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PREFACE

The development of materials science and technology plays an active role in the development of several fields of life including industry, medical, infrastructure, energy and the others. Researchers and academics are the forefront of this development and Indonesia Journal of Materials Science – JUSAMI – was founded to represent their needs, which are now widely recognized as an integral part of scientific and characterization investigations. JUSAMI Vol. 21 No. 4, July 2021 is proudly published several paper entitled: Radiation Synthesis of Poly(Vinyl Alcohol) PVA-(Polyvinyl Pyrrolidone) PVP for Immobilization of Captopril; Effect of Ultrasonic Treatment on the Consolidation of ODS Steel FeCrY2O3 Processing with Capsulated Sintering Process; The Effect of Milling Time And Percentage of Dispersing Agent on The Characteristic of Solvent-Based Black Paint from Carbon Black Pigment; Properties of Edible Film from Modified Sago Starch Precipitated by Butanol; Synthesis and Characterization of HPMC/HAp/Fe3O4 Composite for Hyperthermia Application; Bioreduction and Characterization of Silver Nanoparticles from Oil Palm Empty Fruit Bunch; and Characterization of Composite Containing LDPE (Low Density Poly Ethylene) and Modified Pineapple Leaf Fiber.

All papers published in this volume of JUSAMI have been peer reviewed through processes administered by the journals Editors. Reviews were conducted by expert referees to the professional and scientific standards expected of a JUSAMI.

Finally, this issue would not have been possible without the greatest support of the Editorial Board and secretariat members, and we would like to express our sincere thanks to all of them. And all the Editorial Boards conveyed the support of the writers and reviewers, so that the Indonesia Journal of Material Science could display articles on quality research and development materials that are expected to contribute to the development of materials science.

Editor in Chief

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Author Guidelines

General Information about Indonesian Journal of Materials Science (Jusami)

1. Journal scope

The topics discussed in Indonesian Journal of Materials Science are research & development results in: Material science and engineering; and Technological innovations and applications in industry based on materials such as polymers, ceramics, composites, metals or metal alloys, which are related to mechanical, magnetic, physical, dielectric or electronic properties with discussion includes: synthesis and modification and development of methods; testing and characterization; simulation and modeling; and nuclear engineering and its application in material science, etc.

2. Originality and novelty

The submitted text must be: own work/not the result of plagiarism; not rewriting without updates and novelty; and shows the current status supported by an adequate library

3. Systematic articles

Manuscripts must include the following parts (in order):

• Article Title

Paper's title in capital letters and not more than 14 words

Abstract

ARTICLE TITLE IS REWRITTEN IN UPPERCASE. Abstract is written in English include background, methodology, the results and conclusions. The abstract should be brief and clear, not exceeding than 200 words. Do not include art work, tables, elaborate equations or references.

Keywords

maximum 5 words with the first word is the most important word.

Introduction

Manuscripts written in Indonesian or English are typed with Microsoft Word for Windows on A4 size paper with right, left, top and bottom margins 30, 20, 30 and 25 mm respectively. The text is typed with the new romance font time, the distance between lines is 1 space, consisting of 2 columns, with a maximum of 8 spaces including images, tables and attachments. The introductory section contains a brief ex-planation of the background and importance of the research problem, the current scientific status which is accompanied by a review of the latest references (literature of the last 5 years), hypothesis and research objectives accompanied by a novelty statement from this study. The reference numbers are written in sequence in square brackets, for example [1], or [2-5], or [1, 3].

• Experimental Method

• Materials and Instruments

Includes an explanation of the material used in the study by stating the brand or origin of the material obtained, written in sentence form. For example, sodium chloride, pro analyst (Sigma-Aldrich), battery waste obtained from the Z plant. The equipment used in this paper mentioned the brand and type and its function in this experiment. For example Differential Scanning Calorimeter (DSC) Perkin Elmer Jade for thermal analysis, JEOL JEM 1400 Transmission Electron Microscope (TEM) for microstructure analysis.

Method and Procedure

Method and Procedure is in the form of sentences that describe the steps of the research conducted.

• Results and Discussion

Discussion is carried out by referring to the objectives/hypotheses presented in INTRODUCTION and comparing with the results that already exist in the reference. At the end of the discussion, further research can be submitted.

Tables are numbered and must be referred sequentially according to the contents of the article. Each table must be accompanied by a title and if there is a measurement result, the unit must also be written in the title section. Tables are made without vertical dividing lines. All images given numbers must be referenced in articles in sequence. Images are sent in the form of Excel files that can still be edited for graphics and in the form of bitmaps (BMP, JPEG, TIFF, GIF) for photos/images. Images in the form of bitmaps must have a resolution of more than 300 dpi, unless there is a resolution limit for scientific reasons. Labels/captions are given in separate parts of the image. Graphs are given names and units on the axis. The writing of chemical equations and or mathematical agreements is carried out by the Microsoft Equation program and is numbered with Arabic numbers according to the discussion flow. Abbreviations must be completed at the beginning of loading in the article.

Conclusion

Conclusions are written in paragraph forms without numbering or indenting.

Acknowledgment

Acknowledgments are conveyed to funders and individuals who support the implementation of research and writing.

• References (in IEEE citation style)

Use Mendeley for creating list of references.

4. Adequacy of data and discussion

Manuscripts must include data with provisions including:

- The amount of data presented can be considered sufficient.
- Data is presented in graph/table form and has been given sufficient information
- Data presented has been accompanied by discussion.

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