

PROFILE OF THE DEPARTMENT

1. **Name of the Department** : Physics
2. **Year of establishment** : UG: 1981, PG: 2005, Research Center:2010
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

UG : MPC &MPS (EM &TM), M.P.Cs (EM)
PG : M.Sc Physics with Electronics Specialization
M.Phil. : 2011

4. **Interdisciplinary courses and departments involved**

Interdisciplinary Elective: Applications of Physics in daily life.

5. **Annual/ semester/choice based credit system – SEMESTER SYSTEM**

6. **Participation of the department in the courses offered by other departments:**

- Curriculum development, Instruction and Evaluation

7. **Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

	Sanctioned	Filled
Associate Professors	4	4
Asst. Professors	5	5

8. **Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
Dr.Y.Narasimha Murthy	M.Sc., Ph.D.,	Associate Professor	Electronics	28	02
Dr.Y.MuniKrishna Reddy	M.Sc., M.Phil., Ph.D.,	Associate Professor	Electronics	20	-
Dr. D.Sailaja	M.Sc., M.Phil., Ph.D.,	Associate Professor	Electronics	20	-

Dr.K.Chandrasekhara Reddy	M.Sc., Ph.D.,	Associate Professor	Molecular Bio Physics	20	-
Sri.K.P.Venkateswara Rao	M.Sc., M.Phil.,	Asst. Professor	C A I	13	-
M.Babafakruddin	M.Sc., M.Phil.,	Asst. Professor	General Physics	7	-
Sri M. Nagendra Vara Prasad	M.Sc., M.Phil.,	Asst. Professor	Electronics	6	-
Smt. A. Vedavathi	M.Sc., M.Phil.	Asst. Professor	Solid State Physics	6	
Miss. M. Jabina Begum	M.Sc.,	Asst. Professor	Electronics	1	-

9. Percentage of classes taken by temporary faculty – programme-wise information

	Regular-%	Temporary/Guest-%
B.Sc.,	95	05
M.Sc.,	70	30

10. Programme-wise Student Teacher Ratio:

Name of the Programme	Student – Teacher Ratio
B.Sc.,	35:1
M.Sc.,	20:1

11. Number of academic support staff (technical) and administrative staff: sanctioned and filled--(THREE)

Sanctioned : 3 Filled : 3

12. Number of faculty with on going projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise:

Principle Investigator/ Project type	Project Title/Year	Funding agency	Total Layout
Dr.Y.Narasimha Murthy Associate Professor of Physics Major Research Project	“Design and Development of Embedded based system for the Monitoring and Measurement of Environmental parameters”, February 2010 to February 2013	UGC	Rs.8,26,800

13. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.;total grants received:

Principle Investigator/ Project type	Project Title/Year	Funding agency	Total Layout Rs.
Dr.D. Sailaja Associate Prof .of Physics Major Research Project	“PC based Conductivity and Electroacoustic Measurements of some Surfactants in Non-Polar Liquids”, May 2009 to April 2012	UGC	8,71,800
Dr.Y. Munikrishna Reddy Associate Prof .of Physics Minor Research Project	“Study of Current –Voltage-Temperature (I-V-T) and Capacitance-Voltage-Temperature (C-V-T) Characteristics of Schottky Contacts on n-type In”, July 2010 to August 2012	UGC	80,000

14. Research facility / centre with

- SK University recognized Research centre (2011)

15. Publications:

Name of the Faculty	National Journals	International Journals
Dr.Y.Narasimha Murthy		25
Dr.Y.MuniKrishna Reddy	5	15
Dr. D.Sailaja	10	04
Dr.K.Chandrasekhara Reddy	06	04
M.Nagendravara Prasad	02	-
Smt.A.Vedavathi	02	03

- Impact Factor(Average-1.75)

16. Details of patents and income generated: NIL

17. Areas of consultancy and income generated: NIL

18. Faculty recharging strategies:

- Participating in Orientation Programmes, Refresher courses, Workshops, National & International Seminars/conferences and symposia conducted by various colleges, Academic staff colleges, Universities and Research institutions.
- Accompanying students in educational tours to research institutions like OTRI, JNTU, SKU and Radio station, TV station etc.

19. Student projects:

- percentage of students who have done in-house projects including inter-departmental : 15%
- percentage of students doing projects in collaboration with industries / institutes : Nil

20. Awards / recognitions received at the national and international level by

- **Faculty:** Dr.M. Narasimha Murthy –State Best Teacher –Govt.of A.P, in the year 2000

21. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

- National Seminar on “Emerging Materials and Technologies”, 09-10, Oct-2010.

The Invited Chief Guest and outstanding participants:

- * Prof A.Rama Chandra Reddy, V.C. Yogivemana University, Kadapa.
- * Prof.G.Mohan Rao, IISC, Bangalore.
- * Dr.I.Gurrappa, Scientist F, DMRL, HYD.
- * Dr.V.N.Mani, Scientist-F.CEMAT,Dept.Of Information Technology, HYD.
- * Prof.K.T.Ramakrishna Reddy,SVU, Tirupathi.

22. Student profile course-wise:

Name of the Course	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B.Sc.,	255	111	142	85	89
M.Sc.,	SVURPGCET	09	09	90	95

23. Diversity of students

Name of the Course	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
M.Sc Physics	20	70	10	-
M.Phil	33	67	-	-

24. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

- GATE-02
- Other Competitive Exam- 10

25. Student progression

Student progression	Percentage against enrolled
UG to PG	60
PG to M.Phil.	15
PG to Ph.D.	5
Ph.D. to Post-Doctoral	-
Employed	-
• Campus selection	
• Other than campus recruitment	
UG	25
PG	80
Entrepreneurs	-

26. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	35
from other universities within the State	65
from other universities from other States	-

27. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period: NIL

28. Present details about infrastructural facilities

- Library:** 215 books
- Internet facilities for staff and students:** Staff and Research Scholars.
- Total number of class rooms :** U.G- 7 & P.G-2
- Class rooms with ICT facility:** NIL
- Students' laboratories:** U.G-3 & P.G-3
- Research laboratories:** ONE

29. Number of students of the department getting financial assistance from College: 4(Four)

30. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology

31. Does the department obtain feedback from

- Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

Yes, as the institution is an autonomous one, the faculty of the department along with the outside experts frame their curriculum and evaluation methods in its Board of studies meeting. The same will be placed before the Academic

Council and the department will bring the changes in curriculum or evaluation methods if suggestions are given by Academic council.

b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

Yes, the department obtains feedback from the students on staff, curriculum and teaching-learning evaluation. The suggestions made by students are discussed in the departmental review and modifications are considered, if necessary.

c. Alumni and employers on the programmes and what is the response of the department to the same?

Yes, the department invites alumni to interact with the department and present students and suggestions are taken on curriculum, teaching methods and are used in strengthening the department.

32. List the distinguished alumni of the department (maximum 10)

- Dr.C. Kesava Rao-- Scientist, NMDC , Hyderabad.
- Sri. B. Raghunatha Rao-- Principal, APRJC Chittoor.
- Dr. K. Chandra Sekhar Reddy --Associate Prof. in Physics, S.S.B.N. Degree College.
- Raghunath Reddy-- Assisstant Prof., Dept.of Computer Science, S.K.U. A.T.P.
- B. Narasimha Reddy-- Lecturer in chemistry, Govt. Degree College, Srikalahasti.
- P.Venkata Rami Reddy –Associate Professor of Computer Science,JNTUH,Hyd.
- A.Suryanarayana, Jr.Lecturer, SAP College, Gorantla.
- Dr.A.Venkatesulu, Assistant Professor of Physics, Govt.First Grade College.Bangalore.P.Pavan Kumar,Manager, Andhra Bank
- M.Dhanunjaya,pass Port Office, Hyd.
- M.Parameswara Reddy,C.I. of Police, Kadapa.
- P.Venkata Ramana,Railway Department, ASM,Anantapur.
- A.Mallikarjuna Radiologist,basavatharakam Cancer Institute,Hyd.
- M.Baba Fakruddin, M.Nagendra Vara Prasad & Smt.A.Vedavathi, Dept.Staff.

33. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts

Special /Guest lectures

- Prof. R.Ramakrishna Reddy,S.K.U. Anantapur
- Prof.D.Buddudu,S.V.U. Tirupathi.
- Prof. P.Raghavendra Rao, S.K.U. Anantapur
- Prof.C.V. Krishna Reddy,R.U.Kurnool.
- Prof.O.Md.Hussain, S.V.U. Tirupathi
- Prof. N.Punyaseshudu, R.U.Kurnool.

34. List the teaching methods adopted by the faculty for different programmes:

Apart from the regular teaching method, demonstration method, charts, OHP, PPT are used.

35. How does the department ensure that programme objectives are constantly met and learning outcomes monitored? -----

- Learning out come is monitored by conducting slip tests, internal exams, seminars, quiz, and group discussions.
- Remedial coaching is given to the slow learners.

36. Highlight the participation of students and faculty in extension activities

Students of the department are actively participating in various extension activities like health camp, Blood donation camp, clean and green programme, campus beautification programme, traffic control assistance conducted by college and other N.G.O's.

Faculty: Resource persons for Junior Lecturers and High School teachers training programme.

- Dr.Y.Munikrishna Reddy is Convener of ECO – club, SSBN Degree College, ATP.
- Dr.D.Sailaja is Convener of Women empowerment cell, and member NSS advisory committee Degree College, ATP. Delivered 10 radio talks on popular science topics and other current issues.
- Dr. K.Chandrasekhara Reddy, is the secretary of S.S.B.N. College Students Consumer Cooperative Stores. Member in college sports committee and NSS advisory committee

37. Give details of “beyond syllabus scholarly activities” of the department.

- Two day WORKSHOP on Recent Trends in a Novel Materials
- Guest Lectures by the faculty in other colleges
- Seminar on “Bio Sensors- Applications.
- Applications of Micro Controllers.

38. State whether the programme/ department is accredited/ graded by other agencies. Give details: NIL.

39. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department :

Strengths:

- Four experienced staff members with Ph.D.
- Five young and energetic staff members.
- Conducting guest lectures with professors of University.
- The department has well established laboratories with sufficient Infrastructural facilities.
- United efforts of the staff.

Weaknesses

- Absence of replacements of grant-in-aid teachers on their retirement
- Low comprehensive skills of learners

Opportunities

- Establishment of another physics lab.
- Conduct of National/International conference.
- Implementation of Lab to Land linkage.
- Add on courses to strengthen the student employability
- Student's involvement in basic science research programs

Challenges

- Time management to complete syllabi and practicals due to Bandhs, strikes and unwanted interruptions.
- Overcrowded class rooms.
- Enforcing strict discipline and cent percent attendance.
- Encourage students to prepare for competitive exams, PG Entrance, NET/SET, GATE etc..

40. Future plans of the department:

- Improvement of the Research Centre.
- The department is planning to conduct a two day conference on "Recent Trends in Modern Materials" and other seminars and workshops.
- To introduce Material science specialization in M.Sc. Physics course.
- To establish another lab for P.G.
- To equip the labs with modern facility.
- Planning to collaborate with industries/institutions.
- Starting certificate course in Mobile Mechanism, T.V. Mechanism.