# **Profile**

Name: Dr. Bagvanth Reddy Sangala Father's Name: S. Kanthi Reddy (late) Date of Birth: May 9<sup>th</sup>, 1983 Place of Birth: Bijinapally, Nagarkurnool (District) Social Status: General Marital Status: Unmarried Nationality: India Languages known: Telugu, Hindi, English, Sanskrit, Tamil, Kannada Email id:bagvanth\_uab@ymail.com Phone: 9640486128



#### 1.Educational Qualifications (starting with highest degree obtained) :

| SI.<br>No. | Examination/<br>Degree | , , ,  | Percentage of<br>marks/Grade | Discipline/Subjec<br>t(s)                            | Year of<br>Passing /<br>Award |  |
|------------|------------------------|--|------------------------------|--|-------------------------------|--|
| 1          | Ph.D                   | University of Alabama at<br>Birmingham, AL, USA                          | NA                           | Physics  | Aug, 2013                     |  |
| 2          | M.S.                   | University of Alabama at<br>Birmingam, AL, USA                           | 3.8 out of 4                 | Physics  | s 2008                        |  |
| 3          | M.Sc.                  | Hyderabad Central University<br>(HCU), AP, India                         | 76.4%                        | Physics  | 2005                          |  |
| 4          | B. Sc.                 | Sri Krishnadevaraya<br>University (Silver Jubilee<br>College, APRDC), AP | 84.5%                        | Mathematics,<br>Physics, Industrial<br>Chemistry     | 2003                          |  |
| 5          | Intermediate           | Board of Intermediate<br>Education, AP                                   | 84.2%                        | Mathematics,<br>Physics,Chemistry                    | 2000                          |  |
| 6          | 10 <sup>th</sup>       | Board of Secondary<br>Education, AP                                      | 68%                          | Telugu, Hindi,<br>English, Maths,<br>Science, Social | 1998                          |  |

- 2. Title of Ph.D. Thesis: High Frequency Resolution Terahertz Time-Domain Spectroscopy(i) Date & Year of awarded: Aug 10th, 2013
- **3. Whether Qualified UGC/CSIR/JRF/SET:** CSIR-UGC NET. **Qualifying date of test:** 01/12/2005. **4.Details of Employment (in chronological order starting with most recent)**

Sl. Name of the Employer Status of the Post Period of Pav Nature No Institute/Unive held/Designatio Employment band/Scale of and Grade Pay Duties rsity n (Govt./Quasi Govt./Autonom ous/Private) 1 **Palamuru University** 2016-Present 23,000 INR per Teaching Govt. Academic Consultant month 2 15,000 INR per Teaching **Palamuru University** Govt Part Time 2015-2016 Lecturer month 3 37,000 INR per Research **Tata Institute of** Govt. Visiting 2013-2015 **Fundamental Research** postdoctoral month fellow and Scientist

| 4 | University of Alamaba  | Govt. | Graduate        | 2009-2013 | 1800 USD per  | Research |
|---|------------------------|-------|-----------------|-----------|---------------|----------|
|   | at Birmingham, AL,     |       | Research        |           | month         |          |
|   | USA                    |       | Assistant       |           |               |          |
| 5 | University of Alamaba  | Govt. | Graduate        | 2007-2009 | 1600 USD per  | Teaching |
|   | at Birmingham, AL,     |       | Teaching        |           | month         |          |
|   | USA                    |       | Assistant       |           |               |          |
| 6 | Advanced Center for    | Govt. | Junior Research | 2005-2007 | 8,000 INR per | Research |
|   | High Energy Materials, |       | Fellow          |           | month         |          |
|   | HCU, India             |       |                 |           |               |          |

## **5. Experience:**

(i) Teaching 2.5 Years (1 yr part time Lecturer, 1.5 yr-academic Consultant)

(ii) Research (Excluding M.Phil./Ph.D. Research) 3rs Years 2 months (1 yr 8 months at Pre PhD, 1 yr 6 months as postdoc)

(iii) Total: 5.5 years

#### 6. Details of Research Experience:

| Sl. No. | Position     | Institution       | Country | Period     | Project         | Funding              |
|---------|--------------|-------------------|---------|------------|-----------------|----------------------|
| 1       | Visiting     | Tata Institute of | India   | Oct, 2013- | Terahertz (THz) | Department of Atomic |
|         | Postdoctoral | Fundamental       |         | April,     | Metamaterials,  | Energy, India        |
|         | fellow and   | Research          |         | 2015       | THz             |                      |
|         | Scientist    |                   |         |            | Spectroscopy    |                      |
| 2       | PhD student  | University of     | USA     | Aug,       | High Frequency  | NASA, USA            |
|         |              | Alamaba at        |         | 2007-Aug,  | Resolution THz  |                      |
|         |              | Birmingham        |         | 2013       | spectroscopy    |                      |
| 3       | Junior       | Advanced Center   | India   | Nov,       | Laser Induced   | DRDO, India          |
|         | Research     | for Research in   |         | 2005-Jul,  | Plasma assisted |                      |
|         | Fellow       | High Energy       |         | 2007       | shock wave      |                      |
|         |              | Materials         |         |            | Dynamics in air |                      |

## 7. Academic Experience:

| Sl.No. | Post held           | Organization        | Period  | Remarks |
|--------|---------------------|---------------------|---------|---------|
| 1      | Part time Lecturer  | Palamuru University | 2015-16 | No      |
| 2      | Acedemic Consultant | Palamuru University | 2016-   | No      |
|        |                     |                     | present |         |

## 8. Administrative Experience:

| Sl.No. | Name of Post | Name of the University | Duration |    | Experience |
|--------|--------------|------------------------|----------|----|------------|
|        |              |                        | From     | То |            |
| 1      | NA           | NA                     | NA       | NA | NA         |
|        |              |                        |          |    |            |

# 9. Invited Talks in Conference / Seminar / Workshop:

| Sl.No. | Name of conference /<br>Seminar / Workshop | Delivered Topic | Name of the<br>Organization | Level (State/<br>National/Intern |
|--------|--|-----------------|-----------------------------|----------------------------------|
|        |  |                 |                             | ational)                         |
| 1      | NA   | NA              | NA                          | NA                               |

# **10. Publications:**

| Sl. | Type of Publication                | ISSN/ ISSB   | Publisher      | Published/ | Commun |
|-----|------------------------------------|--------------|----------------|------------|--------|
| No  | (Books/Research                    |              |                | Accepted   | icated |
|     | papers/Articles in                 |              |                |            |        |
|     | journals/Research Article)         |              |                |            |        |
| 1   | High Frequency Resolution          | ISBN:        | ProQuest       | 2013       |        |
|     | Terahert Time-Domain               | 978130332350 | Dissertations  |            | 2013   |
|     | Spectroscopy (Book)                | 8            | And Theses     |            |        |
| 2   | <b>Bio-interfacing of resonant</b> | ISSN:2057-   | Biomedical     | 2015       | 2014   |
|     | transmission characteristics of    | 1976         | Physics and    |            |        |
|     | InSb-based terahertz plasmonic     |              | Engineering    |            |        |
|     | waveguide (Journal Article)        |              | Express        |            |        |
| 3   | Resonant Terahertz InSb            | ISSN:1866-   | Journal of     | 2016       |        |
|     | Waveguide Device for sensing       | 6892(print)  | Infrared and   |            | 2015   |
|     | Polymers (Journal Article)         | ISSN: 1866-  | Millemeter and |            |        |
|     |                                    | 6906 (onlin) | Terahertz      |            |        |
|     |                                    |              | waves          |            |        |
| 4   | <b>Evaluation of Structure-</b>    | ISSN:1386-   | Spectrochimica | 2016       | 2015   |
|     | reactivity descriptors and         | 1425         | Acta Part      |            |        |
|     | biological activity spectra of 4-  |              | A:Molecular    |            |        |
|     | (6-methoxy-2-naphthyl)-2-          |              | and            |            |        |
|     | butanone using spectroscopic       |              | Biomolecular   |            |        |
|     | techniques (Journal Article)       |              | Spectroscopy   |            |        |

# **11.Paper Presentations in Conference / Seminar / Workshops:**

| Sl. | Paper Title                         | Title of Conference /             | Present | Remarks        |
|-----|-------------------------------------|-----------------------------------|---------|----------------|
| No  |                                     | Seminar/Workshop                  | ation   |                |
| -   |                                     |                                   | Туре    |                |
| 1   | Shock Wave Dynamics in              | SEVENTH DAE - BRNS NATIONAL       | Poster  | Presented by a |
|     | Air Using Probe Beam                | LASER SYMPOSIUM(NLS-7) (India)    |         | Co-author      |
|     | Deflectometry                       |                                   |         |                |
| 2   | <b>Beam Delectometry Method</b>     | High Energy Materials             | Oral    | Presented by a |
|     | for Characterization of             | Conference & Exhibits-2007        |         | Co-author      |
|     | Laser-induced Shock Waves           | (India)                           |         |                |
| 3   | Terahertz time-domain               | American Physical Society, 2011   | Oral    | No             |
|     | spectroscopy of Ices of N2,         | (USA)                             |         |                |
|     | CO2, and Ar                         |                                   |         |                |
| 4   | Terahertz time-domain               | IRMMWTHz-2011 (USA)               | Oral    | No             |
|     | spectroscopy of α-Nitrogen          |                                   |         |                |
|     | Ice                                 |                                   |         |                |
| 5   | Terahertz time-domain               | Science and Technology Open house | Poster  | No             |
|     | spectroscopy of N2 and CO2          | at Tuskegee, AL-2012 (USA)        |         |                |
|     | ice mixtures at 20K                 |                                   |         |                |
| 6   | Measurement of Decoherence          | Ultrafast Phenomena XVIII-2012    | Poster  | Presented by a |
|     | Lifetimes in a High Mobility        | (Switzerland)                     |         | Co-author      |
|     | <b>Two-Dimensional Electron Gas</b> |                                   |         |                |
| 7   | Terahertz Time-Domain               | American Physical Society, 2013   | Oral    | No             |
|     | Spectroscopy of Nitrogen            | (USA)                             |         |                |
|     | Ice                                 |                                   |         |                |
| 8   | A Narrowband THz                    | Photonics-2014 (India)            | Oral    | No             |
|     | Metamaterial Polarizer              |                                   |         |                |
| 9   | A tunable Fano-Resonance            | COMSOL-2014, (India)              | Poster  | No             |
|     | in the THz Metamaterials            |                                   |         |                |

| 10 | Indium Antimonide (InSb) | IRMMW-THz-2014 (USA)       | Oral | Presented by a |
|----|--------------------------|----------------------------|------|----------------|
|    | based planar THz         |                            |      | co-author      |
|    | plasmonic Waveguide      |                            |      |                |
| 11 | Indium antimonide (InSb) | IRMMW-THz-2015 (Hong kong) | Oral | Presented by a |
|    | based THz sensor         |                            |      | co-author      |

## **12.** Training Courses / FDP Refresh Courses / Orientation Courses:

| Duration & Position   | Institution                     | Nature of the work done  |
|---|---------------------------------|--|
| Teacher Orientation Program<br>Jun17th-Jun 30 <sup>th</sup> , 2016                            | Palamuru University             | Listening talks and participation in<br>discussions  |
| Photonics-2006<br>December 13 <sup>th</sup> -16 <sup>th</sup> .<br>(International Conference) | Hyderabad Central<br>University | Participation in organizing a conference.<br>Sorted out papers for topics to write CDs<br>and books, helped speakers with technical<br>support, etc. |

## 13. Full Length Papers in proceedings of Conferences (National / International)

1. "High Pressure Phase Transformations in Heavy Rare Earth Metals and Connections to Actinide Crystal Structures," MRS Proceedings, 2008. (International)

2. "Terahertz time-domain spectroscopy of  $\alpha$ -nitrogen ice," IRMMW-THz proceedings, 2011. (International)

3. "Decoherence in a Landau Quantized Two Dimensional Electron Gas", The European Physical Journal Conferences, 2013. (International)

4. "Indium Antimonide (InSb) based planar THz plasmonic Waveguide" IRMMW-THz proceedings, 2014. (International)

5. "Indium antimonide (InSb) based THz sensor, IRMMW-THz proceedings, 2015. (International)

## 16. Details of travel(s) abroad:

| (i) Countries visited | : USA           |
|-----------------------|-----------------|
| (ii) Duration         | : Six years     |
| (iii) Purpose         | :To pursue PhD. |

## **Declaration:**

I hear by declare that the above information given by me is true, complete and correct in the best of my knowledge and belief and that nothing has been concealed or distorted thereof.

**Date:** December 21<sup>st</sup>, 2017.

Spream thety

**Signature Name:** Dr. Bagvanth Reddy Sangala