

## e-ISSN 2477-2038 p-ISSN 2477-1422

JURNAL PENELITIAN DAN PEMBELAJARAN IPA

Vol.4, No.1, p.1-88, May 2018



PUBLISHED BY DEPARTMENT OF SCIENCE EDUCATION FACULTY OF TEACHER TRAINING AND EDUCATION UNIVERSITY OF SULTAN AGENG TIRTAYASA IN COLLABORATION WITH PERKUMPULAN PENDIDIK IPA INDONESIA (PPII)/ INDONESIAN SOCIETY FOR SCIENCE EDUCATORS



#### DEPARTMENT OF SCIENCE EDUCATION FACULTY OF TEACHER TRAINING AND EDUCATION UNIVERSITY OF SULTAN AGENG TIRTAYASA 2018

#### JURNAL PENELITIAN DAN PEMBELAJARAN IPA

## Vol.4, No.1, p.1-88, May 2018

### e-ISSN 2477-2038, p-ISSN 2477-1422

Person in Charge	: Dean of Faculty of Teacher Training and Education
	University of Sultan Ageng Tirtayasa
Editor in Chief	: R. Ahmad Zaky El Islami, M.Pd.
Editor	: Dr. Sjaifuddin, M.Si.
	: Dr. Suroso Mukti Leksono, M.Si.
	: Lukman Nulhakim, M.Pd.
	: Liska Berlian, M.Si.
	: Prasetyaningsih, M.Pd.
	: Prof. Antriman Vipinosa Orleans, Ph.D
	: Dr. Prasart Nuangchalerm
	: Prof. Lilia Halim, Ph.D
	: Prof. Dr. Bayram COSTU
Graphic Design	: Aditya Rakhmawan, M.Pd.
Secretariat	: Vica Dian Aprelia Resti, M.Pd.
	: Mudmainah Vitasari, M.Pd.
Reviewer	: Dr. Yanti Herlanti, M.Pd.
	: Dr. Sigit Saptono, M.Pd.
	: Dr. Fahyuddin, M.Si.
	: Dr. Aliefman Hakim, M.Si.
	: Prof. Dr. Saberi Othman
	: Chatree Faikhamta, Ph.D
Publisher	: Department of Science Education
	: Faculty of Teacher Training and Education
	: University of Sultan Ageng Tirtayasa
	: in Collaboration with Perkumpulan Pendidik IPA Indonesia
	(PPII)/Indonesian Society for Science Educators
	: Jl. Ciwaru Raya No. 25 Cipocok Jaya Serang Banten
	42117 Email: jppi@untirta.ac.id and jppiuntirta@gmail.com

### e-ISSN: 2477-2038, p-ISSN: 2477-1422

# JURNAL PENELITIAN DAN PEMBELAJARAN IPA Vol.4, No.1, p.1-88, May 2018

Jurnal Penelitian dan Pembelajaran IPA is published twice a year, May and November contains publications of research in the field of science learning (chemistry, physics, biology and natural science)

#### PUBLISHER

DEPARTMENT OF SCIENCE EDUCATION FACULTY OF TEACHER TRAINING AND EDUCATION UNIVERSITY OF SULTAN AGENG TIRTAYASA IN COLLABORATION WITH PERKUMPULAN PENDIDIKAN IPA INDONESIA (PPII)/ INDONESIAN SOCIETY FOR SCIENCE EDUCATORS

#### PREFACE

Praise to Allah SWT who has given all his gifts and favors so that publishers are able to publish the Jurnal Penelitian dan Pembelajaran IPA volume 4, number 2, May 2018. Shalawat and greetings may be poured into Prophet Muhammad SAW, to his family, his companions and his followers until the end of time. The publication of this journal can't be separated from the support of various parties, from university to degree level, researchers from within and outside University of Sultan Ageng Tirtayasa (UNTIRTA), other partners and stakeholders. Do not forget to thank the Dean of Faculty of Teacher Training and Education (FKIP) and Head of Department of Science Education, who has provided support in the publication of this journal. We would also like to thank both the moral and material support given by all parties who provided the way to the publication of research in UNTIRTA or outside UNTIRTA.

In volume 4 (four) number 1 (one) consists of 8 articles. All articles are the result of a research study. The research methods used by the authors include descriptive research, quasi experiment, experiment, survey, classroom research and research and development (R & D). The proportion of articles from the University of Sultan Ageng Tirtayasa is less than 40% and more than 60% of articles from outside University of Sultan Ageng Tirtayasa

Finally the editorial boards realizes that this journal is so far from perfect, constructive feedback and suggestions to publishers for future improvements so publishers hope that this journal can have better quality

Serang, May 2018

**Editorial Boards** 

#### TABLE OF CONTENTS

PREFACE	ii
TABLE OF CONTENTS	ii
Dynamic and Static Modeling Embedded in Inquiry Learning to Improve	
Student's Multiple Representation Ability	
Indah Langitasari, Effendy Effendy, Fauziyatul Fajaroh	1
Analysis of Science Learning Process by Using Learning Module of Character	
Education Oriented through Quantum Learning Approach	
Rona Taula Sari & Ira Rahmayuni Jusar	1
The Use of Affective and Cognitive Assessment on the Learning of Mirrors	
and Lenses through the Inquiry Laboratory Approach	
Riskan Qodar, Samsiah Samsiah, Zeni Hatyanto	2
Development of Teaching Materials Based on Local Excellences of South	
Sumatera for Science Learning in Elementary School	
Suratmi Suratmi, Laihat Laihat, Didi Jaya Santri	3
The Effectiveness of Scaffolding Based Virtual Class to Improve Student's	
Logical Thinking Ability	
Siti Romlah Noer Hodijah, Ria Sudiana, Dewi Murni	5
Context of Science on Environmental Conservation: Comparative Study	
between Thai and Indonesian Novice Science Teacher Students	
Prasart Nuangchalerm & R. Ahmad Zaky El Islami	6
Using Macro Flash Animation Media on Motion Material to Improve Learning	
Achievement for Learning Science in Junior High School	
Endang Saripudin, Indah Juwita Sari, Mukhtar Mukhtar	6
The Implementation of Pedagogical Content Knowledge (PCK) based Guided	
Inquiry on Science Teacher Students	
Lulu Tunjung Biru, Prasetyaningsih Prasetyaningsih, Mudmainah Vitasari,	
Vica Dian Aprelia Resti, Dwi Indah Suryani	7
Retraction Notice	8
Retraction Notice	8