

GIGI SEBASTIAN

ASSOCIATE PROFESSOR



Contact Details

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GEC KOZHIKODE

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Professional Qualifications

B-Tech	Specialization	Chemical Engineering
	Institute/University	Govt. Engg. College Thrissur/ University of Calicut
	Year	1991
M-Tech	Specialization	Plant Design
	Institute/University	NIT Trichy / Bharathidasan University
	Year	1994
PhD	Specialization	Process Control
	Institute/University	IIT Madras
	Year	2013

Areas of Interest

- Process Control
- Process Design
- Environmental Engineering

Professional Experience

- Teaching: 1999 onwards
- Assistant Engineer in Kerala State Pollution Control Board: 1996 -1999
- Design Engineer – Reynolds Engineering Corporation, Mumbai: 1996
- Senior Post Graduate Fellow – CECRI, Karaikudi: 1995

Responsibilities/ Position

- HOD Chemical Engineering
- BOG member, GEC Kozhikode
- Chair Person, M. TECH. Computer Aided Process Design, University of Calicut

Publications

Journals

1. S. Gigi and A. K. Tangirala. **Quantification of interaction in multiloop control systems using directed spectral decomposition**. Automatica, vol 49, number 5, May 2013, pages 1174-1183.
2. S. Gigi and A. K. Tangirala **Quantitative analysis of directional strengths in jointly stationary linear multivariate processes**. Biological Cybernetics vol. 103, number 2, August 2010 , pages 119-133.

Conferences

1. Swetha P. and Gigi Sebastian. Study on drinking water purification using Phyllanthus Emblica (Nelli) and low temperature activated charcoal. Proceedings of NET 2015, Government Engineering College, Kozhikode. pages 194 – 199.
2. Gigi Sebastian, **Process Modeling and Simulation – An Introduction**. Proceedings of ETIC 2014, NSS College, Nenmara (UGC sponsored national conference), December 4 -5, 2014, pages 1 -6.

3. Nighila V. Paul and Gigi Sebastian, **Modeling and fuzzy control of DME reactive distillation column**, ATCE, Dept. of Chemical Engineering, Govt. Engineering College, Thrissur. 26-28 September 2013, pages 46-51
4. S. Gigi and A. K. Tangirala **Reconstructing Plant Connectivity using Directed Spectral Decomposition**. Proceedings of the 8th IFAC Symposium on Advanced Control of Chemical Processes, The International Federation of Automatic Control, Singapore, July 10-13, 2012, pages 481-486.
5. S. Gigi and A. K. Tangirala. **Frequency domain quantification of interaction in MIMO systems using directed variance decomposition**. Proceedings of 5th international symposium on Design, Operation and Control of Chemical Processes, PSE Asia, July 25-28, 2010, Singapore. pages
6. S. Gigi and A. K. Tangirala. **A data-driven method for control configuration in multivariate systems**. *Chemference 2009*, (National Conference on Chemical Engineering), 22-23, August 2009, IIT Madras. pages
7. S. Gigi and A. K. Tangirala. **Quantification of directed influences in multivariate systems by time-series modelling**. International Conference on Control, Automation, Communication and Energy Conservation (INCACEC – 2009), 4-6, June 2009, Kongu Engineering College, Erode. pages