



BYA

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Website: <https://spnrecararia.ac.in/>

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Editor: Dr. Ritesh Kumar, Assistant Professor



SPNREC CHRONICLES

Quarterly Newsletter of Shri Phanishwar Nath Renu Engineering College, Araria

STUDENT MEMBERS

- Niraj Kumar
(B. Tech ECE)
- S M Saurabh Raj
(B. Tech ECE)
- Suraj Kumar
(B. Tech ECE)
- Tanu Kumari
(B. Tech ECE)
- Kumkum Kumari (B.
Tech ECE)
- Soumya
(B. Tech ECE)
- Vicky Kumar Raj
(B. Tech ECE)

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From Principal's Desk



Dr. Atma Ram Gupta
Principal
SPNREC, Araria

We welcome you to Shri Phanishwar Nath Renu Engineering College Araria. The aim of this college is to develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions by providing qualitative technical education and exploring latent talent of students. Our students will be the emerging leaders who will help shape tomorrow's world, employing game changing skills with a strong integrity and societal values leading to an all-round winner. SFNREC, Araria student will contribute to India and the World through excellence in scientific and technical education and research; to serve as a valuable resource for industry and society; and remain a source of pride for all Indians.

"An Equation means nothing to me unless it expresses a thought of God."

Sri Nivasa Ramanujan



Institute Level Activities/Achievements

Tree Plantation



In Campus, Tree Plantation was Celebrated by Students and Faculty Members of SPNREC ARARIA on the Occasion of Teacher's Day.

Love, like a tree, grows on its own and establishes deep roots throughout our entire existence.

Institute Level Activities/Achievements

Teacher's Day Celebration



“It’s good to have good teachers, but you always need a pretty good student.”

Selfie with Tiranga



Love for the Nation is the First Love of Every Indians.



Institute Level Activities/Achievements

Fresher's Party Celebration



Fresher's Party 2k21, Organized By. 2k20 Batch

Institute Level Activities/Achievements

Mathematics Day Celebration

Shri Phanishwar Nath Renu Engineering College, Araria
(Department of Science & Technology, Govt. of Bihar)

Prize Distribution Ceremony
For toppers of Sri Nivasa Ramanujan Talent Search Test in Mathematics
On
National Mathematics Day-2022
(Date: 22-12-2022)

Shri Phanishwar Nath Renu Engineering College, Araria
Time: 02:00 pm onwards
An invited lecture by:
Prof. S N Suman
Department of Mathematics
Purnia University, Purnia

Coordinators
Prof. Abhay Kumar Singh
Prof. Md Nadir

Patron
Dr. Atma Ram Gupta
Principal
SPNREC, Araria

Organizing Committee Members: Prof. Mithilesh Kumar, Prof. Raushan Kumar, Prof. Arjun Kumar, Prof. Shambhu Nath Sharma, Prof. Gautam Prakash, Prof. Shahrukh Jan, Prof. Md Arman, Prof. Rajan Kumar

श्रीनिवास रामानुजन
22-12-1887 to 26-04-1920
"An Equation for me has no meaning, unless it expresses a thought of God"
-Sri Nivasa Ramanujan



रेणु इंजीनियरिंग कालेज में छात्र हुए सम्मानित



कार्यक्रम में शामिल शिक्षक एवं छात्र ● जगन्नाथ

Dainik Jagran 23.12.2022

सं. सु. रेणुगुप्त (अररिया): परीक्षार्थी प्रखंड के विमर्श विस्तार परियोजना के अंतर्गत आररिया में सुनार के बहन गणित और भौतिक विज्ञान के क्षेत्र में छात्रों को प्रोत्साहित करने के लिए एक कार्यक्रम का आयोजन किया गया। कार्यक्रम के दौरान प्राचार्य ने गणित विषय की उपयोगिता एवं इसके पढ़ने के फायदे के बारे में विद्यार्थियों से छात्रों के बीच चर्चा की। वहीं संस्कार के विद्युत विभाग के विभागाध्यक्ष प्रो. अर्जुन कुमार ने श्री रामानुजन के गणित के सिद्धांत पर चर्चा करते हुए अभिनंदन किया।

छेत्र में गणित की उपयोगिता पर प्रकाश डाला। ऐतिहासिक व्यक्तित्व अररिया के प्राचार्य प्रो. अर्जुन कुमार के द्वारा छात्रों के बीच प्रेरणा का वितरण किया गया। कार्यक्रम को सफल बनाने में संयोजक प्रो. अर्जुन कुमार, सह संयोजक प्रो. गणेश कुमार और अन्य प्रमुख शिक्षक प्रो. अर्जुन कुमार, प्रो. रमेश कुमार, प्रो. विमर्श कुमार सहित सभी विभाग के विभागाध्यक्ष, शिक्षक, कर्मचारी, कालेज के छात्र और मौजूद थे।



Mathematics Day and Prize ceremony was conducted at SPNREC ARARIA

Seminar/Workshop

Experts Talk

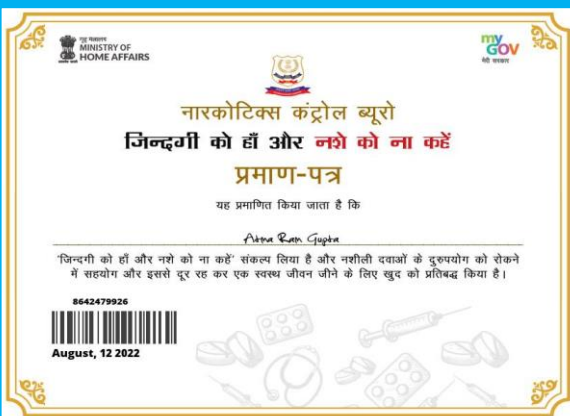


Expert talk was conducted by the industry experts at SPNREC ARARIA



Awareness Program

Student and faculty awareness program.



Nasha mukti as per AICTE

The concept of nasha mukti has gained significant attention in recent years, as more and more people are recognizing the destructive effects of substance abuse and seeking help to overcome their addiction.



Skill development programme

Skill development programs are an essential tool for promoting economic growth and social development. They provide individuals with the means to improve their lives, enhance their communities, and contribute to a more prosperous and equitable society.



Formation of discipline committee

The formation of a discipline committee is an important step towards maintaining order and promoting a positive and productive environment within an organization or community.

Awareness Program

Power Energy Ujjwal Bharat



“It is time for sustainable energy policy which puts consumer, the environment, human health, and peace first.”



We Can Serve Our Nation By Saving Energy

Institute Level Facilities

Biometric installation



To monitor regular and in time presence of students and staffs, institute started biometric attendance. This helps to improve the education system, sincerity, and punctuality towards our duties.

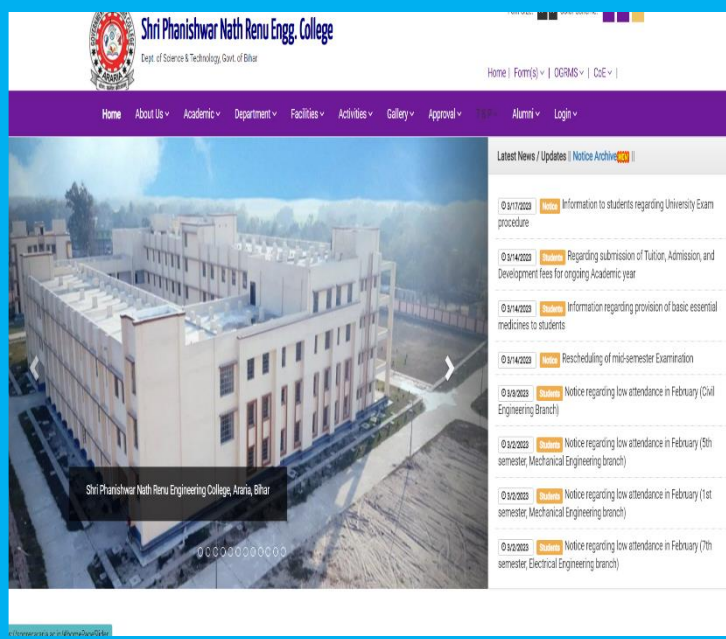
Security System



To build secure and safe environment inside campus, all institute's members are facilitated by strong security system. A good network of security is equality distributed to main gate, girls' hostel, boys hostel, academic building, faculty quarter, non-teaching staff quarter, workshop, and other various places.

Institute Level Facilities

Institute website and in campus medical facility



Official website of the institute

Launch of Institute official website in August 2022

URL link:

<https://spnrecararia.ac.in>

Medical facility in institute



Medical facility available inside institute premise for students, faculty members, staffs and their family members.

Institute Level Facilities

11 KV INSTITUTE POWER SUBSTATION FOR ELECTRICITY



Establishment of 11 KV power substation inside campus for proper electricity.

Ministry of Power In Association With NTPC Kahalgaon



This Institute is associated With NTPC **KAHALGAON**

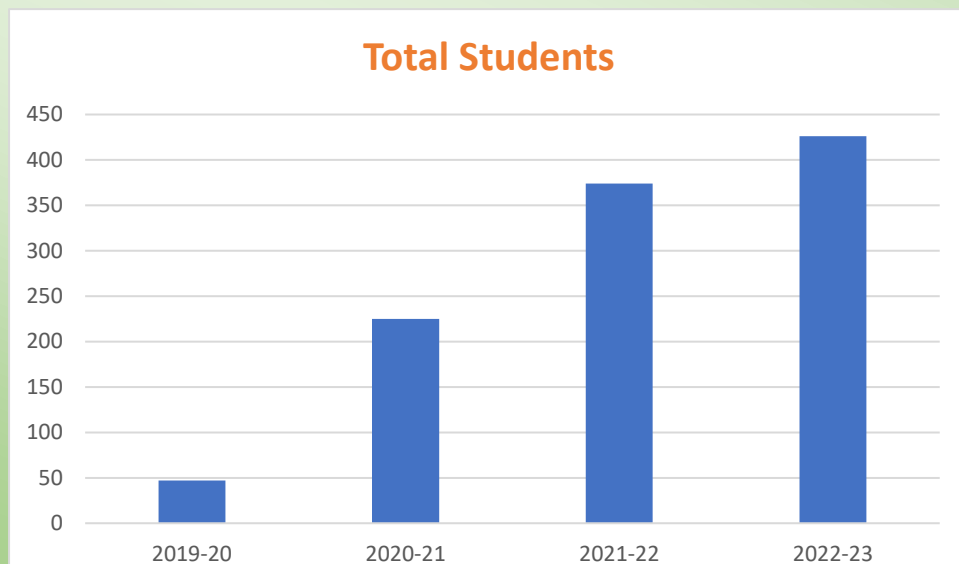
Institute Welcomes New Entrants

JOINING OF SIX NEW FACULTIES IN CIVIL ENGINEERING.

S. No.	Name of Faculty	Designation	Highest Qualification	Photograph
01	Md. Nadir	Assistant Professor	M. Tech (NIT DURGAPUR) Environmental Engineering	
02	Mr. Shambhu Nath Sharma	Assistant Professor	M. Tech (NIFFT HATIA) Environmental Engineering	
03	Md. Arman	Assistant Professor	M. Tech (NIT PATNA) Water Resources Engineering	
04	Mr. Shahrukh Jan	Assistant Professor	M. Tech (NIT PATNA) Transportation Engineering	
05	Mr. Rajan Kumar	Assistant Professor	M. Tech (NIT ROURKELA) Transportation Engineering	
06	Mr. Gautam Praksh	Assistant Professor	M. Tech (PhD Thesis Submitted) (NIT PATNA) (Transportation Engineering)	

Institute Welcomes New Entrants

ADMISSION RECORD:



BRANCHES:

Name of Branch	Intake
Civil Engineering	60
Electronics & Communication Engineering	60
Electrical Engineering	60
Mechanical Engineering	60

Publications..

- Nitin Kumar Saxena, **Atma Ram Gupta**, et. Al., “Algorithm based LCL filtered grid-tied STATCOM design for reactive power compensation in SCIG based Micro-grid”, **Energy Reports, Elsevier**, Volume 8, Supplement 9, 2022, Pages 723-740, ISSN 2352-4847, <https://doi.org/10.1016/j.egy.2022.07.106> (*Indexed in SCIE, Scopus, Inspec*).
- Jitendra Singh Bhadoriya & **Atma Ram Gupta**, “Techno-economic analysis of the DNO operated distribution system for active and reactive power support using modified particle swarm optimization”, *International Journal of Ambient Energy*, 43:1, 7061-7076, 2022. <https://doi.org/10.1080/01430750.2022.2059779> (*Indexed in Inspec, Scopus*).
- Nandola Maitrey Bharatbhai, **Atma Ram Gupta**, “Practical Distribution System Analysis with Multiple PV and DSTATCOM Using Flower Pollination Algorithm”, Springer, Book entitled Renewable Energy Towards Smart Grid. Springer Nature Singapore Pte Ltd. 2022. A. R. Gupta et al. (eds.), *Power Electronics and High Voltage in Smart Grid*, **Chapter 20**, *Lecture Notes in Electrical Engineering* 817, https://doi.org/10.1007/978-981-16-7393-1_20, (*Indexed in Scopus*).
- Bharatbhai, N.M., Gupta, A.R., “Active–Reactive Power Support with Optimal Allocation of DG and DSTATCOM in Distribution System Using Flower Pollination and Artificial Bee Colony Algorithm with Load Growth.” *Recent Advances in Power Electronics and Drives. Lecture Notes in Electrical Engineering*, vol 852. Springer, Singapore. https://doi.org/10.1007/978-981-16-9239-0_14 (*Indexed in Scopus*).
- Ashish Verma and **Atma Ram Gupta** “Allocation of Wind-Based Distributed Generation Using Bacterial Foraging Optimization Algorithm in Electrical Distribution System” Springer, Book entitled Renewable Energy Towards Smart Grid. Springer Nature Singapore Pte Ltd. 2022. A.Kumar et al. (eds.), *Renewable Energy Towards SmartGrid*, **Chapter 2**, *Lecture Notes in Electrical Engineering* 823, https://doi.org/10.1007/978-981-16-7472-3_2 (*Indexed in Scopus*).
- Ashish Verma and **Atma Ram Gupta**, “Bacterial Foraging Optimization Based Allocation of PV-DG in Power Distribution System” Springer, Book entitled Renewable Energy Towards Smart Grid. Springer Nature Singapore Pte Ltd. 2022. A.Kumar et al. (eds.), *Renewable Energy Towards SmartGrid*, **Chapter 29**, *Lecture Notes in Electrical Engineering* 823, https://doi.org/10.1007/978-981-16-7472-3_29 (*Indexed in Scopus*).
- Verma, A., Gupta, A.R., “Bacterial Foraging and Whale Optimization Algorithm Based DG and DSTATCOM Allocation in Radial and Mesh Distribution System.” In: Kumar, J., Tripathy, M., Jena, P. (eds) *Control Applications in Modern Power Systems. Lecture Notes in Electrical Engineering*, vol 870. Springer, Singapore. https://doi.org/10.1007/978-981-19-0193-5_26 (*Indexed in Scopus*).
- Verma, A., **Gupta, A.R.**, “Applications of Internet of Things and Its Security Management Issues in Smart Grid.”, In: Kumar, J., Tripathy, M., Jena, P. (eds) *Control Applications in Modern Power Systems. Lecture Notes in Electrical Engineering*, vol 870. Springer, Singapore. https://doi.org/10.1007/978-981-19-0193-5_48 (*Indexed in Scopus*).
- Smriti Singh, **Atma Ram Gupta**, Ashwani Kumar, “Impact of Wind Generation Participation on Congested Power System” Springer, Book entitled Renewable Energy Towards Smart Grid. Springer Nature Singapore Pte Ltd. 2022. Ashwani Kumar S. C. Srivastava S. N. Singh (eds.), *Chapter 20, Lecture Notes in Electrical Engineering* 823, https://doi.org/10.1007/978-981-16-7472-3_20 (*Indexed in Scopus*).
- Karimulla Polisetti, **Atma Ram Gupta**, Ashwani Kumar “Impact of Capacitor Banks on the Nodal Prices of Meshed Distribution System” Springer, Book entitled Renewable Energy Towards Smart Grid. Springer Nature Singapore Pte Ltd. 2022. Ashwani Kumar S. C. Srivastava S. N. Singh (eds.), *Chapter 13, Lecture Notes in Electrical Engineering* 823, https://doi.org/10.1007/978-981-16-7472-3_13 (*Indexed in Scopus*).
- Malaviya, S., **Gupta, A.R.**, Bhadoriya, J.S. (2023). A Study of the Installed Turbine, Generator, and Control Equipment of the Indira Sagar Hydropower Plant. In: Namrata, K., Priyadarshi, N., Bansal, R.C., Kumar, J. (eds) *Smart Energy and Advancement in Power Technologies. Lecture Notes in Electrical Engineering*, vol 926. Springer, Singapore. https://doi.org/10.1007/978-981-19-4971-5_5

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- Aniket, A., **Gupta, A.R.**, “Modelling and Analysis of a Grid Connected Squirrel Cage Induction Generator” In: Namrata, K., Priyadarshi, N., Bansal, R.C., Kumar, J. (eds) Smart Energy and Advancement in Power Technologies. Lecture Notes in Electrical Engineering, vol 926. Springer, Singapore. https://doi.org/10.1007/978-981-19-4971-5_8.
- Kumar, K., **Gupta, A.R.**, Bhadoriya, J.S., “FACTS Devices Injection in Electrical Network for Reactive Power Compensation” In: Namrata, K., Priyadarshi, N., Bansal, R.C., Kumar, J. (eds) Smart Energy and Advancement in Power Technologies. Lecture Notes in Electrical Engineering, vol 926. Springer, Singapore. https://doi.org/10.1007/978-981-19-4971-5_6.
- Saxena, N.K., Gupta, V., Rajput, R.S., Kumar, A., **Gupta, A.R.**, “Reactive Power Requirement for Operating Wind-Driven Micro Grid in the Presence of Several Proportions and Classes of Static Load” In: Kumar, A., Srivastava, S.C., Singh, S.N. (eds) Renewable Energy Towards Smart Grid. Lecture Notes in Electrical Engineering, vol 823. Springer, Singapore. https://doi.org/10.1007/978-981-16-7472-3_3
- Arya, A.K., **Gupta, A.R.**, Goyal, G.R., Sharma, A.K., “Harmonic Reduction for Smart Distribution Network with D-STATCOM and DG Using Gravitational Search Algorithm” In: Bohre, A.K., Chaturvedi, P., Kolhe, M.L., Singh, S.N. (eds) Planning of Hybrid Renewable Energy Systems, Electric Vehicles and Microgrid. Energy Systems in Electrical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-0979-5_31
- Bhadoriya, J.S., **Gupta, A.R.**, Zellagui, M., Saxena, N.K., Arya, A.K., Bohre, A.K., “Optimal Allocation of Electric Vehicles Charging Station in Distribution Network Beside DG Using TSO” In: Bohre, A.K., Chaturvedi, P., Kolhe, M.L., Singh, S.N. (eds) Planning of Hybrid Renewable Energy Systems, Electric Vehicles and Microgrid. Energy Systems in Electrical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-0979-5_29.