

## About Vijayawada:

Vijayawada earlier known as Bezawada, is the second largest city in Andhra Pradesh, India, located on the banks of the Krishna River and bounded by the Indrakiladri Hills on the West and the Budameru River on the North. It is located east of proposed Andhra Pradesh Capital City and is the second largest city in the state after Visakhapatnam. Vijayawada literally translates to "The Place of Victory". Its prominence as a major trading and business center has earned it the title of,

"The Business Capital of Andhra Pradesh". Situated along the Madras-Howrah and Madras-Delhi Railway route, this is the largest railway junction of the South Central Railway region. The city is in Krishna District, The very mention of Vijayawada, first brings to mind delicious mangoes and pickles. Lying in the rich coastal delta of the state, the cuisine of Vijayawada is spicy and deliciously varied. The Northern, North-Western, and South-Western parts of the city are covered by a low range of hills, while the Central, South-Western and North-Western parts are covered by rich and fertile agriculture lands with three major irrigation canals. The topography of Vijayawada is flat, with a few small to medium sized hills. The Krishna River runs through the city. These hills are part of the Eastern Ghats cut through by the Krishna river. They have very low elevation compared to the average elevation of the ghats. Three canals originating from the north side of the Prakasham barrage reservoir, Eluru, Bandar and Ryves, run through the city. Vijayawada is the only city in the world with two rivers, Krishna, Budameru, and three canals. Buckingham Canal originates from the south side of the reservoir. Due to the presence of the Krishna River the soil around here is very fertile and cultivated intensively.

## About the department:

The undergraduate department of physics was started in the year 1975. Later the post graduate department was started in the year 2003 with an intake of 24 students and it has increased to 36. The faculty are all qualified and well experienced. The department has well equipped laboratories both in electronics and general physics and they are of their own kind in the area of two universities Acharya Nagarjuna University and Krishna University. The department is also recognized as the research centre. The department has a separate research laboratory with equipment like digital balance, magnetic stirrer, furnaces thin film deposition plant etc. to prepare different classes of materials like thin films, liquid crystals etc. The faculty has eligibility to guide research scholars for Ph.D and M.Phil., programmes. Till now 4 M.Phils were awarded and one Ph.D is ready for submission.

## How To Reach Vijayawada:

Vijayawada is well connected by road, rail and Air. It is well connected to the rest of the country by National Highways. Vijayawada Railway Junction is the largest railway junction on the south central railway network. It is also well connected by Air. The domestic Airport is at GANNAVARAM, about 19km from the seminar venue, connects Vijayawada to Hyderabad, Bangalore, Chennai, New Delhi and Jaipur. Seminar venue is located about 4km from Vijayawada Railway Station and Vijayawada A.P.S.R.T.C. Bus Stand. Auto Rickshaw and RTC Buses are available from Railway Station to reach the seminar Venue.

## Profile of the College :

Parvathaneni Brahmayya Siddhartha College of Arts & Science is the first offspring of "Siddhartha Academy of General & Technical Education" in the year 1975. From the beginning the college has emerged as one of the premier institutions of higher learning in the State. At present the college is offering 8 PG and more than 10 UG courses. The college has well furnished class rooms, well equipped laboratories, full fledged Botany & Zoology museums, an excellent library and reading room with Open Access System and free internet facility, a very big Indoor Stadium, multi-gym, a well furnished auditorium, a large play field and an excellent hostel in hygienic conditions. Since 1988 the UG college is enjoying full academic Autonomy. The college has introduced "Choice Based Credit System" from the year 2005-06 where as the PG Centre is affiliated to Krishna University and recognized as research centre by Krishna University offering M.Phil and Ph.D programmes.

Siddhartha Academy of General & Technical Education has 3 Degree Colleges, 2 Junior Colleges, 2 Schools, 2 Technical Institutions and 9 Professional Colleges.

## ADVISORY COMMITTEE

**Prof. T.Radha Krishna,**  
Emeritus professor, JNTU, HYD.

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# Regional seminar on "Advances in Atmospheric and Space Physics"

(26<sup>th</sup> September, 2016)



Organized by  
Department of Physics

Dep

Parvathaneni Brahmayya Siddhartha  
College of Arts & Science

Re-accredited at the level 'A' by the  
NAAC College with Potential for  
Excellence (UGC)

Affiliated to  
KRISHNA UNIVERSITY

Siddhartha Nagar,  
Vijayawada-520 010  
Andhra Pradesh, India

## Physics association

Cordially solicits your gracious presence at the inauguration of the seminar at

10.00 A. M on 26<sup>th</sup> September 2016

By

Sri. P. L. N. Prasad, Convener  
P. B. Siddhartha College of Arts and Science,  
Vijayawada

Guests of Honour

Dr. M. Ramesh, Principal,  
P. B. Siddhartha College of Arts and Science,  
Vijayawada

Sri. V. Babu Rao,  
Director,  
P. B. Siddhartha College of Arts and Science,  
Vijayawada

Prof. K. Krishna Murthy  
Vice Principal and HOD of Physics,  
P. B. Siddhartha College of Arts and Science,  
Vijayawada

### Registration Fee :

Faculty : Rs.250  
Students : Rs.100

### Accommodation:

Will be provided in the local hotels with tariff rates ranging from Rs.1400/- to Rs.5000/-

### Theme of the Seminar :

Space physics is the study of the natural phenomenon that occurs in our solar system. Specifically, the sun, the particles and radiation it creates and how these affect the planets. This includes the solar wind and its interaction with the Earth and near-Earth space; so-called space weather.

It is also the study of **plasmas** as they occur naturally in the Earth's **upper atmosphere**. As such, it encompasses a far-ranging number of topics, such as **heliophysics** which includes the **solarphysics** of the **sun**: the **solarwind**, **planetary magnetospheres** and **ionospheres**, **auroras**, **cosmic rays**, and **synchrotron radiation**. Space physics is a fundamental part of the study of **space weather** and has important implications not only to understanding the universe, but also to practical everyday life, including the operation of **communications** and **weather satellites**. Space physics is distinct from other fields of **astrophysics** which study similar phenomena, in that space physics utilizes **insitu** measurements from high altitude rockets and spacecraft. Many areas of science and technology have made advances due to technological breakthroughs resulting from the manned exploration of space. Space research is truly inter-disciplinary and has enabled true innovations at the intersection of multiple areas of science and engineering. It has been consistently aiming at the “impossible” and the “incredible,” every time moving the frontiers of our knowledge forward. Space research has had as its major focus on making things work and bringing the dreams of mankind to fruition through technologies that mankind can be proud of. It is almost a “Green Technology.” Its greatest asset is that in many cases what is perfected as a space technology becomes a technology that enhances the quality of human life on the Earth. Some examples are the revolution in communication, tele-presence, infotainment, and an integrated picture of earth and its resources. Besides direct contributions, the fruits of space research have also resulted in designing innovative products such as cardiac stent and heart pacemaker for healthcare.

The main aim of this seminar is to excite young people who may go on to pursue a career in science and technology and may be in the space physics also.

### Venue :

Seminar Hall  
P.B. Siddhartha College of Arts & Science,  
Siddhartha Nagar, Vijayawada-520 010,  
Andhra Pradesh, India.

## REGISTRATION FORM

Name :  
Designation :  
College / Institution :  
Address :  
(with contact number and e-mail ID)  
Participation / Presentation of the paper :  
Title of the paper :  
Accommodation required : YES / NO  
Registration Fee :  
D.D. Number and Date :  
Name of the Bank and Place :

Signature

### Posters :

Post-Graduate students are encouraged to send Abstracts of poster presentation to the e-mail of the “Organizing Secretary” before 20<sup>th</sup> September, 2016. Name of the author presenting the paper must be underlined.

**Abstract and full length research paper of the Faculty / Research Scholars / Scientists should reach the organizing secretary on or before 20<sup>th</sup> September, 2016**

**Prof: K. Krishna Murthy**

Organizing Secretary  
Head, Dept. of Physics (PG)  
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