

Contents

Selection of Medium and Optimization of Process Parameters for Melanin Biosynthesis from <i>Pseudomonas stutzeri</i> HMGM-7	1
Harsha Thaira, Shraddha S. Bhosle, Rajmohan Balakrishnan and Keyur Raval	
Unstructured Kinetic Modeling of Glutathione Production by <i>Saccharomyces cerevisiae</i> NCIM 3345	11
Abhinandan Dhavale, Atul Vhanmarathi, Shrinivas Deshmukh and Seema Dabeer	
Statistical Optimization of Lactic Acid Extraction from Fermentation Broth Using Emulsion Liquid Membrane.	21
Avinash Thakur, Parmjit Singh Panesar and Manohar Singh Saini	
Optimization of Microwave Assisted Extraction of Pectin from <i>Helianthus annuus</i> Head Using Response Surface Methodology	35
B.K. Aarthi, V. Aswini, M. Lakshmi Priya, M. Nirosha and M. Shanmugaprakash	
Production and Characterization of Hydrophobins from Fungal Source	47
Basavaraj Hungund, Chaitanya Habib, Vaibhav Hiregoudar, Sona Umloti, Saiprasad Wandkar and Gururaj Tennalli	
Sustainable Utilization of Food Industry Waste and by-Products for the Production of Prebiotic Isomaltooligosaccharides (IMO).	55
Anindya Basu and S.G. Prapulla	
Enhancing the Bioproduction of Cellulase by <i>Aspergillus nidulan</i> via Medium Optimization	65
P. Saravanan and R. Muthuvelayudham	

Modeling and Theoretical Analysis of Isomaltooligosaccharide (IMO) Production Using Fed-Batch Process	73
Sarma Mutturi and Anindya Basu	
Optimization of Na₂CO₃ Pre-treatment by RSM Approach for Releasing Reducing Sugars from Cocoa Pod Shells	85
Vinayaka B. Shet, Nisha, Manasa Bhat, Manasa, Leah Natasha S. Mascarenhas, Louella C. Goveas, C. Vaman Rao and P. Ujwal	
Partitioning of Nitrilase Enzyme from <i>Pseudomonas putida</i> in Polymer/Salt Aqueous Two Phase System	93
V. Lokesh Ramana, Iyyaswami Regupathi, B.S. Rashmi and S. Nainegali Basavaraj	
Aqueous Two-Phase (Acetonitrile–Potassium Citrate) Partitioning of Bovine Serum Albumin: Equilibrium and Application Studies	101
Badekar Sagar Dilip, Regupathi Iyyaswami, Basavaraj S. Nainegali and B.S. Rashmi	
Mixed Surfactant Based Reverse Micelle Extraction of Lactose Peroxidase from Whey	111
Sivananth Murugesan, Prudhvi Ambakam, Akshay Naveen, Aarathi Makkada, Nithin Solanki and Regupathi Iyyaswami	
Evaluation of Bio-surfactant on Microbial EOR Using Sand Packed Column	121
A. Rajesh Kanna, Sathyanarayana N. Gummadi and G. Suresh Kumar	
Extraction of Polyphenols from Orange Peel by Solvent Extraction and Microbial Assisted Extraction and Comparison of Extraction Efficiency	129
Prabha Hegde, Pushpa Agrawal and Praveen Kumar Gupta	
Enzymatic Concentration of <i>n</i>–3 Polyunsaturated Fatty Acids from Indian Sardine Oil	137
Charanyaa Sampath, N. Anita, B.D. Prasanna and Iyyaswami Regupathi	
High-Throughput Screening of Cell Repellent Substrate Chemistry for Application in Expanded Bed Adsorption Chromatography	145
Vikas Yelemane, Martin Kangwa and Marcelo Fernández-Lahore	
Concentration of <i>C-Phycocyanin</i> from <i>Spirulina platensis</i> Using Forward Osmosis Membrane Process	153
Shoaib A. Sharief and Chetan A. Nayak	

Design and Fabrication of Miniature Bubble Column Bioreactor for Plant Cell Culture	163
K. Sandesh, P. Ujwal, Blecita D. Mascarenhas, Gayatri Dhamannavar, Narmada Kumar and Dakshayini	
Industrial Applications of Caffeine Degradation by <i>Pseudomonas</i> sp.	171
Swati Sucharita Dash, Sree Ahila Retnadhas, Nameeta Rao and Sathyanarayana N. Gummadi	
Highly Sensitive Determination of Ascorbic Acid, Dopamine and Uric Acid Using Mesoporous Nitrogen Containing Carbon	179
Anju Joshi and C.N. Tharamani	
Nano-aptamer Based Quantitative Detection of Chloramphenicol.	187
Richa Sharma, K.V. Ragavan, K.S.M.S. Raghavarao and M.S. Thakur	
Influence of Substrate Concentration, Nutrients and Temperature on the Biodegradation of Toluene in a Differential Biofilter Reactor.	197
Suganya Baskaran, Shri Vaishnavi Perumal Selvakumar, Roshni Mohan, Rhea Mariam John, Swaminathan Detchanamurthy, Meyyappan Narayanan and Peter Alan Gostomski	
Importance of Biomass-Specific Pretreatment Methods for Effective and Sustainable Utilization of Renewable Resources.	207
Yadhu N. Guragain and Praveen V. Vadlani	
Medium Optimisation for Maximum Growth/Biomass Production of <i>Arthrobacter sulfureus</i> for Biodesulphurisation	217
E. Asha Rani, M.B. Saidutta and B.D. Prasanna	
Effect of Electrodeposited Copper Thin Film on the Morphology and Cell Death of <i>E. Coli</i>; an Electron Microscopic Study	227
Arun Augustin, Harsha Thaira, K. Udaya Bhat and K. Rajendra Udupa	
Optimization of a Glucocorticoid Encapsulated PLGA Nanoparticles for Inflammatory Diseases	233
Sriprasad Acharya and Bharath Raja Guru	

Biotechnology and Biochemical Engineering
Select Proceedings of ICACE 2015

B. D., P.; Gummadi, S.N.; Vadlani, P.V. (Eds.)

2016, XI, 239 p. 115 illus., Hardcover

ISBN: 978-981-10-1919-7