Current Pharmaceutical Analysis

Manuscript Evaluation Form

Editor-in-Chief: Anastasios Economou, Department of Chemistry, Laboratory of Analytical Chemistry, University of Athens, Athens, Greece

PAPER IIII E	A Bayesian Regularized Artificial Neural Network for Simultaneous Determination of Loratadine, Naproxen And Diclofenac in wastewaters
AUTHOR(S) NAME	Mojtaba Mohammadpoor, Roya Mohammadzadeh Kakhki, Hakimeh Assadi

Sec. A: REFEREE'S ASSESSMENT (cross as appropriate) Criterion Excellent Good Fair Poor Originality of the topic X **Technical Quality** Х Importance in its Field Х Style & Overall Representation X Readily Understandable Х Suitability for the Journal Х Adequate Illustrations or Drawings \mathbf{X} English language **Description** Yes No Comments/ Suggestions Does the title represent manuscript's contents? X Is the Abstract accurate and concise? Х Are the approach/ methods properly described? Х Are the conclusions and interpretations sound? X Are the references properly cited? Х Is this a new/ original/ contribution? X Is it within the scope of the journal? X (Excellent ---- Poor)

Sec. B: REFEREE'S RECOMMENDATIONS		OTHER SPECIFIC CRITICISMS	
Accept with minor changes	X	Imperfect style	х
Accept with major changes		Too long	
Reject in current form, but may be resubmitted		References incorrectly presented	
Reject, with no resubmission		Typographical and Grammatical errors	Х
PAPER TYPE: Research article	Review article	Letter article	

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Overall the Paper is Rated:

BENTHAM SCIENCE PUBLISHERS:

Confidential Comments to the Editor (not for Transmission to Authors):				
This article is within the scope of the journal and suitable for publication after some revision.				
1 J				

Comments for the Authors (continue on another sheet, if necessary):

Review of the article entitled

A Bayesian Regularized Artificial Neural Network for Simultaneous Determination of Loratadine, Naproxen And Diclofenac in wastewaters, by Mojtaba Mohammadpoor, Roya Mohammadzadeh Kakhki, Hakimeh Assadi

In this study, an artificial neural network trained by the backpropagation learning was employed to predict Loratadine, Naproxen and Diclofenac in turnery mixtures in water, using UV-Vis spectroscopy. The effect of different number of neurons in hidden layer was analyzed based on final mean square error, and the optimum number was selected. The obtained results showed that Bayesian regularization algorithm has the best performance among the other evaluated methods and an acceptable mean square error between the predicted and actual values.

This article is within the scope of the journal and suitable for publication after some revision.

The English language, grammar and spelling have to be improved.

For example, in the title replace and, instead of And

In the abstract state: Chemometric methods are an effective way to analyze several components simultaneously, instead of analyses

On page 2, replace: some difficulties, instead of difficult, have been used, instead of have used, abilities instead of abbilities, repeating chemical experiments is expensive, or repeated chemical experiments are expensive On page 3, state: The aim of this research, instead of the this research

On page 6, use the abbreviation et al. instead of et. al

Replace controlling instead of controlling

Page 7, Leave-one-out validation method is another way that is used in this research

Page 8, use plural for

Their spectra are overlapped with each other, instead of is

Therefore ternary mixtures of medicines were prepared in these linear ranges.

Figure 4 is showing, instead of capital letter Is showing.

Page 9, state: Table 1 and Figure 5 are showing

much closed to 100 %

Page 11, state: As it is shown, or As shown,

Figure 6 is showing, instead of capital letter Is showing

Page 12, use plural and correct the sentences: The predicted results of the remaining experiment are compared with their actual values.

BENTHAM SCIENCE PUBLISHERS:

Average MSEs are plotted in Figure 7 with respect to the number of neurons in the hidden layer.

different backpropagation (BP) algorithms are applied

The results are shown in Table 3.

As it is shown, or As shown

Page 14, The final prediction results of the algorithm are shown in Table 4. The values of individual prediction for each row are compared with their actual values. The total MSE values are shown in the last row.

In Conclusion, a dataset consisting of UV-Visible spectra and the absorbance values is made

The results show acceptable mean square errors and R-values.

The best value of the number of neurons in the hidden layer is found.

Replace capital letter at the beginning of the sentence: Other backpropagation methods

State the complete term and the abbreviation at the first place where it appears in the manuscript, in the rest of the text use either the abbreviation or full term.

Some additional spaces should be deleted between some words or numbers and at the adequate places in the manuscripts spaces should be added.

Heading 2, on page 3, should be stated in the capital letters

Use the first capital letter for Figure or Table in the entire manuscript, as well as the same style of labeling in Figure legends and Table captions.

Use the abbreviation Lor for Loratadine in Figure 3 and Table 3, instead of Lur.

Use two words for Eigen values in Table 1 and the legend of Figure 5.

Begin the legend of Figure 8 with the capital letter: The performance of the network

Move the first row of Table 1 to the next page, place complete table on the same page.

Put the points after the legends of Figures 1-9.

Place the adequate legend below Figure 6.

The quality of some figures can be improved.

Format the entire manuscript uniformly, including references.

The numbers of pages, the last page, or issues should be added in some references.

FIELD OF EXPERTISE OF REFEREE: Materials and chemical technologies, nanotechnologies, biomedical engineering, chemistry, medicinal and pharmaceutical chemistry

Name & Affiliation of referee: Tamara Jovanovic, Department of Biomedical Engineering, Faculty of Mechanical Engineering, University of Belgrade, Kraljice Marije 16, 11120 Belgrade, Serbia

Dr Tamara Jovanovic / February 21, 2019

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