

Dr. V. Sivakumar

Associate professor

Department of Chemical Engineering

Anna University, Chennai

9842723454

drvsivakumar@annauniv.edu

- 2020 Energy efficient process for valorization of corn cob as a source for nanocrystalline cellulose and hemicellulose production
ACF Louis, S Venkatachalam
International Journal of Biological Macromolecules 163, 260-269
- 2020 A holistic approach for microwave assisted solvent extraction of phenolic compounds from *Ficus benghalensis* fruits and its phytochemical profiling
A Jayasree Radhakrishnan, S Venkatachalam
Journal of food process engineering
- 2020 Ultrasonic acoustic-cavitation as a novel and emerging energy efficient technique for oil extraction from kapok seeds
J Senrayan, S Venkatachalam
Innovative Food Science & Emerging Technologies, 102347
- 2019 Ultrasonic-assisted solvent extraction of phenolic compounds from *Opuntia ficus-indica* peel: Phytochemical identification and comparison with soxhlet extraction
A Karunanithi, S Venkatachalam
Journal of Food Process Engineering, e13126
- 2019 Optimization of ultrasound-assisted extraction of phenolic compounds from wood apple pulp: Identification of phytochemicals using GC–MS
A Karunanithi, S Venkatachalam
Chemical Industry & Chemical Engineering Quarterly
- 2018 Biosorptive removal of Zn (II) ions by Pongamia oil cake (*Pongamia pinnata*) in batch and fixed-bed column studies using response surface methodology and artificial neural network
M Shanmugaprakash, S Venkatachalam, K Rajendran, A Pugazhendhi
Journal of environmental management 227, 216-228
- 2018 Solvent-assisted extraction of oil from papaya (*Carica papaya L.*) seeds: evaluation of its physiochemical properties and fatty-acid composition
J Senrayan, S Venkatachalam
Separation Science and Technology 53 (17), 2852-2859
- 2018 Icee is energy 09 production of fatty acid methyl esters (fame) from papaya (*Carica papaya L.*) Seed oil for use as a biodiesel
J Senrayan, S Venkatachalam
SALVATIO'18
- 2018 A short extraction time of vegetable oil from *Carica papaya L.* seeds using continuous ultrasound acoustic cavitation: Analysis of fatty acid profile and thermal behavior
J Senrayan, S Venkatachalam
Journal of Food Process Engineering, e12950

- 2018 Optimization of ultrasound-assisted solvent extraction (UASE) based on oil yield, antioxidant activity and evaluation of fatty acid composition and thermal stability
J Senrayan, S Venkatachalam
Food Science and Biotechnology, 1-10
- 2018 Physicochemical treatment for improving bioconversion of cassava industrial residues
A Sudha, V Sivakumar, V Sangeetha, KS Priyenka Devi
Environmental Progress & Sustainable Energy 37 (1), 577-583
- 2017 Preparation and characterization of calcium treated bentonite clay and its application for the removal of lead and cadmium ions: adsorption and thermodynamic modeling
JG Meneguín, MP Moisés, T Karchiyappan, SHB Faria, ML Gimenes
Process Safety and Environmental Protection 111, 244-252
- 2017 Influence of process conditions on the physicochemical properties of pomegranate juice in spray drying process: Modelling and optimization
K Thirugnanasambandham, V Sivakumar
Journal of the Saudi Society of Agricultural Sciences 16 (4), 358-366
- 2017 Improving enzymatic saccharification of cassava stem using peroxide and microwave assisted pre-treatment techniques
A Sudha, V Sivakumar, V Sangeetha, DKS Priyenka
Chemical Industry and Chemical Engineering Quarterly 23 (3), 357-366
- 2017 Optimization of Cassava Pulp Pretreatment by Alkaline Hydrogen Peroxide Using Response Surface Methodology for Bioethanol Production
A Sudha, V Sivakumar, V Sangeetha, KS Priyenka Devi
Materials, Energy and Environment Engineering, 175-185
- 2017 Microwave assisted extraction process of betalain from dragon fruit and its antioxidant activities
K Thirugnanasambandham, V Sivakumar
Journal of the Saudi Society of Agricultural Sciences 16 (1), 41-48
- 2016 Optimization of foaming properties and foam mat drying of muskmelon using soy protein
S Asokapandian, S Venkatachalam, GJ Swamy, K Kuppusamy
Journal of food process engineering 39 (6), 692-701
- 2016 Pilot scale evaluation of feasibility of reuse of wine industry wastewater using reverse osmosis system: modeling and optimization
K Thirugnanasambandham, V Sivakumar, K Loganathan, R Jayakumar
Desalination and Water Treatment 57 (53), 25358-25368
- 2016 Optimization of reverse osmosis treatment process to reuse the distillery wastewater using Taguchi design
K Thirugnanasambandham, V Sivakumar, K Shine

- Desalination and Water Treatment 57 (51), 24222-24230
- 2016 Performance, emission and combustion characteristics of a dual fuel engine with Diesel–Ethanol–Cotton seed oil Methyl ester blends and Compressed Natural Gas (CNG) as fuel
R Senthilraja, V Sivakumar, K Thirugnanasambandham,
Energy 112, 899-907
- 2016 Studies on treatment of egg processing industry wastewater using electrocoagulation method: optimization using response surface methodology
K Thirugnanasambandham, V Sivakumar, K Shine
Desalination and Water Treatment 57 (46), 21721-21729
- 2016 Modeling and optimization of treatment of milk industry wastewater using chitosan–zinc oxide nanocomposite
K Thirugnanasambandham, V Sivakumar
Desalination and Water Treatment 57 (40), 18630-18638
- 2016 Enhancement of shelf life of *Coriandrum sativum* leaves using vacuum drying process: Modeling and Optimization
K Thirugnanasambandham, V Sivakumar
Journal of the Saudi Society of Agricultural Sciences 15 (2), 195-201
- 2016 Performance evaluation of chemical coagulation process to treat bagasse wastewater: modeling and optimization
K Thirugnanasambandham, V Sivakumar, K Shine
Polish Journal of Chemical Technology 18 (1), 99-104
- 2016 Response surface modeling and optimization of upflow anaerobic sludge blanket reactor process parameters for the treatment of bagasse based pulp and paper industry wastewater
R Sridhar, V Sivakumar, K Thirugnanasambandham
Desalination and Water Treatment 57 (10), 4345-4356
- 2016 Removal of ecotoxicological matters from tannery wastewater using electrocoagulation reactor: modelling and optimization
K Thirugnanasambandham, V Sivakumar
Desalination and Water Treatment 57 (9), 3871-3880
- 2016 Preparation of chitosan based nanofibers: Optimization and modeling
K Thirugnanasambandham, V Sivakumar
International Journal of Chemical Reactor Engineering 14 (1), 283-288
- 2016 Recovery of biogas from meat industry wastewater using continuously stirred tank reactor (CSTR): modeling and optimization
K Thirugnanasambandham, V Sivakumar, B Sruthi
International Journal of Chemical Reactor Engineering 14 (1), 125-132

- 2016 Application of Plackett–Burman Design to Extract Polysaccharide from Soy Bean Hulls Using Microwave
K Thirugnanasambandhama, V Sivakumar, LG Marcelino
Biotechnol Ind J 12 (10), 105
- 2016 Biogas production from synthetic sago wastewater by anaerobic digestion: optimization and treatment
V Sangeetha, V Sivakumar
Chemical Industry and Chemical Engineering Quarterly 22 (1), 33-39
- 2015 Enzymatic catalysis treatment method of meat industry wastewater using lacasse
K Thirugnanasambandham, V Sivakumar
Journal of Environmental Health Science and Engineering 13 (1), 86
- 2015 Batch and fixed-bed column studies for biosorption of Zn(II) ions onto pongamia oil cake (*Pongamia pinnata*) from biodiesel oil extraction
M Shanmugaprakash, V Sivakumar
Journal of environmental management 164, 161-170
- 2015 Foam mat drying of food materials: A review
A Sangamithra, S Venkatachalam, SG John, K Kuppuswamy
Journal of Food Processing and Preservation 39 (6), 3165-3174
- 2015 Performance evaluation and optimization of electrocoagulation process to treat grey wastewater
K Thirugnanasambandham, V Sivakumar, J Prakash Maran
Desalination and Water Treatment 55 (7), 1703-1711
- 2015 Enhancing fermentable sugar yield from cassava pulp for bioethanol production: microwave-coupled enzymatic hydrolysis approach
A Sudha, V Sivakumar, V Sangeetha, KSP Devi
Bioprocess and biosystems engineering 38 (8), 1509-1515
- 2015 Optimization of process parameters in electrocoagulation treating chicken industry wastewater to recover hydrogen gas with pollutant reduction
K Thirugnanasambandham, V Sivakumar, JP Maran
Renewable Energy 80, 101-108
- 2015 Modeling and optimization of advanced oxidation treatment of beer industry wastewater using Electro-Fenton process
K Thirugnanasambandham, V Sivakumar
Environmental Progress & Sustainable Energy 34 (4), 1072-1079
- 2015 Investigation on biodiesel production from cotton seed oil using microwave irradiated transesterification process
K Thirugnanasambandham, V Sivakumar
Environmental Progress & Sustainable Energy 34 (4), 1229-1235

- 2015 Extraction of natural anthocyanin and colors from pulp of jamun fruit
JP Maran, V Sivakumar, K Thirugnanasambandham, R Sridhar
Journal of Food Science and Technology 52 (6), 3617-3626
- 2015 Optimization of treatment of grey wastewater using Electro-Fenton technique—
Modeling and validation
K Thirugnanasambandham, V Sivakumar
Process Safety and Environmental Protection 95, 60-68
- 2015 An eco-friendly approach for copper (II) ion adsorption onto cotton seed cake and its
characterization: Simulation and validation
K Thirugnanasambandham, V Sivakumar
Journal of the Taiwan Institute of Chemical Engineers 50, 198-204
- 2015 Evaluation of an electrocoagulation process for the treatment of bagasse-based pulp
and paper industry wastewater
K Thirugnanasambandham, V Sivakumar, J Prakash Maran
Environmental Progress & Sustainable Energy 34 (2), 411-419
- 2015 Foam-mat drying of muskmelon
A Sangamithra, V Sivakumar, K Kannan, SG John
International Journal of Food Engineering 11 (1), 127-137
- 2015 Electrochemical degradation of sago wastewater using Ti/PbO₂ electrode:
optimisation using response surface methodology
V Sangeetha, V Sivakumar, A Sudha, K Kannan
International Journal of Electrochemical Science 10 (2), 1506-1516
- 2015 Competitive biosorption of Cr (VI) and Zn (II) ions in single-and binary-metal
systems onto a biodiesel waste residue using batch and fixed-bed column studies
S Muthusamy, S Venkatachalam
RSC Advances 5 (57), 45817-45826
- 2015 Mass transfer kinetics during osmotic dehydration of amla (*Emblica officinalis L.*)
cubes in sugar solution
D Tiroutchelvame, V Sivakumar, PJ Maran
Chemical Industry and Chemical Engineering Quarterly 21 (4), 547-559
- 2015 Application of D-optimal design to extract the pectin from lime bagasse using
microwave green irradiation
K Thirugnanasambandham, V Sivakumar
International journal of biological macromolecules 72, 1351-1357
- 2015 Response surface modelling and optimization of treatment of meat industry
wastewater using electrochemical treatment method
K Thirugnanasambandham, V Sivakumar, JP Maran
Journal of the Taiwan Institute of Chemical Engineers 46, 160-167

Modeling of by-product recovery and performance evaluation of Electro-Fenton treatment technique to treat poultry wastewater
K Thirugnanasambandham, S Kandasamy, V Sivakumar, R Mohanavelu
Journal of the Taiwan Institute of Chemical Engineers 46, 89-97