


Brief Biodata

Name: Dr. Arun Ram Prasath R T

Designation:	Scientist	
DP No. and Name:	#2.02 and AC High Voltage & Current Metrology Section	
DU No. and Name:	#2 and Electrical and Electronics Metrology Division	
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Date of Joining CSIR-NPL:	05 th January 2021	
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Research Area/ Interest

- R&D related to AC High Current and High Voltage Metrology.
- Power System, High Voltage, Insulation Engineering, Real-Time Condition Monitoring of Power Transformers, Partial Discharge (PD), Lightning Impulse, Dissolved Gas Analysis (DGA) & Nano-dielectrics.

Educational Qualifications

(Please write latest qualification first)

Degree	Subject/ Specialization	University/ Institute	Year
Ph.D.,	Electrical Engineering /(HVEngg)	National Institute of Technology (NIT) Durgapur, West Bengal	Jan. 2020
M.Engg.,	High Voltage Engineering (HVEngg)	Anna University, Chennai	Apr. 2014
B.Engg.,	Electrical & Electronics Engineering	Anna University, Chennai	Apr. 2012

Academic / Research Experience

Grade / Post	Institute	Duration		Research Field
		From	To	
Scientist	CSIR- National Physical Laboratory of India (NPLI)-The NMI of India, New Delhi	Jan. 2021	Till-date	AC High Voltage & High Current Metrology, Insulation Studies for HV power applications

Ph.D. (Full-time Institute Scholar)	National Institute of Technology (NIT) Durgapur, West Bengal	Sept. 2014	Jan. 2020	Liquid/Solid Dielectrics, Nano- Insulation, Condition Monitoring in Power Transformers
PG Research Associate	Central Power Research Institute (CPRI-MoP), Bangalore, Karnataka	Nov. 2013	Aug. 2014	Condition Monitoring in HV Power Apparatus

No. of Publications

No. of Publications in SCI Journals	No. of Publications in non-SCI Journals	No. of Publications in Conference Proceedings	Books	Total
8	3	10	-	21

Selected Publications

[1] **Arun Ram Prasath R T**, Mubeen Akhtar Ansari, Thomas Paramanandam, Sankar Narayan Mahato & Nirmal Kumar Roy, “ Performance Studies on Mineral Oil and Natural Ester Oil Based High Dielectric CCTO Nanofluids for High Voltage Application, 2021 **IEEE** 5th International Conference on Condition Assessment Techniques in Electrical Systems (CATCON), pp.123-126.

[2] **Arun Ram Prasath R T**, Nandini E. Hudedmani, Nirmal Kumar Roy, Sankar Narayan Mahato & P. Thomas, Effect of un-inhibited Synthetic Ester Oil Based High dielectric CaCu₃Ti₄O₁₂ (CCTO) Nanofluids for Power Transformer Application, **IET Sci. Meas. Technol.**, (2019), 13, 04, pp. 486-490. [*Impact factor - 1.914*]

[3] P. Thomas, Nandini E. Hudedmani, **Arun Ram Prasath R T**, Nirmal Kumar Roy & Sankar Narayan Mahato, Synthetic Ester Oil Based High Permittivity CaCu₃Ti₄O₁₂ (CCTO) Nanofluids for Power Transformer Application, **IEEE Trans. Dielectr. Electr. Insul.**, (2019), 26, 01, pp. 314-321. [*Impact factor - 2.931*]

[4] **Arun Ram Prasath R T**, M. Willjuice Iruthayarajan & R. Karthik, Performance studies on Dielectric and Physical Properties of Eco-friendly based Natural Ester Oils Using Semi-conductive Nanocomposites for Power Transformer Application. **IET Sci. Meas. Technol.**, (2018), 12, 3, pp. 323-327. [*Impact factor- 1.914*]

[5] **Arun Ram Prasath R T**, Nirmal Kumar Roy, Sankar Narayan Mahato & P. Thomas, Mineral Oil Based High Permittivity CaCu₃Ti₄O₁₂ (CCTO) Nanofluids for Power Transformer Application, **IEEE Trans. Dielectr. Electr. Insul.**, (2017), 24, 04, pp. 2344-2353. [*Impact factor – 2.931*]

[6] **Arun Ram Prasath R T**, M. Willjuice Iruthayarajan & R. Karthik, Retreatment of Aged Mineral oil using Semi-conductive Nanocomposites for Power Transformer Application, **Int. Trans. Electr. Energy Syst.**, (2017), 27, 09, pp. 1-8, [*Impact factor - 3.41*]

Patents

Nil

Current Activities

(Not more than 100 words)

- Establishment, Maintenance & Upgradation of AC High Voltage and High Current Standards to be at par with leading NMIs
- Providing apex level calibration services, research and development on Current Transformers, Voltage Transformers, Capacitance & Tan Delta Bridge and Allied equipment, and dissemination of traceability of AC High Voltage & High Current parameters to various Power Utilities, Electrical Equipment Manufacturers and Testing and Calibration Laboratories
- Establishment of New Calibration Measurement Capabilities (CMCs)
- Updation & implementation of quality document manuals for the section as per IS/IEC/ISO 17025:2017 standards

Honour(s)/Award(s)/ Fellowship(s)

- *Best Presenter Awardee*- Indian Institute of Technology (IIT)-Madras, Tamil Nadu.
- *PG Project Fellow*- R&D Cell, Institutions of Engineers India, Kolkata.
- *Best Project Awardee*- Bharat Heavy Electrical Limited (BHEL), Trichy Unit, Tamil Nadu.

Contributions to AcSIR

- *Team Member*- Precision Measurement and Quality Control (PG Diploma-PMQC)

Membership of Professional Societies/ Institutions

- *Life Member*, Metrology Society (MSI) of India.
- *Member*, ETD-03 (Bureau of Indian Standards).
- *Associate Member*, Institutions of Engineers India (IEI), Kolkata.

Any other Information

(Not more than 100 words)

- Completed various research projects based on;
 - Nano-Insulation Studies for HV Power apparatus with CPRI Bangalore in 2015-18
 - Condition Monitoring Studies in Power Transformers, Institution of Engineers India (IEI), Kolkata in 2013-14
 - RLC to PLC Conversion with BHEL Unit, Trichy in 2011-12
- Reviewer- *IEEE, IET, Elsevier Journals (HV Domain)*