

Title of abstract in Times New Roman font: size12 point, Bold, centered paragraph

¹Author, A.A., ^{1*}Second-Author, B.B., ²Third, C.C. & ²So-on, D.D.

*lead presenter

¹e-mail address of lead presenter, Institution, country

² Institution, country

The main text, use Times New Roman font, 12 point for the remainder of the abstract. Type or paste your text into this file, but remember to keep the page margins the same as is set here which is 2.5 cm all round. Paragraphs are justified (straight-edged) on both left and right.

Use 1.5 spacing and leave a line gap between paragraphs. This helps your text to be read easily. If you would like to insert a figure you can do so. Use the *insert picture* command and *paste special* as an enhanced metafile for ease of handling. If you want, you can set the text to flow around the figure, but do remember to include a figure caption.

The abstract deadline is November 30th 2022.

If you need to receive a formal acceptance of your abstract in order to be funded to come to the conference, please write this in your e-mail to the conference secretary and you will receive a prompt reply.

In the last add the picture and profile of the corresponding/presenting author (Line spacing: 1 point, Times New Roman, 12 point. The sample abstract is also attached.

The maximum word limit for the abstract is 300. Abstracts that do not meet these formatting requirements will be returned. The organizing committee reserves the right to edit abstracts for clarity or correctness of English, but will consult the author if any significant changes are needed.



Investigation of Reaction Kinetics of Municipal Wastewater in Batch Reactor using Aerobic Technique

Um-e-habiba¹, Maham Hussain*¹, Waqas Aleem², Shaista javed¹, Sadiq Hussain¹

¹Department of Chemical Engineering NFC institute of Engineering and Technology, Multan.
Pakistan

²Department of Chemical, Petroleum and Petrochemical Technology, Mir Chakar Khan Rind
University, D.G Khan, Pakistan

Corresponding author: aleem.waqas@gmail.com, waqas.aleem@mcut.edu.pk

The municipal wastewater in general are characterized by high Biochemical Oxygen Demand and Chemical Oxygen Demand. In the present investigation thorough biological treatment study was carried out on municipal wastewater using powdered activated charcoal as adsorbent. Activated sludge process is the most widely used technology in the wastewater treatment. In this process, secondary settling tank (SST), as the final treatment unit, separates the suspended biomass from the treated water to produce a clear effluent through gravity sedimentation. The main intention of this study is focused on evaluation of kinetic parameters of activated sludge process for municipal wastewater. The kinetic parameters is calculated by experimental studies on pilot scale batch reactor using activated sludge system technique. In this research the composition of wastewater is also determined by all the three ways mean by physically chemically and by biologically. In this project composition is also studied to find out the different types of bacteria was present in the waste water. This study also shows that how the bacteria effects the overall organic degradation and also the performance of the activated sludge system. The calculation of kinetic coefficients is based on COD value. The maximum degradation of the substrate is 0.54 day^{-1} was observed due to CRE (COD removal efficiency) of 99.31% during 13 days.

About Authors



Waqas Aleem received his PhD. in Chemical Engineering from Universiti Teknologi PETRONAS, Malaysia in 2018. He obtained his M.Sc. Petroleum Technology and B.Sc Chemical Engineering from University of TEESIDE, UK and Bahauddin Zakariya University, Pakistan, respectively. He has vast experience in teaching and research. He is currently serving at the Department of Chemical Engineering Technology, Mir Chakar Khan Ring University of Technology, Dera Ghazi Khan. Previously he worked as an Assistant Professor at MNS-University of Engineering and Technology, Pakistan. Dr Aleem has extensive teaching and research experience in Malaysia and Pakistan.

