram and K. Narasimha Reddy

XVII National Seminar on Crystallography (December 20-22, 1985) Department of Physics, IIT, Madras.

3. Mechanical Strengthening and impurity precipitation behaviour of Mn doped alkali halide single crystals

R.Sayanna, S.Ramalingaiah, U.V. Subba Rao and K. Narasimha Reddy

XVIII National Seminar on crystallography (Oct 7 - 9, 1986) Dept. of Physics, University of Jammu, JAMMU.

4. The effect of Microstructure on Thermally stimulated Luminescence of Yba $_2$ Cu $_3$ O $_{7-\delta}$ System

Katta Narasimha Reddy, R. Sayanna and T.S.P.L.N. Prasad.

National Seminar on "Thermo luminescence and its applications"

(Feb 7 – 9, 1991) Applied Physics Department, M.S. University of Baroda, BARODA.

5. Thermally stimulated luminescence studies in KCl.:Br:Mn system

R.Sayanna, V.Vijay Kumar and Katta Narasimha Reddy

National Seminar on "Thermo luminescence and its applications" (Feb 7 - 9, 1991) Applied Physics Department, M.S. University of Baroda, BARODA.

6. EPR and Optical absorption studies of Cu²⁺ ions in Na₂ O-NaBr-P₂O₅-B₂O₃ quaternary glasses.

K.Madhusudhan reddy, **R.Sayanna**, Md.Shareefuddin, K.Narasimha Reddy and M.narasimha Chary

5th National Conference on Solid State Ionics , Department of physics, Nagapur University during 15-17 February, 2002.

7. Electron Paramagnetic Resonance Spectra of VO^{2+} spin probe in Na_2O -PbO- B_2O_3 ternary Glasses

K.Madhusudhan reddy,**R.Sayanna**,Md.Shareefuddin, K.Narasimha Reddy and M.narasimha Chary

National Seminar on Advances in Materials and Processing Technologies, 31st January & 1st February 2003, Department of Physics, Osmania University.

8. Signatures of 'Active' and 'Break' phases of Indian Summer monsoon in Subsurface Agro data.

Anita.G., M.Ravichandran and **R.Sayanna**

Fourteenth National Symposium on Environnment(NSE-14) June 5-7, 2005, Department of Physics, Osmania University.

9. Seasonal and Intraseasonal SST and Winds in the North Indian Ocean.

Anitha.G., M. Ravichandran and **R. Sayanna**

1st International Indian Geography Congress,October 5-7,2006, Osmania University, Hyderabad.

10. A Study of Electron paramagnetic Resonance Spectra of VO^{2+} Ions InNaCl-Na₂O-B₂O₃ Glasses.

K.Madhusudhan Reddy, G.Ramadevudu, Md. Shareefuddin, **R.sayanna** and M.Narasimha Chary

UGC-SAP National Seminar on Recent Trends in Solid State Materials (NSRTSSM-2010). February 26th, 2010. Department of Physics, Osmania University.

11. Spectroscopic Studies of Li₂O-Na₂O-K₂O-ZnO-B₂O₃-CuO Glass system Abdul Hameed, Md. Shareefuddin, G.Ramadevudu **R.sayanna** and M.Narasimha Chary International conference on Applications of Renewable and Sustainable Energy for Industry and Society (REIS 2010) December 16-18, 2010. Department of Physics, Osmania University.

12. Preparation, characterization and thermal expansion of Pr co-dopant in samarium doped ceria

V. Venkatesh, V. Prasanth Kumar, **R. Sayanna** and C. Vishnuvardhan Reddy

World congress on Engineering and Technology (CET2012) October26-28'Beijing, China.

Advances in Materials Physics and Chemistry, vol.2. supplement, October 2012

World congress on Engineering and Technology.

13. Optical and FTIR Studies on Mixed Alkali-alkaline Earth Oxide Borate Glasses G.Srinivas,B.Ramesh,Md.Shareefuddin and R.Sayanna National seminar on Advanced Materials and their Applications 2013(NSAM- 2013) February27-28, 2013.Department of Physics, Osmania University.

14. Electron Paramagnetic Resonance and Optical Absorption Studies of Cu²⁺ Spin Probe in KBr-K₂O-B₂O₃-P₂O₅ Quaternary Glasses.

K.Madhusudhan Reddy,G.Ramadevudu,Md.Shareefuddin,**R.Sayanna** and M.Narasimha Chary.

National seminar on Advanced Materials and their Applications 2013(NSAM- 2013) February 27-28, 2013. Department of Physics, Osmania University.

15. Morphology and Electrical properties of DBSA doped poly aniline and poly Phenylene Sulphide polymer blend.

A.R.Subrahmanyam,K.Alakanandana, M.Jaipal Reddy,**R.Sayanna** and J.Siva Kumar

- National seminar on Advanced Materials and their Applications 2013(NSAM- 2013) February 27-28, 2013. Department of Physics, Osmania University.
- 16. Physical, Optical and FTIR Studies On Mixed Alkali-Alkaline Earth Oxide Borate Glasses *G. Srinivas**, J. Siva Kumar, Md. Shareefuddin, M.N. Chary, and R. **Sayanna***. Presented at the International conference on Nano, Bio & Materials Science (ICONBMS- 8-10th Jan 2014), Department of physics, Nizam college, Osmania University, Hyderabad, P142.
- **17.** Optical and FTIR studies of alkaline earth zinc bismuth borate glasses B.Ramesh, ²D.Komaraiah, ³Md.Shareefuddin, ⁴**R.Sayanna**, Presented at the International conference on Nano, Bio & Materials Science (ICONBMS- 8-10th Jan 2014), Department of physics, Nizam college, Osmania University, Hyderabad, P162.
- 18. DSC and Optical Studies on Binary Mixed Alkali Alkaline Earth Oxide Borate Glasses G. Srinivas^a, J. Siva Kumar^b, Md. Shareefuddin^c, M.N Chary^d, **R. Sayanna**^a. Presented at the National conference on Advanced Materials for Energy Applications (NCAMEA-31 January-1Februaary-2014), Osmania University, Hyderabad.
- 19. Optical and Structural properties of Alkaline Earth Bismuth Borate Glasses Doped with Zinc B.Ramesh, G.Srinivas, D.Komaraiah, Md.Shareefuddin, M.N Chary, **R.Sayanna**Presented at the National conference on Advanced Materials for Energy Applications (NCAMEA-31 January-1Februaary-2014), Osmania University, Hyderabad.
- 20. Preparation and characterization of ZnO thin films by spray pyrolysis technique for TCO application
 D. Komaraiah, Y. Vijaykumar, M.V. Ramana Reddy and R. Sayanna. Presented at the National conference on Advanced Materials for Energy Applications (NCAMEA-31 January-1Februaary-2014), Osmania University, Hyderabad.
- 21. Spectroscopic Studies on Li₂O-K₂O-MgO-BaO-B₂O₃ Glasses G.Srinivas*, J. Siva Kumar, Md. Shareefuddin, M.N. Chary, and **R. Sayanna***. Presented at the International Seminar on Glass and other Functional Materials (ISGFM, 11 -13, Dec-2014) Acharya Nagarjuna University, Guntur, A.P., India.
- 22. FTIR and Optical Properties of Europium Doped Lithium Zinc Bismuth Borate Glasses B.Ramesh, G.Srinivas, D.Komaraiah, Md.Shareefuddin, M.N Chary, **R.Sayanna** International conference Recent Advances in Nano-Science and Technology (RAINSAT-2015), 8th 10th July, 2015. Organized by Sathyabama University, Chennai.
- 23. Optical Constants, Single-Oscillator Modal and Refractive Index Dispersion Analysis of Lithium Zinc Bismuth Borate Glasses Doped With Eu³⁺ Ions Ramesh Boda*, G.Srinivas, D.Komaraiah, B.Srinivas, Md. Shareefuddin, **R.Sayanna** International conference on condenced matter and applied physics (ICC-2015), 30-31st oct 2015. Department of physics, Govt. Engineering College Bikaner, Rajasthan.
- 24. Optical properties of Bismuth Borate Glasses Doped with Eu³⁺ Ions Ramesh Boda*, G.Srinivas, D.Komaraiah, B.Srinivas, Md. Shareefuddin, **R.Sayanna**

International conference on condenced matter and applied physics (ICC-2015), 30-31st oct 2015. Department of physics, Govt. Engineering College Bikaner, Rajasthan.

- 25. Mixed alkali effect in the optical and EPR studies of alkali-alkaline earth oxide borate glasses
 - G. Srinivas, B. Ramesh, Md. Shareefuddin, M N Chary and **R. Sayanna** International conference on condenced matter and applied physics (ICC-2015), 30-31st oct 2015. Department of physics, Govt. Engineering College Bikaner, Rajasthan.
- 26. A study of Physical and optical absorption spectra of VO²⁺ions in potassium and sodium oxide borate glasses
 - G. Srinivas, B. Ramesh, J. Siva Kumar, Md. Shareefuddin, M. N Chary, **R. Sayanna** Department of physics, Osmania University, Hyderabad, India 60th DAE Solid State Physics Symposium (DAE-SSPS-2015) December 21-25, 2015Amity University UP, Noida, Uttar Pradesh.