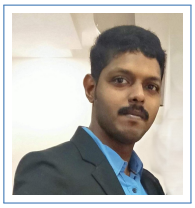
Saneesh P F

Amrita Virtual Labs
Amrita Vishwa Vidyapeetham
Amritapuri 690 525
+91 9633 913855
saneeshpf@am.amrita.edu
linkedin.com/in/saneeshpf



Overview

- Project Manager, Amrita Virtual Labs *(An initiative of MoE, Govt. of India)* and the Technical Lead of Physical Sciences Virtual labs, Amrita Vishwa Vidyapeetham.
- Supervisor of virtual lab deployment classes and a specialist in quality control of physical sciences simulations.
- Subject Matter Expert (SME) in Physical Science Virtual Laboratory Experiments

Work Experience

2013–Present **Project Manager**.
Amrita Virtual Labs, Amrita Vishwa Vidyapeetham
- Supervision of virtual lab deployment in institutions
- Technical lead of online laboratory experiments
- Quality control of experiment simulations
- Conducting workshops and training programs for the effective use of virtual labs.

2012–2014 **Laboratory Instructor**.
Department of Physics, Amrita Vishwa Vidyapeetham
- Conducted physical laboratory courses
- Research in educational pedagogy

2011–2013 **Project Assistant**.
Amrita Virtual Labs, Amrita Vishwa Vidyapeetham
- Virtualization of physical science experiments.
- Content developer for online experiments.
- Handling virtual lab Workshops.

January 2011–May 2011 **Intern**, *Amrita Vishwa Vidhyapeetham*, Amritapuri.
'Zener diode as a voltage regulator' is an online simulator to perform a Zener diode experiment as a pre-lab lab exercise. This online laboratory can provide the concept of the working of physical science laboratory experiments. Also, anyone can access these online experiments at any time, anywhere, based on the user's convenience.

Project

Amrita Virtual Labs

June 2011 – Present

Amrita virtual labs implement state-of-the-art technology in providing computer simulated, remote triggered and interactive animation based experiments. The virtual laboratories would help students to understand better the complex scientific questions while at the same time motivate them to pursue cross-disciplinary, innovative research. These experiments can access through the main project website `http://vlab.co.in` and university website `http://vlab.amrita.edu`.

Education

2012–2017 **Master of Computer Applications**, Indira Gandhi National Open University, New Delhi.

2009–2011 **Master of Science (MSc), Physics**, *St. Albert's College, Ernakulam, Mahatma Gandhi University*.

2006–2009 **Bachelor of Science (BSc) Physics**, *St. Albert's College, Ernakulam, Mahatma Gandhi University*.

Publications

Krishnashree Achuthan, Dhananjay Raghavan, Balakrishnan Shankar, Saneesh P Francis, and Vysakh Kani Kolil. **Impact of remote experimentation, interactivity and platform effectiveness on laboratory learning outcomes**. *International Journal of Educational Technology in Higher Education*, 18(1):1–24, 2021.

Krishnashree Achuthan, Joshua David Freeman, Prema Nedungadi, Umesh Mohankumar, Anu Varghese, Athul M Vasanthakumari, Saneesh P Francis, and Vysakh Kani Kolil. **Remote triggered dual-axis solar irradiance measurement system**. *IEEE Transactions on Industry Applications*, 56(2):1742–1751, 2020.

M Umesh, Krishnashree Achuthan, Saneesh P Francis, and Balakrishnan Shankar. **Battery Capacity Computation Using Peukert's Equation in a Virtual Environment**. In *2018 IEEE 18th International Conference on Advanced Learning Technologies (ICALT)*, pages 403–404. IEEE, 2018.

Krishnashree Achuthan, Saneesh P Francis, and Shyam Diwakar. **Augmented reflective learning and knowledge retention perceived among students in classrooms involving virtual laboratories**. *Education and Information Technologies*, pages 1–31, 2017.

Saneesh P Francis, Vysakh Kanikkolil, and Krishnashree Achuthan. **Learning curve analysis for virtual laboratory experimentation**. In *Advances in Computing, Communications and Informatics (ICACCI), 2016 International Conference on*, pages 1073–1078. IEEE, 2016.

Krishnashree Achuthan, Lakshmi S Bose, Saneesh Francis, KS Sreelatha, CO Sreekala, Prema Nedungadi, and Raghu Raman. **Improving perception of invisible phenomena in undergraduate physics education using ICT**. In

Information and Communication Technology (ICoICT), 2014 2nd International Conference on, pages 226–231. IEEE, 2014.

CO Sreekala, PF Saneesh, KS Sreelatha, A Kishnashree, and MS Roy. **Organic bulk heterojunction solar cell based on rosebengal: ncTiO2 and parameter extraction by simulation**. In *Advanced Materials Research*, volume 403, pages 4304–4310. Trans Tech Publ, 2012.

Project Guided

Unnikrishnan, Sharika and Sreelakshmi, S and Deepa G, *Enhancement of Accuracy in K-means Clustering*, ICAIECES-2016

National/International Participation

- Large Scale Wireless Sensor Networks - Protocols, Programming and Remote Triggering (LS-WSN 2015), June 29 - July 1, 2015, Amrita Vishwa Vidhyapeetham, Amritapuri campus.
- 6^{th} IEEE International Conference on Technology for Education, December 18-22, 2014, Amrita Vishwa Vidhyapeetham, Amritapuri campus.
- National Seminar on Trends in Physical Science (Trips-2013), Sree Sankara College, Kalady.
- Workshop on Astronomy Research: Opportunities and Challenges, Macfast, Thiruvalla, 2013
- International Conference on Technology Enhanced Education (ICTEE 2012) at Amrita Vishwa Vidhyapeetham

Events Organized

2015, 2016, 2017 — National Nodal Centre Conference (NNCC), Amritapuri

Jun 2015 — Virtual Lab Workshop, LS-WSN 2015, Amritapuri

Feb 2015 — Nodal Centre Workshop, Amritapuri

National and International Workshops

Several national and international workshops are organized and conducted as part of the Virtual lab project. I have acted as a resource person for 100+ virtual lab workshops covering different Indian states, including Kerala, Karnataka, Tamil Nadu, Andhra Pradesh, Bihar and Madhya Pradesh. Also, I served as a resource person for the international online workshop on virtual labs in Malaysia, Maldives, Bangladesh and Kenya.