



13th Joint Conference on Chemistry

Certificate of Presentation

This is to certify that

Joni Agustian

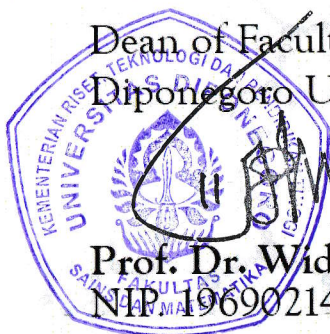
has presented a paper entitled

**Hydrolysis of Tapioca Starch using Amylase Immobilised on
Magnetic Mesostructured Cellular Foam Silica (MCF-(9.2T-3D))**

at the 13th Joint Conference on Chemistry held on 7-8 September 2018 in
Semarang that organised by Chemistry Department, Diponegoro University

Semarang, 8 September 2018

Dean of Faculty of Sciences and Mathematics
Diponegoro University



Prof. Dr. Widowati, M.Si
NIP. 19690214 1994032002

The Chair of
13th Joint Conference on Chemistry



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Hydrolysis of Tapioca Starch using Amylase Immobilised on Magnetic Mesostructured Cellular Foam Silica (MCF-(9.2T-3D))

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Abstract:

Innovations and studies of magnetic mesoporous silica for supports of alpha-amylase and glucoamylase immobilisation have not been performed because the magnetic supports are only associated nanoparticles (pure or composite). Therefore, it is desirable to study the method of synthesis of magnetic mesoporous cellular foam silica, to observe the immobilization method of amylase enzymes (alpha- and gluco) on this supports, and to know the characteristics of these immobilized enzymes in the starch hydrolysis process. The synthesis of magnetic MCF silica is an attempt to insert nano Fe compounds into the siliceous matrix. Variations in the number of nanoparticles and MCF silica components as well as other operating condition factors were studied to determine the magnetic support products based on BET, FTIR and SEM-EDX analyzes. The operating conditions of the immobilization process of alpha-amylase and glucoamylase enzyme on the support were varied during the process to know their effects in which the end result is a large number of the enzymes immobilized onto the support concluded from the analysis of protein content, FTIR and SEM-EDX. Starch hydrolysis was observed by type of both enzymes (free and immobilized) where the liquefaction stage observation was performed with alpha-amylase enzyme, while the saccharification stage was performed with glucoamylase enzyme.



13th JOINT CONFERENCE ON CHEMISTRY

September 7-8, 2018
Semarang, Indonesia



28st June 2018

Dear **Joni Agustian**

University of Lampung, Indonesia

ACCEPTANCE LETTER

Thank you for submitting your abstract for presentation at "13th Joint Conference on Chemistry" to be held 7th -8th September 2018 in Semarang, Indonesia. We have reviewed your paper abstract and found that they meet preliminary acceptance requirements set forth by the committee

Your abstracts entitled:

1. **Hydrolysis of Tapioca Starch using Amylase Immobilised on Magnetic Mesostructured Cellular Foam Silica (MCF-(9.2T-3D))** is accepted for **Oral Presentation**
2. **Capability of immobilised glucoamylase on mesostructured cellular foam silica to hydrolyse tapioca starch** is accepted for **Poster presentation**
3. **Mesostructured cellular foam MCF-(9.2T-3D) silica as support for free a-amylase in liquefaction of tapioca starch** is accepted for **Poster Presentation**

Congratulations and you may begin making your conference plans!

Please save this message for reference.

- ✓ Confirmation of your presentation on the final schedule is contingent upon full payment of fees by 7th July 2018 for early bird and 7th August for late payment.
- ✓ After that time, your presentation will be dropped from the program if you are not yet registered with fees paid in full. If you have extenuating circumstances which would require later payment, please contact us jcc@live.undip.ac.id to make arrangements prior to 7th August 2018.
- ✓ The registrar will provide confirmation when your registration and fees have been received and processed.
- ✓ Please note that 13th Joint Conference on Chemistry committee does not have funds available to pay registration and/or travel expenses for program participants.
- ✓ You must attend and present the paper at the conference in order to be included in the program and proceedings.
- ✓ The preliminary program, including registration materials, will be posted online at conference website (<https://jcc.undip.ac.id/>)
- ✓ Substitutions for presenting authors may be made until 7th August 2018. The substitute must be registered for the conference by contacting conference committee. The substitute will be listed as the presenting author in conference materials.
- ✓ No changes to the title or text of your submission will be accepted after 7th August 2018.
- ✓ You will receive final confirmation of your place on the program as well as specific details and information about your session between 8th -11th August 2018 (contingent upon your registration and payment of fees by 7th August 2018).



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- ✓ Please note that individual requests for specific presentation dates and/or times cannot be addressed due to the very large number of presentations and other factors that the program committee must consider when scheduling the overall program.
- ✓ You are encouraged to prepare a fullpaper to be published, however the submission of a paper is optional.
- ✓ A review coordinator will arrange for two independent and anonymous reviews. Papers deemed acceptable by this process will be included in the conference proceedings or conference partner journal.
- ✓ Papers must be no longer than 8,000 words and must be written in English prepared in Word and submitted by 14th August 2018.
- ✓ Reviews will be completed and comments sent back to you by 7th October 2018. Revisions, if applicable, will be due 21st October 2018.
- ✓ Please note that you must be registered, with fees paid, and you must make your presentation at the conference in order to have your paper published in the conference proceedings or conference partner journal.

Feel free to contact us (jcc@live.undip.ac.id) if you have any questions about your abstract and full paper submission. We try to respond to you quickly

Thank you for your interest, and we look forward to working with you on a successful conference

Yours sincerely,

Adi Darmawan, Ph.D

The Chair of 13th Joint Conference on Chemistry