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Dr. SANJAY P. SHIRSAT (PhD Chemical Engineering)

Professor (CAS) of Chemical Engineering

Academic Qualification

Sr. No.	Name of Degree	University Institute	Year
1	B.Tech. Chemical Enggg	Sant Gadge Baba Amaravati University	2000
2	M. Tech Chem. Engg.	IIT Kharagpur	2002
3	Ph. D. Chemical Engineering	Laxminarayan Institute of Technology, RTM Nagpur University, Nagpur	2015

List of Publications:

- 1) **Sanjay P. Shirsat**, “Modeling, Simulation and Control of internally heat integrated pressure swing distillation for the bioethanol dehydration” *Computers and Chemical Engineering* **53** (2013) 201-202
(Elsevier) **Impact Factor =2.404**
- 2) **S. P. Shirsat**, “Separation of isobutyl alcohol and isobutyl acetate by extractive distillation and pressure-swing distillation: Simulation and optimization” *Separation and Purification Technology* – 118 (2013) 652
(Elsevier) **Impact Factor=3.565**
- 3) **Sanjay Pralhad Shirsat**, Shrikant Devidas Dawande, Seema Sudhakar Kakade “Simulation and Optimization of extractive distillation sequence with pre-separator for the ethanol dehydration using n-butyl propionate” *Korian Journal of Chemical Engineering* – Vol. 30, Issue 12 (2013) 2163-2169
(Springer) **Impact Factor=1.056**
- 4) A. M. Patwardhan, **S. P. Shirsat**, S. D. Dawande, “Pressure Swing Distillation Simulation and Optimization of Azeotropic IBA+IBAc Mixture” *International Journal of Computer Applications*, vol.66- No.10, March (2013)

(Impact Factor=0.909)

- 5) **S. P. Shirsat**, A. M. Patwardhan, S. S. Kakade, "GHG Emissions and Energy Minimization Using Heat Integrated Pressure Swing Distillation Sequence (HiPSDS) for the separation of Azeotropic Mixture" *International Journal of Computer Applications*, Vol. 66- No.19, March (2013)

(Impact Factor=0.909)

- 6) Dnyanesh Awachar, **Sanjay Shirsat**, Nikhil Sancheti," Simulation of transesterification Reactive Distillation with Total thermal coupling" **International Journal of Innovations in Engineering & Technology** vol 5 Issue 3 June 2015
- 7) Nikhil Sancheti, **Sanjay Shirsat**, Dnyanesh Awachar," Simulation of Butyl acetate and Methanol production by Transesterification Reaction via conventional Distillation process" **International Journal of Innovations in Engineering & Technology** Vol. 5 Issue 3 June 2015
- 8) S D Dawande, **S. P. Shirsat** "Design, Simulation and Optimization of extractive Distillation Sequence for the azeotropic mixture separation with entrainer Ethylene glycol" **RTM Nagpur University Science Journal** Vol. XIII Pages 32-47, 2015
- 9) Abdul Jamal, Pranay Chinchamalature, **Sanjay Shirsat**, "Modeling of Downflow Bubble Column Reactors" *Chemical Engineering World*, Vol. 64, May 2009, pages 64-69.
- 10) R. Rewagad, R. Gupta, G. Jaiswal, **S. Shirsat** "Use of Neural Network for Modeling the HETP in Batch Packed Vacuum Distillation Column, an experimental study" *Chemical Engineering World*, Vol. 42, 2007 pages 80-89
- 11) **Sanjay Shirsat**, Ajay Mandal, D. Mukharjee, G. Kundu "Hydrodynamic studies on Gas-Liquid Downflow Bubble Column with Non-Newtonian Liquids" *Journal of the Institutions of Engineers*, September 2003, Vol. 84 pages 38-43.
- 12) **S. P. Shirsat**, "Separation of isobutyl alcohol and isobutyl acetate by extractive distillation and pressure-swing distillation: Simulation and optimization" *Separation and Purification Technology* – 154 (2015) 366
- (Elsevier) Impact Factor=3.565**
- 13) Deepak Patil, **Sanjay Shirsat**, "Membrane Distillation Review and Flux prediction in Direct contact Membrane distillation Process" **International research journal of Engineering & Technology**, Vol 04 Issue 07, July 2017

- 14) Swapnil Sankhe, **Sanjay Shirsat**, “Steady State Simulation of Ethyl Acetate production using CHEMCAD” **International research journal of Engineering & Technology**, Vol 04, Issue 06, June 2017
- 15) Seema Kakade, Rajendra Ugwekar, **Sanjay Shirsat**, “Strategy for Separation of Azeotropic Mixture by Pressure Swing Distillation, **International Journal of Computational Engineering & Management** Vol 20, Issue 6, Nov 2017
- 16) **Certificate of merit** for the paper entitled “Hydrodynamic Studies on Gas-Liquid Downflow Bubble Column with Non-Newtonian Liquids” published in the *Journal of Institutions of Engineers* in September 2003, Vol. 84 pages 38-43

Book chapter

1. S. S. Anwani, **S. P. Shirsat**, “Extractive Distillation Simulation for the Separation of Methylcyclohexane and Toluene Mixture with Phenol as an Extractor using CHEMCAD” **BOOK Chapter CRC Press (Taylor & Francis), ISBN No. 978-1-77188-578-2, Pages 281-290 (2018)**
2. Mayuri Tambe, Divya P. Barai, Bharat A. Bhanvase, **Sanjay P. Shirsat**, Quantum Dots: Catalysis Applications, in: (EDs.) Sanjay J. Dhoble, Marta Michalska-Domanskais, N. Thejo Kalyani, B. Vengadaesvaran, H. Nagabhushana, Abdul Kariem Arof, Quantum Dots: Emerging materials for versatile applications, Elsevier, 2023, pp. 439- 462 (ISBN: 978-0-323-85278-4).

National / International Seminar / Conferences:

- 1) Member of advisory committee “POLY-VISION 2004” for the Poly Tech Savvy Technical Paper presentation at LIT Nagpur on October 03rd, 2004.
- 2) Participated in National seminar on “Global perspectives for Indian Food Industries by 2020” organized by LIT Nagpur during February 05th -06th, 2005.
- 3) Participated in National Seminar on “Emerging Facets of Chemical Engineering and Biotechnology” organized by LIT Nagpur during September 28th -29th, 2005.
- 4) Presented Paper on “GHG Emissions Reduction using Pressure Swing Distillation column sequence and Extractive Distillation column sequence simulations for the separation of azeotropic mixtures” in National Conference on Recent Advances in Chemical Engineering (RACE 2012) organized by UDCT, **NMU Jalgaon** on February 04th, 2012.

- 5) Poster presented by Co-author in National Conference at **VNIT Nagpur**, on 25th March 2013.
- 6) Poster presented by Co-author in International Conference held at **NIT Raipur** on April 5th- 6th 2013.
- 7) Presented Paper in National Conference on REACT 2014 organized by Laxminarayan Institute of Technology, RTM Nagpur University, Nagpur on February 28th, 2014
- 8) Presented Paper in National Conference on REACT 2015 organized by Laxminarayan Institute of Technology, **RTM Nagpur University**, Nagpur on February 27- 28th, 2015
- 9) Paper presented on “Extractive Distillation Simulation for the separation of azeotropic mixture with entrainers using CHEMCAD” in **International Conference on Advances in Chemical Engineering** (ICACE 2015) held at the Department of Chemical Engineering, NIT Surathkal, Karnataka during 20th -22nd December 2015.