

**DR. CELINE MARY STUART**  
**ASSOCIATE PROFESSOR**



**Contact Details**

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### Professional Qualifications

B-Tech	Specialization	ECE
	Institute/University	Calicut University
	Year	1992
M-Tech	Specialization	Digital Systems and Communication
	Institute/University	NIT Calicut
	Year	2006
PhD	Specialization	Secure Channel Coding
	Institute/University	NIT Calicut
	Year	2017

### Areas of Interest

- Secure Communication, Physical Layer Security

### Professional Experience

- Rajeev Gandhi Institute of Technology, Kottayam – 24.09.1999 to 10.12.1999
- Govt. Engineering College, Barton Hill – 13.12.1999 to 18.06.2007
- Govt. Engineering College, Kozhikode – 20.06.2007 to 04.06.2009
- Govt. College of Engineering, Kannur – 05.06.2009 to 24.07.2014
- Govt. Engineering College, Kozhikode - 25.07.2014-till date

### Responsibilities/Position

- Head - Dept. of AE&I, Convener - Disciplinary Action committee, Member - Squad for University Examinations, Member - Antiragging committee, Course Co-ordinator - Analog and Integrated Circuits (KTU), Coordinator for B Tech ECE Examination 2017 - 18 (Calicut University).

### Publications

- Celine Mary Stuart and P. P. Deepthi. "Nonlinear Cryptosystem Based on QC-LDPC Codes for Enhanced Security and Reliability with Low Hardware Complexity and Reduced Key Size." *Wireless Personal Communications*: 1-21, 2017; DOI:10.1007/s11277-017-4376-z.
- Celine Mary Stuart and P. P. Deepthi. "FPGA implementation of highly secure, hardware-efficient QC-LDPC code-based nonlinear cryptosystem for wireless sensor

networks." *International Journal of Communication Systems* - Wiley, 30 (10), 2017, DOI: 10.1002/dac.3233.

- Celine Mary Stuart, Spandana K., Dhanaraj K.J., Deepthi P.P., "Design and Implementation of Hardware-Efficient Modified Rao-Nam Scheme with High Security for Wireless Sensor Networks", *Journal of Information Security and Applications* - Elsevier; vol. 29, pp. 65 - 79, August 2016. DOI: 10.1016 /j. jisa .2016. 03.004.
- Celine Mary Stuart and Deepthi P. P., Article: "A Novel Low Complexity Scheme for Improving Security of NLFG based Symmetric Key Cryptosystem using Secure Concatenated RS-QCLDPC Code". *International Journal of Security and Communication Networks* - Wiley, 2015, DOI: 10.1002/sec.1215.
- Celine Mary Stuart, Nandan S. and Deepthi P. P., Article: "Low Complex Crypto based Channel Coding with Turbo Code", *International Journal of Computer Applications* 61(16): 39-44, January 2013.
- Celine Mary Stuart, Deepthi P.P., "Hardware Efficient Scheme for Generating Error Vector to Enhance the Performance of Secure Channel Code", *International Conference on Signal Processing, Informatics, Communication and Energy Systems (IEEE SPICES-2015)* Feb 19-21, Kerala, India.
- Celine Mary Stuart, Deepthi P.P., "Low Complex System for Physical Layer Security Using NLFG and QCLDPC code", *Second International Symposium on Security in Computing and Communications (SSCC-2014)*, Springer, CCIS Series, September 24-27, New Delhi, India.
- Nandan S., Deepthi P.P., Celine Mary Stuart, "Low Complex Crypto Based Channel Coding", *IEEE International Conference on Communication Systems and Network Technologies (CSNT 2012)*, May 11-13, 2012, Rajkot, India.
- Ashok L, Deepthi P.P., Celine M. Stuart, "Embedding Secrecy in Channel Coding with Low Density Parity Check Codes" pp 236-241, *Proceedings of IASTED International Conference on Signal and Image Processing and Applications (SIPA 2011)*, June 22-24, 2011, Crete, Greece.