



Department of Physics



20-12-2023

Agenda



01

Department Profile

02

Staff Profile

03

Infrastructure

04

Teaching and Learning
Process

05

Academic Excellence

06

Student Centric Methods

07

Faculty Development
Program

08

Hands on Training

09

Student Achievements

10

Sports Activities

11

Prominent Alumni

12

Funded Projects

Agenda



13

Outreach Activity

14

Research

15

Best Practices

16

Swoc Analysis

17

Future Plan

1. Department Profile



Year of Establishment

- Physics as Ancillary subject in the year- 1984
- B.Sc Physics Programme - 1987
- M.Sc Physics Programme - 2003



2. Staff Profile



Dr. S. Santhakumari

Asst. Prof. & Head

Int. Journal - 3
Chapter - 5
BOS-BDU - 2021-24
Received TNSCST Student Fund



Ms. G. Bhuvaneshwari

Asst. Professor

Book - 1
Received TNSCST Student Fund
Staff Recruitment committee, SJC



Dr. S. Vidhya

Asst. Professor

Editorial member & Reviewer
Int. Journal - 3
Chapter - 8
Received TNSCST Fund



Dr. K. Sujatha

Asst. Professor

Int. Journal - 2
Chapter - 5
Received TNSCST Fund

2. Staff Profile



Dr. N. Sharmila
Assistant Professor

Int. Journal - 3
Chapter - 1

Received TNSCST Student Fund



Ms. N. Uma Maheswari
Assistant Professor

FDP - 2
International Conference -2



Ms. P. Sudha
Assistant Professor

FDP - 2
International Conference -2



Ms. V. Vijaya
Assistant Professor

Best NSS Officer Award from BDU
Best Sadhanaiyalar Award for NSS

2. Staff Profile



Dr. A. Anitha Ezhil Mangaiyarkarasi
Assistant Professor

Int Journal - 9
Chapter - 2
Best Paper Award



Ms. V. Sasikala
Assistant Professor

International Conference -7



Ms. M. Premalatha
Assistant Professor

International Conference -7



Ms. R. Nagalakshmi
Assistant Professor

International Conference -8

2. Staff Profile



Ms. J. Krishnaveni
Assistant Professor

FDP - 5



Dr. A. Angelin Prema
Assistant t. Professor

Int. Journal - 3
Chapter - 1



Ms. C. Mahalakshmi
Assistant Professor

FDP - 3



Ms. D. Meenakshi
Assistant Professor

Int. Journal - 1
Chapter - 3

3. Infrastructure

Classrooms



ICT Panel Classrooms



3. Infrastructure

Laboratory



Dark Room &
Computer Lab

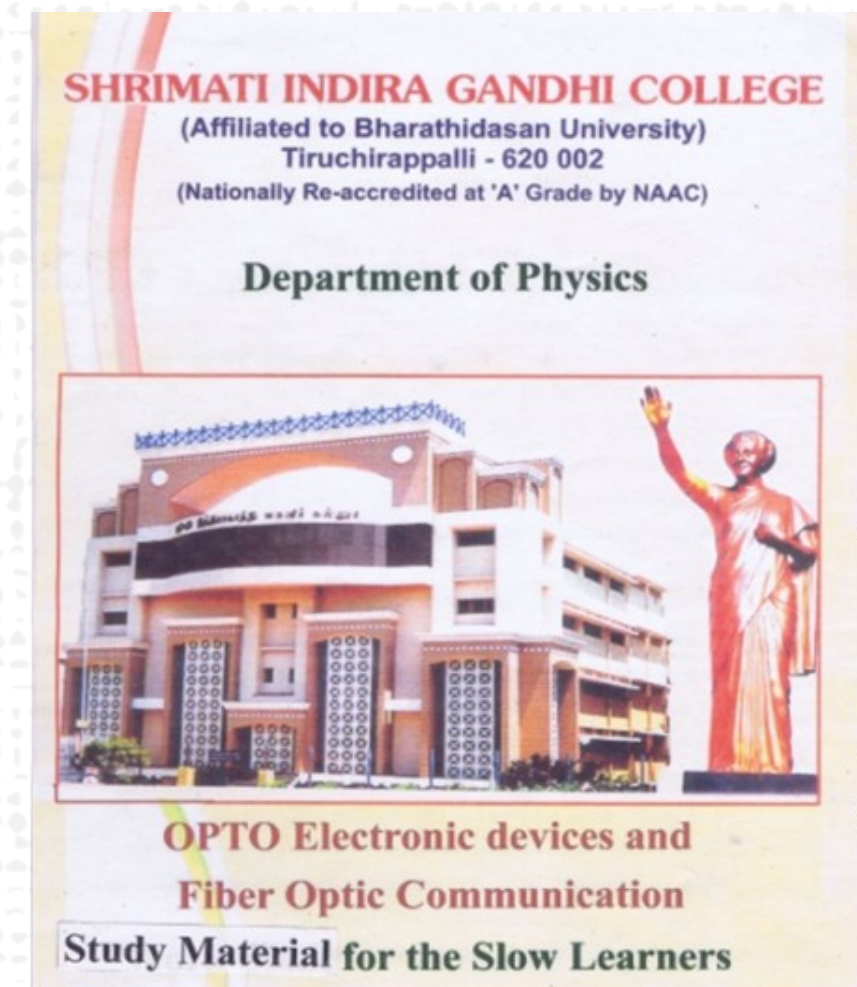
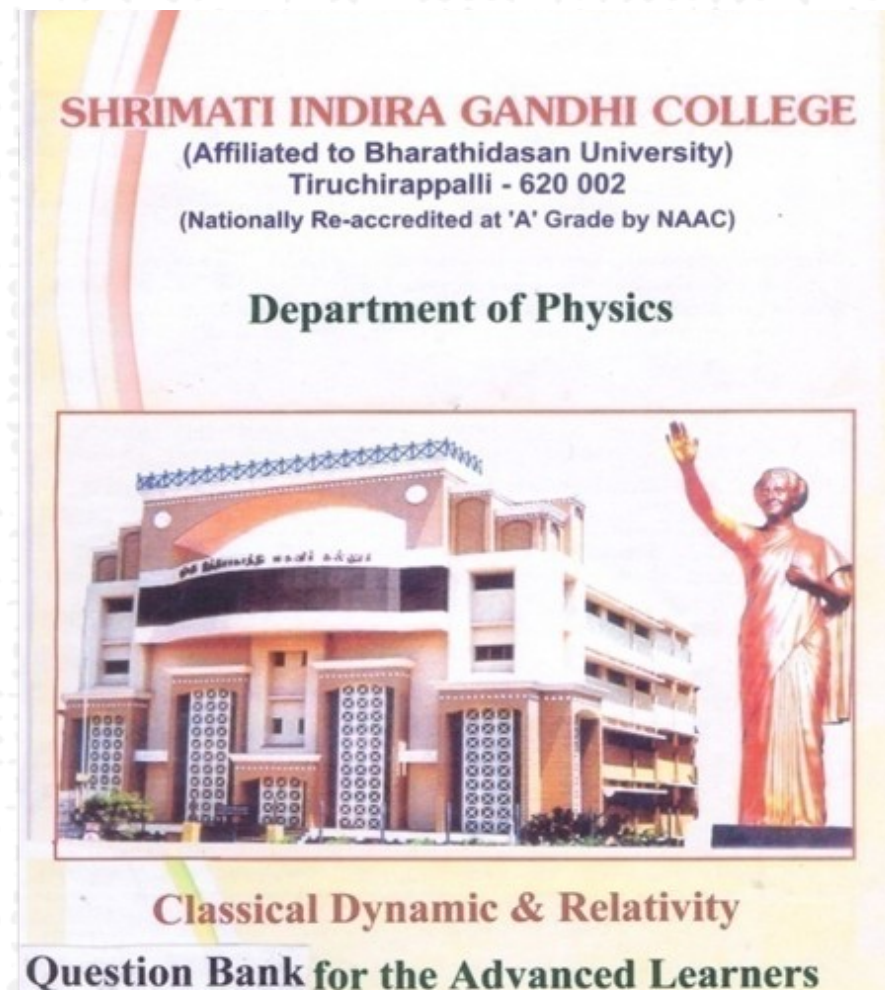
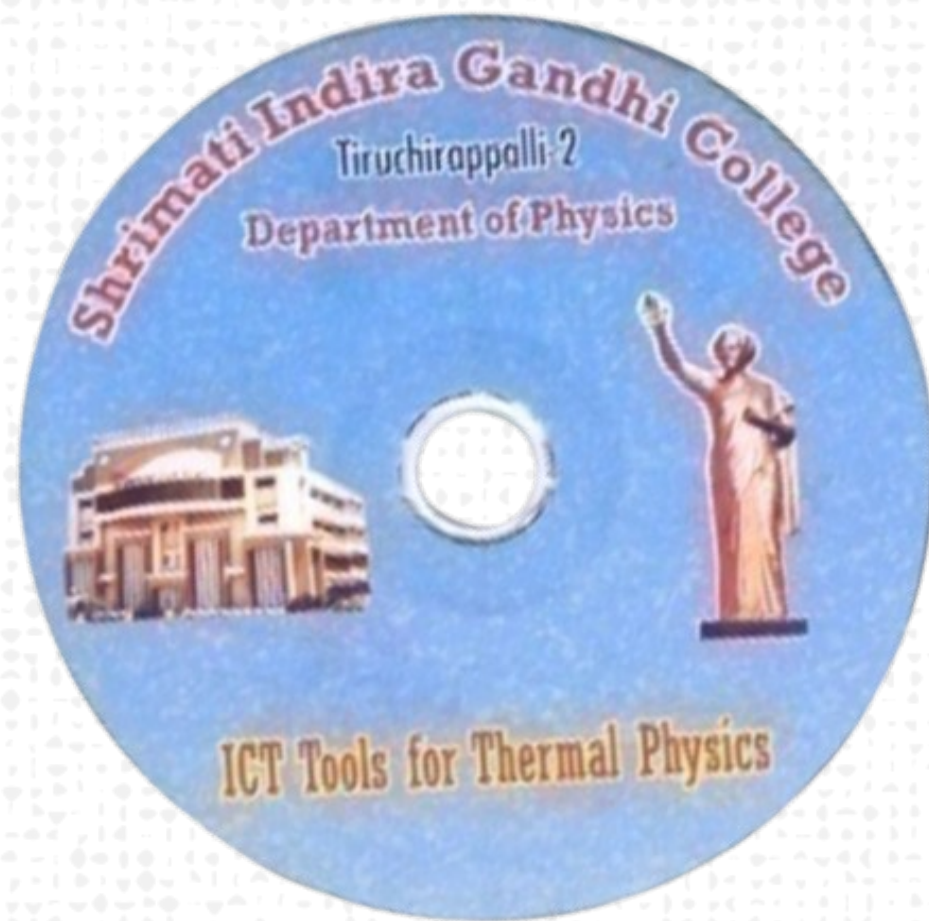


4. Teaching and Learning Process

- Chalk and Talk Method
- Remedial Coaching
- ICT Materials
- Static and Dynamic Models
- Charts for Scientific Data collection
- Study Material for slow learners
- University pattern Question bank for Advanced Learners
- Student Seminar and group discussion
- Quiz program
- Guest Lectures for updated topics in emerging field
- Handling of Classes through Google Meet and class room App

4. Teaching and Learning Process

Study Materials for B.Sc and M.Sc Program



5. Academic Excellence

Results and Achievements



UNIVERSITY RANK HOLDERS(2020-2022)

			
Akilandaswari K III	Mahalakshmi M III	Leelavathi J V	Kiruthiga S VIII
			
Shanmugapriya B IX	Aswini R XI	Ramya M XI	Janani B XIV
			
Lekha B V XIII		Pandiselvi M XIII	

Average percentage of results for the **past 5 years** - B.Sc Physics - 100 %
M.Sc Physics - 85 %

6. Participative Learning



Alumni Seminar



Quiz Program



Student Seminar



Group Discussion

6. Participative Learning



Hardware Demo



Light Experiments Demo



Electronics Demo



Spectrum lab Demo



6. Experiential Learning



Salem Steel & Alloy Plant



Solar Observatory Kodaikkanal



Dr. APJ Memorial Centre Rameswaram



BHEL, Bangalore



BSNL, Trichy



Anna Science Centre, Trichy

6. Knowledge Enrichment



Science Exhibition on the topic
“ Integrated Approach in Science and Technology for a sustainable future”

6. Curriculum Enrichment



Presented by
Dr. S. S. Sathesh Kumar
Scientist, Directorate of Advanced Materials & Manufacturing Processes
Defence Metallurgical Research Laboratory (DMRL)
DRDO, Ministry of Defence

Sathesh Kumar is presenting

Defence Bio-Engineering & Electro Medical Laboratory

- Established in 1982 at Bengaluru
- Carry out Research and Development
 - Protective Equipment & Clothing
 - Life Saving devices
 - Underwater Life Support systems
 - Biomedical Technology
 - CBRN Protection (Chemical, Biological, Radiological & Nuclear)

Coolest Free Fall (C-37) suit

CBRN protection

Presented by
Shri.T.K Sundaramurthy
Mission Director(Retd.ISRO)

T.K.Sundara Murthy is presenting

Mars Orbiter Mission

Dr. S. Sundaramurthy is presenting

Anatomy of a Hydrogen Bond

A...H...D

Dr. S. Sundaramurthy is presenting

Base stacking interactions in DNA double helical structure

Participants: Recordings SIGC, Mukes, Dhanapal M, DR.SU, DR.VIDHYA S, DR.VIC, MEENAKSHI.H SIGC, MS.KA

Gaining knowledge through online Webinars

6. Curriculum Enrichment



Conference and Seminars

7. Faculty Development Program



Maintenance and Servicing of Modern Gadgets - House Hold Appliances



Simulation software - Lab View

8. Hands on Training



Mobile Servicing, PCB Designing and IoT Demonstration

9. Student Achievements



DEPARTMENT OF PHYSICS
ST. JOSEPH'S COLLEGE (AUTONOMOUS)
 Special Heritage Status awarded by UGC Accredited at A++ Grade (4th Cycle) by NAAC
 College with Potential for Excellence by UGC DBT-STAR & DST-FIST Sponsored College
TIRUCHIRAPPALLI - 620 002, TAMILNADU, INDIA.

To: Mrs. B. Janani Date: 20-10-2022
 No.122, Kurunji Nagar, Melathiruvillapatti,
 Pudukudi, Thanjavur-613402

Dear Mrs. B. Janani,

Ref: CRS/2021-2022/02/484. Dt. 30-03-2022
 Sub: UGC-DAE CSR Project-Appointment of "Project Fellow"- orders issued-reg.

Based on your performance in the interview conducted on 13-10-2022, The Panel has recommended your selection for the post of the Project Fellow under the CRS project referred above. You will serve under the supervision of Dr. A. Srinthya, Assistant Professor, Department of Physics & Principal Investigator of the Collaborative Research Scheme (CRS) of the UGC-DAE CSR project entitled "Effect of ion fluency in Alkali Hydrogen Phthalate thin film, with histidine and lactic acid impurities, to enhance Second harmonic generation (SHG)" with a fellowship of ₹ 14,000/- per month + HRA 18% subject to the following conditions as per the University/ College norms:

1. The appointment is initially for a period of one year and will be extended further for two or more years or up to the tenure of the project only if the performance of the appointee is found satisfactory.
2. He / She shall work under the supervision of the Principal Investigator of the Project.
3. The appointment will take effect from the date on which the candidate reports the work to the Principal Investigator of the project.
4. The candidate shall not accept or hold any appointment paid or otherwise or receive any emoluments, salary, stipend etc. from any other source during the tenure of appointment. Those who are already in receipt of any payment from any other source will not be entitled to the appointment unless they are relinquished in favour of the post of "Project Fellow" as aforesaid.
5. If it appears at any time to the University / College that the progress of work or conduct of the candidate has been unsatisfactory, the appointment may be suspended or withdrawn.
6. If the appointment is acceptable under the conditions stipulated, the candidate may report to Dr. A. Srinthya, Assistant Professor, Department of Physics, St. Joseph's College (Autonomous), Tiruchirappalli 620002 as aforesaid. He / She is requested to communicate his/her acceptance

Phone : 0431 - 4226438, 4226386, Fax : 0431 - 2701501 Website : www.sjcm.edu



Inter-Departmental Sports and Games
Individual Championship
 UG - V. Nagavarshini from Commerce with 20 points
 PG - R.K. Shobiha from Physics with 19 points
Overall Championship

SHRI MATHA COLLEGE
 1001 - 2015 Certified Institution



10. Sports Activities



▶ திருச்சி ஸ்ரீமதி இந்திரா காந்தி கல்லூரியில் நேற்று முன்தினம் நடைபெற்ற விளையாட்டு விழாவில் வெற்றி பெற்ற மாணவிகளுக்கு பரிசு வழங்குகிறார் இந்திய ஸ்குவாஷ் வீராங்கனை தீபிகா பல்லிகல் கார்த்திக். உடன், கல்லூரி தலைமை செயல் அலுவலர் கு.சந்திரசேகரன், தலைவர் தோட்டா ராமானுஜம் உள்ளிட்டோர்.

இந்திரா காந்தி கல்லூரியில் விளையாட்டு விழா கொண்டாட்டம்

திருச்சி: திருச்சி ஸ்ரீமதி இந்திரா காந்தி கல்லூரி விளையாட்டு விழா நேற்று முன்தினம் கொண்டாடப்பட்டது. விழாவுக்கு கல்லூரிச் செயலாளர் கே.மீனா தலைமை வகித்தார். இயக்குநர் அபர்ணா முன்னிலை வகித்தார். உடற்கல்வி இயக்குநர் எஸ்.மகேஸ்வரி விளையாட்டு அறிக்கை வாசித்தார்.

தலைமை செயல் அலுவலர் கு.சந்திரசேகரன் பேசுகையில், "இந்த கல்லூரியில் பயின்ற விளையாட்டு வீராங்கனைகள் பலரும் ராணுவம், காவல்துறை மற்றும் அரசுத்துறைகளில் பணியாற்றி வருகின்றனர். 2020-ம் ஆண்டு நடத்தப்பட்ட ஓர் ஆய்வின்படி இந்திய பெண்களில் 30 சதவீதத்தினர் மட்டுமே விளையாட்டுத் துறையில் பங்காற்றி வருகின்றனர். இந்த நிலை மாறி, பெண்கள் அதிக அளவில் இத்துறையில் பங்கெடுக்க வேண்டும்" என்றார்.

சிறப்பு விருந்தினராக இந்திய ஸ்குவாஷ் வீராங்கனை தீபிகா பல்லிகல் கார்த்திக் பங்கேற்று, கொடியை ஏற்றி வைத்து விளையாட்டு விழாவைத் தொடங்கி வைத்துப் பேசுகையில், "முதலில் நம் மீது நமக்கு நம்பிக்கை வேண்டும். முயற்சி செய்து கனவுகளை அடைய வேண்டும். போட்டிகளில் ஈடுபடும் பெண்கள் உடலையும், மனதையும் பக்குவமாக கவனித்துக் கொள்ள வேண்டும்" என்றார்.

இளநிலை இயற்பியல்துறை மாணவிகள் 102 புள்ளிகள் பெற்று ஒட்டுமொத்த சாம்பியன் பட்டத்தை பெற்றனர். போட்டிகளில் வெற்றி பெற்ற மாணவிகளுக்கு தீபிகா பல்லிகல் கார்த்திக் பரிசுகளை வழங்கினார். முன்னதாக கல்லூரி முதல்வர் வித்யாலட்சுமி வரவேற்றார். முடிவில், துணை முதல்வர் மு.ரெமா நன்றி கூறினார்.



11. Prominent Alumni



A. Brindha

Design Quality Guarantee Manager
Michelin Tire pvt ltd, Canada



K. Akshahya

Vice Principal,
Narayana Group of Schools, Chennai



Sreeba Sasidhar

Data Analyst, TCS
Kerala



S. Rajeswari

Rural Development Dept.,
Collectorate, Trichy.



Sangeetha Gopniathan

Quality Assurance Analyst
Wood Bridge, New Jersey, US



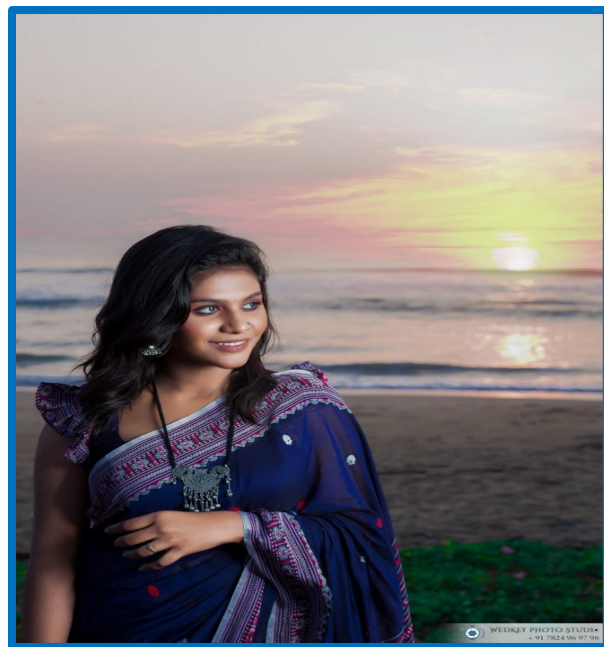
S. Sowmiya

Software Associate,
Capgemini services Tech., Chennai

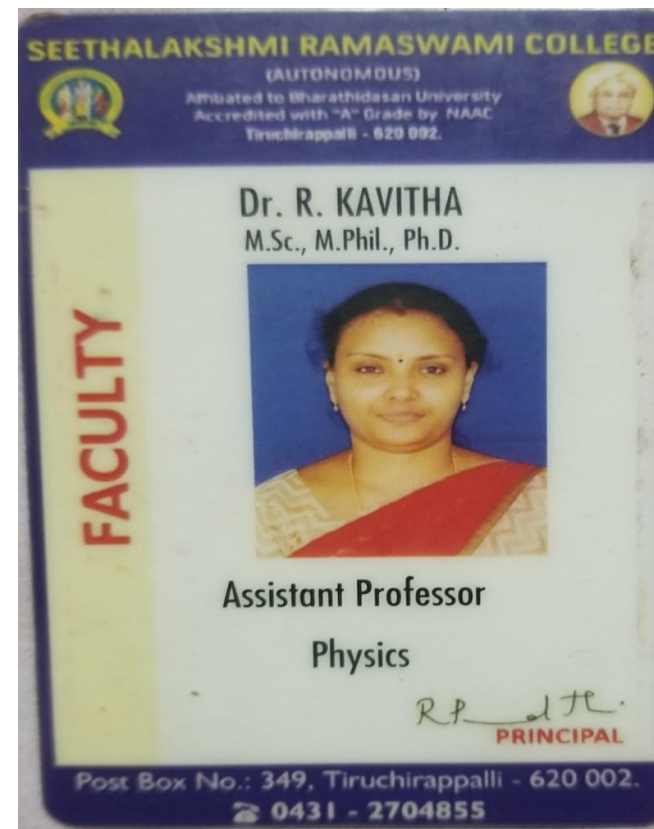
11. Prominent Alumni



**T. Vandhana, M.Sc. Physics
BATCH(2014-2016)**



S. Devadharshini
YOU TUBER, Video Jackie
Chennai



B.Sc. Physics BATCH (1996-1999)



R. Sudha
Akamai Tech. ,
Chennai



Dr. A.VASUHI ,B.Sc Physics BATCH (1996-1999)
Associate Professor Department of Physics
H.H. THE RAJAH'S COLLEGE (Autonomous)
Pudukkottai- 622 001



Uma Maheswari Narasimhan
Technical Project Manager
Scrum Master, Scarborough Ontario,

12. Funded Projects



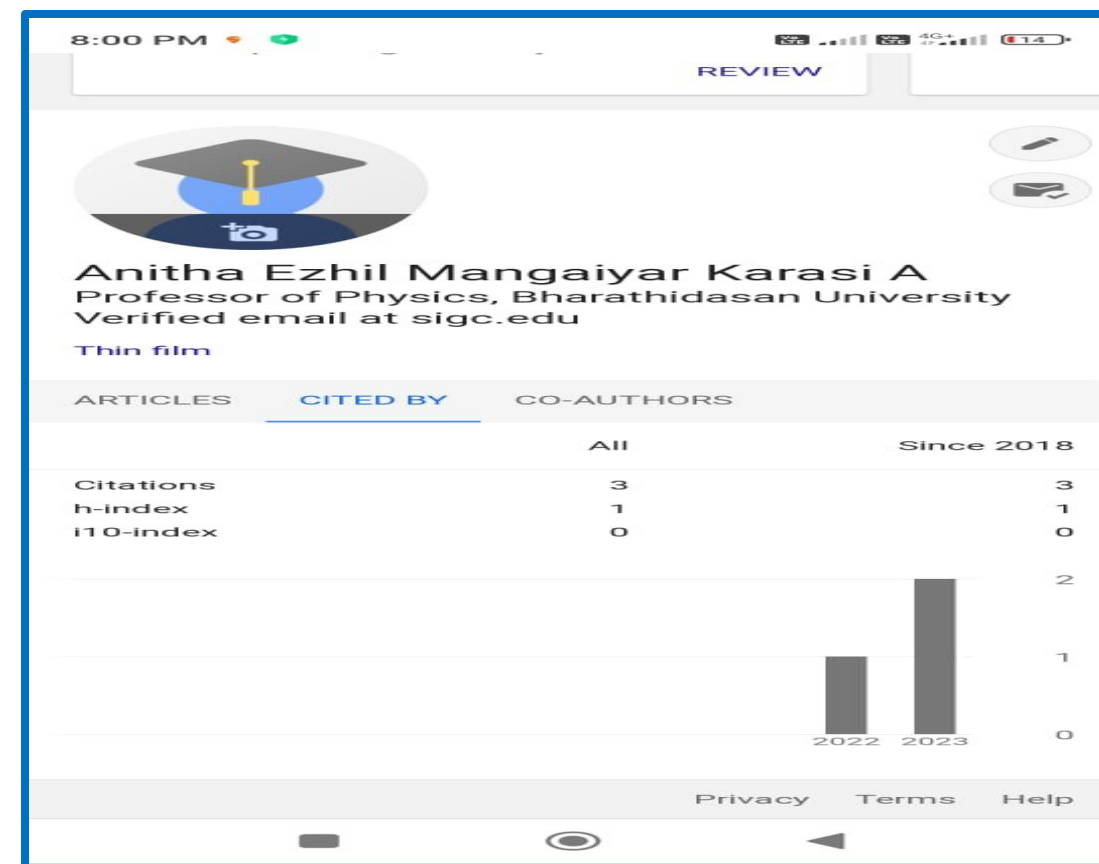
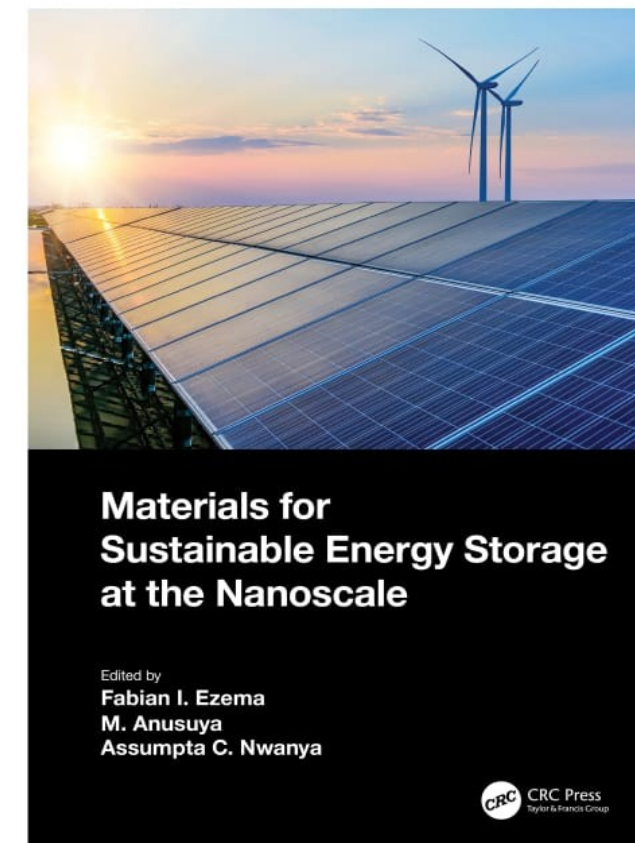
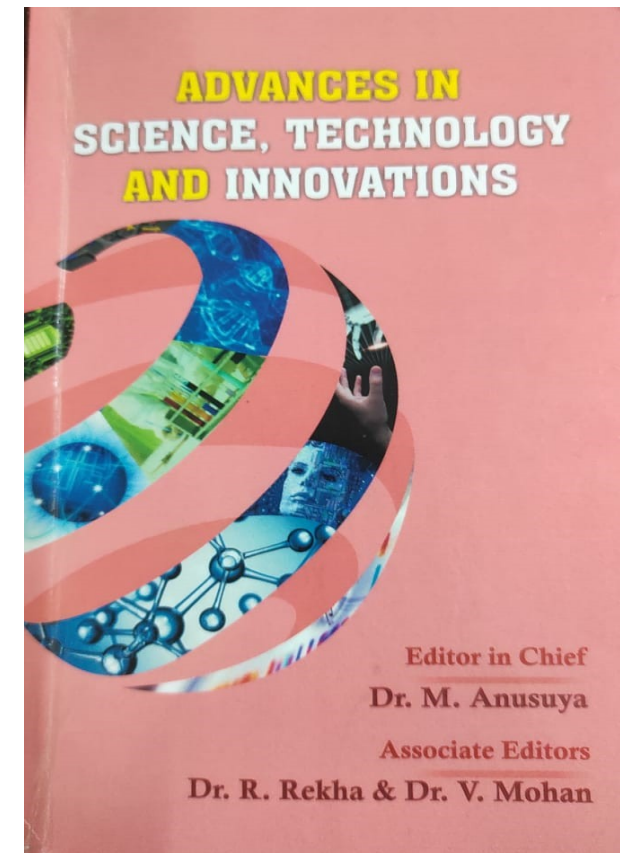
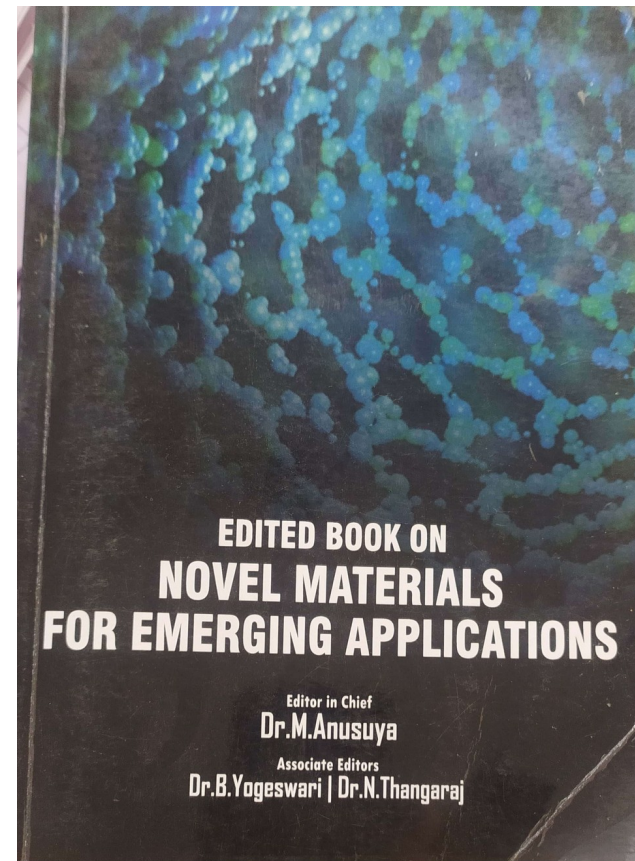
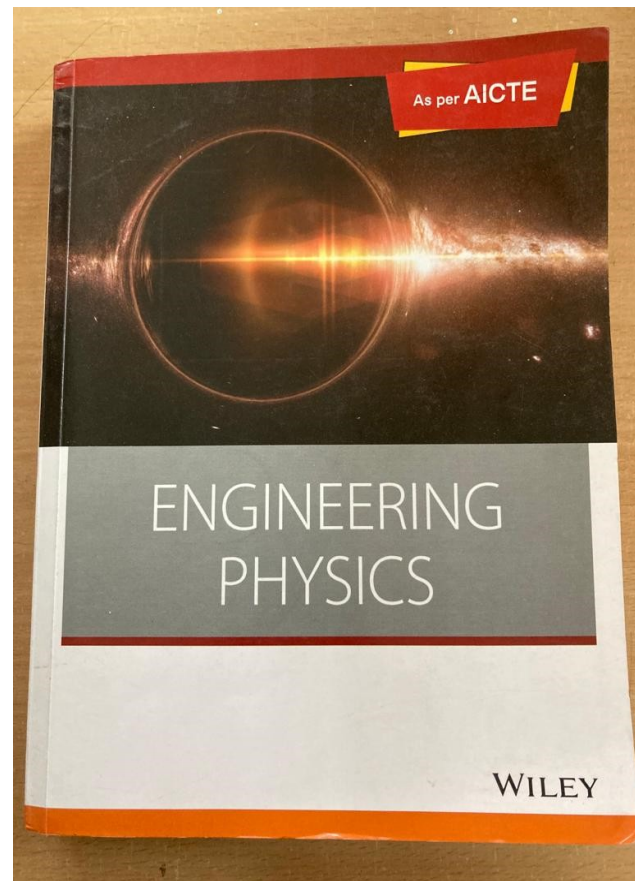
**Tamil Nadu State Council for Science and Technology
&
State Level Student Projects Seminar Cum Exhibition**

13. Outreach Activity




L.N.P. Girls Higher Secondary School, Lalgudi


14. Research Publications



Research Publications

Google Scholar



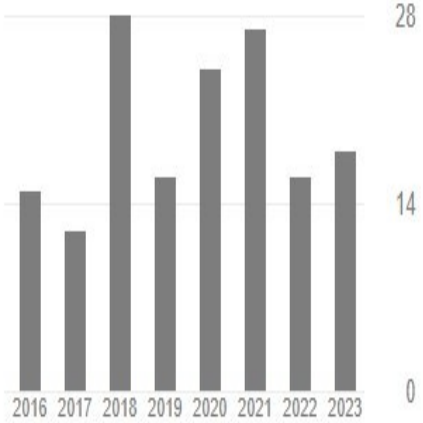
Dr.A Angelin Prema  [FOLLOW](#)

Asst. Professor, Shrimati Indira Gandhi College
Verified email at sigc.edu
thin film

TITLE	CITED BY	YEAR
<input type="checkbox"/> Influence of <i>Murraya koenigii</i> (curry leaves) extract on the corrosion inhibition of carbon steel in HCL solution A Sharmila, AA Prema, PA Sahayaraj Rasayan Journal of Chemistry 3 (1), 74-81	89	2010
<input type="checkbox"/> Phytochemical screening by FTIR spectroscopic analysis of leaf and stem extracts of <i>Wedelia biflora</i> PA Sahayaraj, J Gowri, V Dharmalingam, R Shobana, AA Prema Int J Nano Corr Sci and Engg 2 (5), 322-334	41	2015
<input type="checkbox"/> Antioxidant stability in palm and rice bran oil using simple parameters S Valantina, PA Sahayaraj, AA Prema Rasayan J Chem 3 (1), 44-50	29	2010
<input type="checkbox"/> The properties of chemical bath deposited cadmium sulfide thin films with the effect of ammonia salt concentration RJ Xavier, AA Prema, PA Sahayaraj, C Pragathiswaran, V Dharmalingam Advances in Applied Science Research 7 (2), 178-182	13	2016
<input type="checkbox"/> Poly (acrylic acid) and potassium sodium tartrate as effective corrosion inhibitors for mild steel in aqueous environment V Dharmalingam, PA Sahayaraj, AJ Amalraj, AA Prema Journal of Advanced Electrochemistry, 37-41	9	2016
<input type="checkbox"/> Fabrication and anti-cancer activity of natural ingredient/extract loaded polycaprolactone	8	2016


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Citations	204	129
h-index	6	6
i10-index	4	4



Co-authors [EDIT](#)

No co-authors

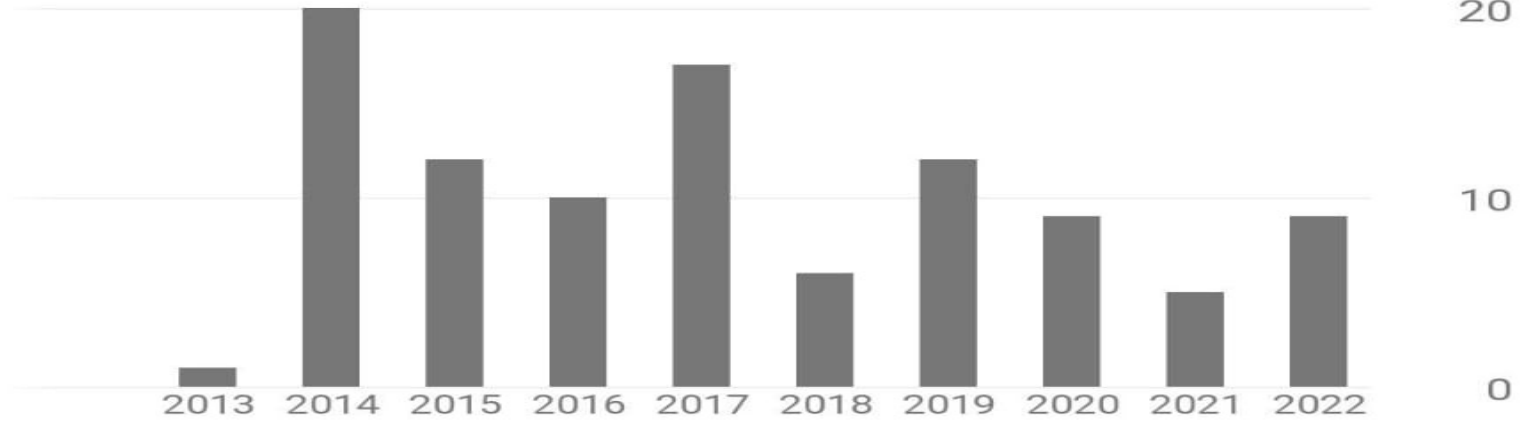


D.Meenakshi
ASSISTANT PROFESSOR, SHRIMATI INDIRA GANDHI COLLEGE
, TRICHY
Verified email at sigc.edu

Network security Nano electronics

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Citations	101	41
h-index	6	4
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15. Best Practices

- * To Provides the Problem solving Skills and creativity.**
- *To Enhance Their knowledge and grasps in various carrier Opportunities.**
- * To develop the experimental observations and empirical evidence grounding the field in real world phenomena.**
- * To provides the suces in various academic and Industrial applications.**
- * To encourage interdisciplinary collaboration and Research.**

16.SWOC ANALYSIS

STRENGTH

- *Qualified and highly experienced faculty.
- *Good diversity in faculty research fields.
- *Equal emphasis both on theory and practical.
- *Producing good results every year.

OPPORTUNITIES

- *Create awareness among students to prepare for government exams.
- *Scope for interaction with industries and research center for projects.

WEAKNESS

- *Need to develop fullfledged research.
- *More project proposals are to be submitted for grants.
- *To link the curricular and teaching learning process with need of industries.

CHALLENGES

- *To maintain the academic standards in spite of the weaknesses mentioned.
- *To increase scientific temper among students
- *Motivating students to do projects and experiments

17. Future Plan



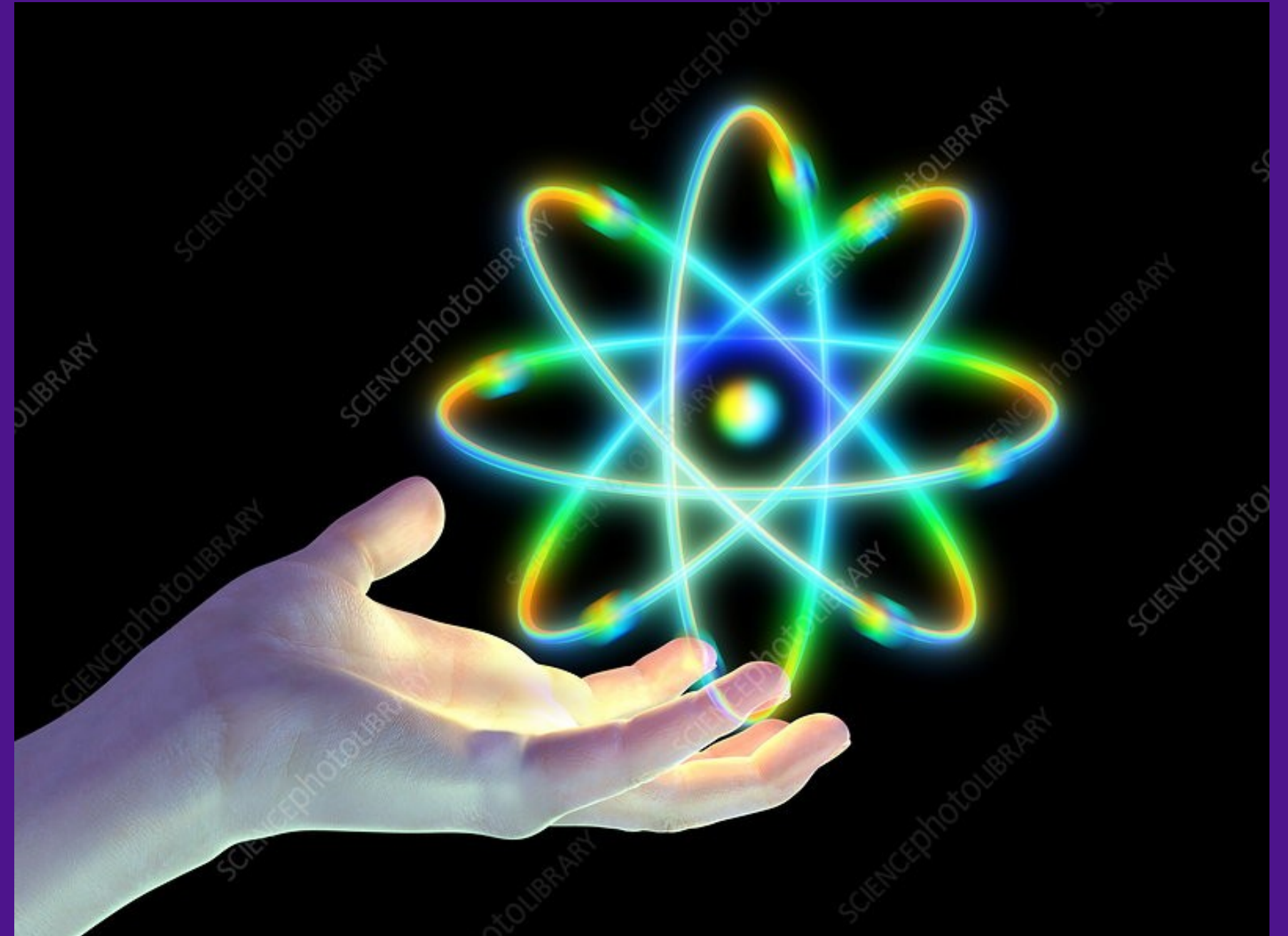
Research Department



MoU



Thank you All



20-12-2023