



2017

**INTERNATIONAL CONFERENCE
ON INNOVATION IN EDUCATION,
SCIENCE AND CULTURE**

Grand Mercure Hotel
08 - 09/11/2017

**BOOK
OF**

**THE
PROGRAM**



Organized by:
Lembaga Penelitian, Universitas Negeri Medan
Jl. Willem Iskandar
Psr.V Medan, North Sumatera Indonesia 20221
Telp. (+6261) 6613365 - Fax: +6261- 6636730

Chair Foreword

The honorable,

- Professor Dr. Syawal Gultom, M.Pd, Rector of Universitas Negeri Medan
- Professor Dr. Jakrapong Kaewkhao, Director of the Center of Excellence in Glass Technology and Materials Science (CEGM), Nakhon Pathom Rajabhat University (NPRU), Thailand
- Rosemarie Daher Kowalski, Ph.D, Intercultural Studies, Research Metodology and Writing in Northwest University USA
- Professor Dr. Atty Cecilio D. Duka, Ed. D, Director Recoletos Law Center, San Sebastian College of Law – Manila
- Dr. Mati Harprathum (Researcher at The National Electronic and Computer Technology Center – NECTEC, Thailand)
- Vice Rectors
- Deans of Faculties of Education, Languages and Arts, Social Sciences, Natural Sciences and Mathematics, Engineering, Sports Sciences, and Economics
- Director of Postgraduate School of UNIMED
- Lecturers, researchers, students, all speakers and participants

Good Morning, *Salam Sejahtera*, Praise to Allah the Almighty for all His blessing, where today we are here to participate in 'The First International Conference on Innovation in Education, Science and Culture (ICIESC)' with the theme "Innovation Making Better Life".

Ladies and Gentlemen,

This conference presents a keynote speaker, 4 plenary speakers from Thailand, Philipphine, United States of America (USA) and Indonesia. Besides speaker, around 220 researchers covering lecturers, teachers, participants and students have attended in this conference. The researchers come from Manado, Palu, Kendari, Malang, Surabaya, Bandung, Jakarta, Palembang, Jambi, Batam, Pekanbaru, Padang, Aceh, Medan and several from Malaysia, Philipphine and Thailand.

I would like to express greatest thankful to all colleagues in the steering committee for cooperation in administering and arranging the conference. Hopefully this conference will be continued in the coming years with many more insight articles from inspiring research.

Regards,

Chairperson of ICIESC

Dr. Juniasul Rajagukguk, M.Si



**Welcoming Speech of Chairman of Research Institute, State University of Medan
International Conference on Innovation in Education, Science and Culture (ICIESC)**

On behalf of the 1st International Conference on Innovation in Education, Science and Culture (ICIESC) committee, I wish to welcome all of the participants to the conference being held during November 8 – 9, 2017 at Grand Mercure Hotel, Medan Sumatera Utara, Indonesia.

Welcome the honorable guests speakers Professor Syawal Gultom, M.Pd, Professor Jakrapong Kaewkhao, Rosemarie Daher Kowalski, Ph.D, Professor Atty Cecilio D. Duka, Ed. D and Dr. Mati Horprathum. Welcome also delivered to Vice Rectors, Deans of Faculties of Education, Languages and Arts, Social Sciences, Natural Sciences and Mathematics, Engineering, Sports Sciences, and Economics, Director of Postgraduate School of UNIMED, other speakers, and participants from outside and inside Unimed.

This conference is one of the manifestations of the vision and mission of Research Institute (Lemlit) of Unimed, namely the dissemination and implementation of the results of research and studies related to the community. Therefore we strongly support the activities of this seminar which is also a series of academic activities of Unimed. Through this seminar, the participants will exchange information related to the latest research in the field of education, science-technology and culture which is expected to bring new ideas in solving various problems.

In accordance with the theme presented in this conference "Innovation Making Better Life" it is expected that LemlitUnimed can lead and strengthen the future research. The goal of innovation is to improve of research quality especially for education, science, technology and culture. Through innovation in education, science and culture, the human resources will be capable for solving global crises such as internationally political conflicts, climate change and loss of biocultural diversity.

Thank you for all committed to has well organized this conference. Thanks to all keynote speakers who have attended, presented and shared their ideas on education, science and culture. Thanks to all researchers, students and participants and hopefully this will be scientific discussion to develop the future innovation.

Finally, I hope that all academicians and stakeholders of LemlitUnimed hand-in-hand to excel our institution to be a world class university.

Best wishes for all of us
Chairman of Lemlit Unimed

Prof. Motlan, M.Sc., P.h.D



Committee of ICIESC

Advisors

- Prof. Dr. Syawal Gultom, M.Pd (Rector of Unimed)
Prof. Drs. Motlan, M.Sc.,P.hD (Chairman of Research Institute of Unimed)
Dr. Martina Restuati, M.Si (Secretary of Research Institute of Unimed)
- International Scientific Committee**
- Prof. Dr. Jakrapong Kaewkhao (NPRU-Thailand)
 - Prof. Dr. Atty. Cecilio D. Duka, Ed.D. (San Sebastian College of Law, Manila - Philippine)
 - Prof. Dr. Ruhizan Mohamad Yassin (UKM Malaysia)
 - Prof. Dr. Nordin Hussin (UKM-Malaysia)
 - Assoc. Prof. Dr. Azizan Mat Esh (UKM-Malaysia)
 - Dr. Mohd Bin Samsudin (UKM-Malaysia)
 - Prof. Dr. Chan Kim Ling (Malaysia)
 - Prof. Alvin P Ang (Philippine)
 - Piyawut Srichaikul, Ph.D. (Thailand)
 - Dr. John Alvarez (Australia)
 - Dr. Michelle Henstridge (Australia)
 - Professor Tim Ackland (Australia)
 - Prof. Loretta Baldassar (Australia)
 - Prof. David Barrie (Australia)
 - Prof. Sandor Bartha (Australia)
 - Professor Dirk Baur (Australia)
 - Professor Snezhana Abarzhi (Australia)
 - Prof. Loretta Baldassar (Australia)
 - Professor Yrjö Engeström (Finland)
 - Professor Todd L. Hutner (USA)
 - Dr. Chao Cong (Korea)
 - Dr. Qian Yang (Korea)
 - Prof. Magdalena Pasarica (USA)
 - Dr. Ellen K. Henriksen (Norway)
 - Dr. M. Rodrigues (Portugal)
 - Dr. P. Simeão Carvalho (Portugal)

Conference Chairperson
Secretary
Treasurer
Secretariat

Papers and Proceedings

- Dr. Junastel Rajagukguk, M.Si
- Dr. Zulkifli, M.Si
- Dr. Hasti Fibriasari, M.Hum
- Sadelik S.Pd
- Rini Masecurity
- Roslaini
- Nanda Pratiwi, M.Pd
- Rahmad Gultom
- Dr. Saronom Slaban, M.Pd
- Dra. Ani Sutiani, M.Si
- Dr. Muhammad Amin, M.Pd
- Dr. Kustoro Budiarta, M.Si
- Ricky Syaputra, S.Pd., M.Sc

Program/Event	Ahmad Shafwan Pulungan, S.Pd.,M.Si Rafael S.Pd.,M.Pd
Public relations	Dr. Ratih Baiduri, M.Si Dewi Andriani, S.Pd.,M.Si
Publication and Documentation	Ater Budiman Sinaga, M.Si Satria Mihardi, S.Pd.,M.Si Pandapotan
Facility	Suyono Agus Ismayadi Cecep
Technology Infomation	Jerry S. Pauned, S.Si.
Accommodation and Transportation	Henry Situmorang, S.Sos Dr. Makmur Sirait, M.Si Dr. Karya Sinulingga
Consumption	Rosmina Purba Rizki Fadhillah
Receptions	Rahma Diana Asmawati

THE
Character Building
 UNIVERSITY

Schedule of International Conference on Innovation in Education, Science and Culture (ICIESC)
Grand Mercure Hotel, November 9, 2017

(Thursday, November 9, 2017)

Time	Activities	PIC Secretariat
07.00 – 08.30	Registration	
08.30 - 09.00	Opening Ceremony 1. MC Speech 2. National Anthem 3. Pray 4. Traditional Welcome Dance 5. Welcoming Speech of Lemlit Chairman	Isli Iriani Indah Pane, S.Pd., M.Hum/ Jiki
09.00 – 09.40	Plenari Lecture 1: (Opening of conference) Prof. Dr. Syawal Gultom, M.Pd (Rector of State University of Medan– Indonesia)	Isli Iriani Indah Pane, S.Pd., M.Hum
09.40 – 10.25	Plenari Lecture 2 Prof. Dr. Jakrapong Kaewkhao (Director of the Center of Excellence in Glass Technology and Materials Science (CEGM), Nakhon Pathom Rajabhat University (NPRU), Thailand)	Nora Susanti, SSt, MSc, APT
10.30 – 11.20	Plenari Lecture 3 Rosemarie Daher Kowalski, Ph.D (Intercultural Studies, Research Metodology and Writing in Northwest University USA)	Dra. Martina Asiati Napitupulu, M.Sc
11.20 – 12.10	Plenari Lecture 4 Prof. Dr. Atty Cecilio D. Duka, Ed. D (Director Recoletos Law Center, San Sebastian College of Law – Manila)	Dr. Anni H. Pulungan, M.Hum
12.10 – 12.45	Invited Speaker: Dr. Mati Horprathum (Researcher at The National Electronic and Computer Technology Center – NECTEC, Thailand)	Prof. Dr. Sumarno, M.Pd
12.45 – 13.30	Lunch Break/ Poster Session	Committee
13.30 – 15.30	Parallel Session 1	Moderator
15.30 – 15.50	Coffee Break	Committee
15.50 – 17.30	Parallel Session 2	Moderator
17.30 – 17.45	Closing in parallel room by moderator	Moderator

Room:	Acacia	Aster	Lily	Camomile
Moderator :	Dr. Muhammad Amin	Dr. Karya Sinulingga	Rafael Ginting, M.Pd	Dr. Makmur Sirait, M.Si
Time				
13.30-14.10	ABS-3	ABS-7	ABS-4	ABS-51
	ABS-36	ABS-28	ABS-10	ABS-52
	ABS-47	ABS-30	ABS-12	ABS-54
14.10-14.50	ABS-48	ABS-43	ABS-13	ABS-55
	ABS-56	ABS-87	ABS-14	ABS-77
	ABS-57	ABS-88	ABS-15	ABS-82
14.50-15.30	ABS-65	ABS-97	ABS-24	ABS-83
	ABS-81	ABS-105	ABS-31	ABS-84
	ABS-90	ABS-109	ABS-60	ABS-104
15.30-15.50	Coffee Break			
16.00-16.45	ABS-95	ABS-121	ABS-69	ABS-110
	ABS-96	ABS-127	ABS-101	ABS-111
	ABS-100	ABS-148	ABS-106	ABS-116
16.45-17.30	ABS-108	ABS-150	ABS-123	ABS-122
	ABS-112	ABS-156	ABS-149	ABS-134
	ABS-119	ABS-158	ABS-152	ABS-139
17.30-18.00	ABS-165	ABS-160	ABS-154	ABS-142
	ABS-168	ABS-162	ABS-161	ABS-144
	ABS-172	ABS-70		ABS-146

Schedule of Poster Session

Personal In charge (PIC):

1. Shafwan S. Pujungan, S.Pd., M.Pd
2. Satria Mihardi, S.Pd., M.Pd
3. Rahmat, S.Pd

No	ID-Code	Type
1	ABS-17	Poster
2	ABS-22	Poster
3	ABS-32	Poster
4	ABS-39	Poster
5	ABS-45	Poster
6	ABS-50	Poster
7	ABS-66	Poster
8	ABS-67	Poster
9	ABS-71	Poster
10	ABS-72	Poster
11	ABS-78	Poster
12	ABS-79	Poster

No	ID-Code	Type
13	ABS-80	Poster
14	ABS-85	Poster
15	ABS-91	Poster
16	ABS-93	Poster
17	ABS-113	Poster
18	ABS-114	Poster
19	ABS-115	Poster
20	ABS-117	Poster
21	ABS-124	Poster
22	ABS-126	Poster
23	ABS-128	Poster
24	ABS-163	Poster

Code	Title	Page
PS-1	Luminescence Material from Glass Doped Ln ³⁺ and Their Applications <i>Jakrapong Kaewkhao</i>	1
PS-2	Connected and Collaborative: 3 Trends in Education <i>Rosemarie Daher Kowalski, Ph.D.</i>	2
PS-3	Unity in Diversity in Education: The Philippine Experience <i>Atty. Cecilia D. Duka, Ed.D.</i>	3
PS-4	Research and Development of Thin Film and Nanostructure at NECTEC, Thailand <i>Mati Horprathum</i>	7
ABS-1	Lexical Change in Javanese Dialect Used in Medan <i>Desi Haryati Nainggolan</i>	8
ABS-3	Reducing Heavy Metal Contamination in Marine Dredged Sediment in Its Use as Substitute Material in Road Construction <i>Ernesto Silfonga</i>	8
ABS-4	Strength And Durability Of K-300 Concrete Mix for Earthquake-Resistant Housing Infrastructure in Indonesia <i>Fahrizal Zulkarnain</i>	9
ABS-5	Encouraging the Translation Teaching in The Classroom <i>Roswani Siregar</i>	9
ABS-6	Development of Cooperative Learning Model Type TGT (Teams Games Tournament) Integrated on Scientific Approach in The Subject of The Periodic System Of The Elements In Class X SMA Negeri 1 Pangkajene <i>Herbert C.B. Manalu, Saronom Silaban, Westy Hutabarat</i>	10
ABS-7	Component of Essential Oil of Hyptis Pectinata Poit Leaf From West Java <i>Zainal Arifin, Meiny Suzery, Bambang Cahyono</i>	10
ABS-8	Role of Vocational Education in Facing Development of Science and Technology of Globalization Era <i>Sudirman</i>	11
ABS-9	The Stathe Effect of Reciprocal Teaching Strategy on The Students Reading Comprehension Achievement in Recount Text of Grade X Students at SMA Pangcaan Antasari in Academic Year 2017/2018 <i>Desi Haryati Nainggolan</i>	11
ABS-10	Mohs Hardness Seale and Micro Vickers Hardness Study of BGO and LYSO Inorganic Scintillators <i>Wuttichai Chaiphaksa, Pruttipol Limkitjaroenporn, Hong Joo Kim, Jakrapong Kaewkhao</i>	12
ABS-12	Development of bismuth sodium borate glasses for radiation shielding materials	12

Code	Title	Page
	<i>Wasu Cheewasukhanont, Pruittipol Limkitjaroenporn, Kittipong Siengsanoh, Jakrapong Kaewkhao</i>	
ABS-13	FTIR, PCR and Energy Resolution Study of GAGG:Ce Scintillator <i>Pruittipol Limkitjaroenporn, Wiraporn Hongtong, Hong Joo Kim and Jakrapong Kaewkhao</i>	13
ABS-14	Comparative study on Structural, Physical and Optical Properties of Standard clear and green float glass <i>Nattapon Srisittipokakun Pornnapha Mangthong Phalut Leowkijisiri and Jakrapong Kaewkhao</i>	13
ABS-15	Analysis of Students Chemistry Learning Outcome Taught by Cooperative Learning Models of Tgt and Stad Using Powerpoint on Colloidal Topic <i>Salahuddin Al Ayubi Pane, Vina Rezekyah Hasibuan</i>	14
ABS-17	Developing Teaching Material Book Project Based in Improving Students Archival Competence of Business Management Vocational School <i>Sri Maimannah, Rotua SP Simandiang, Ellys Siregar</i>	14
ABS-22	New Culture In Buying and Selling Online in the era of Globalization <i>Siti Sadiyah</i>	15
ABS-23	Analysis of Learning Accounting With Addie Model in Improving Learning Quality <i>Henny Zurika Lubis, Jamila</i>	16
ABS-24	Improve Outcomes Study Subjects Chemistry Teaching and Learning Strategies through independent study with the help of computer-based media <i>Gulmah Sugiharti</i>	16
ABS-27	The Instructional Process on The Perspective Learning Resources at Islamic Junior High School Raudhatul Hasanah Paya Bundung Medan North Sumatra <i>Purhatia Manurung</i>	17
ABS-28	The Influence of Red Fruit Oil on Creatin Kinase Level at Maximum Physical Activity <i>Fajar Apollo Sinaga</i>	17
ABS-29	Implementation of Google Classroom Application In Course Meteorology & Climatology Teaching Date 2017/2018 <i>Riki Rahmad, M. Ridha S Damanik, Ali Nurman, Mona Adria Wirda</i>	18
ABS-30	Shuttle Tool: Designing The Bleep Test Tool as A Digital Aerobic Endurance Test System	18

Code	Title	Page
	<i>Imran Akhmad</i>	
ABS-31	Application Model Guided Inquiry Learning With Media Map Concept To Motivation, Creativity, And Outcomes High School Student Learning In Redox <i>Jusmasari Harahap, Novita Sari, Zainal Arifin</i>	19
ABS-32	Utilization of Puzzles To Improve Student Achievement And Creativity In Matter Of Nervous System And Human Sense <i>Sri Wartika, Zainal Arifin, Nuraini</i>	19
ABS-33	Implementation Of Inquiry Learning Model Using Powerpoint On Psychomotoric Of Student Learning In Cost Of The Colloid System <i>Fadhilah Latief, Nuraini, Novita Sari, Agus Salim Samosir</i>	20
ABS-34	Application of Scientific Inquiry Model with Batak Culture to Improve Science Process Skill <i>Derlina, Putri Syahreni Harahap, Mara Bangun Harahap</i>	20
ABS-35	Influence of Mobile Game Based Learning Media on The Ability of Solve Student Problems in Colloid Learning <i>Ucu Cahyana, Rusmono, Irma Ratna Kartika, Tania Shahab</i>	21
ABS-36	The Effect of Additional Detergent in Crude Palm Oil in The Process of Separation Stearin <i>Vina Rezekyah Hasibuan, Nuraini, Febriyanti, Salahudin Al Ayubi Pane</i>	21
ABS-39	Effects of Cooperative Type Model Jigsaw Against Student Results On Various Topic SMK Filling System in PAB 2 Helvetia School Year 2014/2015 <i>Maya Novita Sari</i>	22
ABS-40	Effectiveness Of The Problem Based Learning Model Using Windows Movie Maker Media On The Subject Toward Solutions <i>Novita Sari, Febriyanti, Jusmasari Harahap, Fadhilah Latief</i>	22
ABS-41	The Development Of Chemistry Lab Guide With Chemoentrepreneurship (CEP) Oriented For 1st Grade Students Of Senior High School In 2nd Semester Based On Curriculum 2013 <i>Febri Yanti, Herbert C.B Manalu, Vina Rezekyah Hasibuan</i>	23
ABS-42	Analysis of Lectures Resiliency and Plateauing in Working <i>Abdul Murad, Asih Menanti</i>	23
ABS-43	The Profile of Liver in Rat induced Rhodamin-B and provided Ethanolic Extract of <i>Plectranthus amboinicus</i> L. Spreng	24

Code	Title	Page
	<i>Melva Silitonga, Pasar Maulim Silitonga, Martina Restuati, Yohana Marizza Purba</i>	
ABS-45	The Effectivity of Cooperative Learning Type Student Team Achievement Division to Increase Student Achievement in Teaching Buffer Solution <i>Sinta Puspita Sary</i>	25
ABS-46	Development of an Indonesian Version of Realistic Mathematics Education via Virtual Learning Environment to Enhance Students Mathematical Modelling Ability <i>Denny Haris, Chairunisah</i>	25
ABS-47	Analysis of Planning And Scheduling of Project on Performance of Construction Project <i>Putri Lynna A. Luthan, Nathanael Sitanggang</i>	26
ABS-48	Flood Discharge Analysis with Nakayasu Method Using Combination of IIEC-RAS Method on Deli River in Medan City <i>Rumilla Harahap, Kemala Jeumpa, Bambang Hadibroto</i>	26
ABS-50	Differences of Learning Outcomes in Chemsitry with Problem Based Learning and Discovery Learning by using Real Laboratory on Solubility and Solubility Product in SMA Negeri 1 Tanjung Pura <i>Nadia Armina Ramud, Zurma Nilam</i>	27
ABS-51	Development of Job Satisfaction Model Through Analysis of Determining Factors of Job Satisfaction Variables of Junior High School Principals (A Case Study in Junior High School in Medan Municipality) <i>Benyamin Situmorang, Robert Silaban, Pudir Saragih</i>	28
ABS-52	The Development of Innovative Chemopoly-Edutainment Learning Media on Chemical Separation Subject <i>Sri Adeida Sari, Jarmidi, Agus Kembaren, and Ajat Sudrajat</i>	28
ABS-53	Cladogram Misreading of Undergraduate Sudents in Understanding Evolution <i>Sadiatul Fuadiyah, Topik Hidayat, Didik Priyandoko</i>	29
ABS-54	The Effective Of Quality Program Advertising, Price And Service On Satisfaction And Loyalty Of Advertisers On PT. Smart FM Radio Medan <i>Nasrud Efendi and M. Umar Maya Putra</i>	29
ABS-55	Review Of Implementation In Bunut Shoes Assistance Program In Order Of Micro, Small And Medium Enterprises Economic In Asahan Regency	30

Code	Title	Page
	<i>Ajeng Purnama Ileny, Exora Sartika Mercuariani, Paidi</i>	
ABS-142	The Evaluation of six Course Assignments Implementation Towards the Students Learning Behavior Change a Medan State University <i>Syawal Gultom, Zulkifli Matondang, Zainuddin, Tiur Malasari Siregar, Sempurna Perangin-angin, Jamalum Purba, Arif Rahman</i>	69
ABS-143	Interactive Instructional Materials Development Based on Local Wisdom through Scientific Approach to Junior Secondary English Learning in Aceh Besar <i>Mardhatillah, Verawati, Evi Evianti, Isda Pramunitati</i>	70
ABS-144	Compliance analysis of Higher Education National Standard in Postgraduate School of Universitas Negeri Medan <i>Bornok Sinaga, Sahyar, Busmin Gurning, Juniastel Rajagukguk</i>	70
ABS-145	Development of Economic Geography Textbook for Students of Geography Education Department FISH Unesa <i>Rindawati, Sulistinah</i>	71
ABS-146	E-Learning based on LCMS Moodle to Support Learning Proses Teaching <i>Seprida Hanum Harahap</i>	71
ABS-147	The Evaluation of Students pedagogical Competences and the Application of Basic Teaching Skill at Building Engineering Education Medan State University <i>Zulkifli Matondang, Asri Lubis, Sempurna Perangin-angin</i>	72
ABS-148	Enhancement of Student Learning Achievement Through Learning Models Based on Problem <i>Sondang R Manurung, Veftiana Silalahi</i>	73
ABS-149	The effect of spinning velocity on structural and optical properties ZnO thin film synthesized using Sol-Gel spin coating method. <i>Motlan, Nurdin Siregar</i>	73
ABS-150	Subsurface structure determination of geothermal area in Siogung-ogung, Samosir District by Using Magnetic Met <i>Yagi Tampubolon, Juniar Hutahaean, Suryani N.J. Siregar</i>	74
ABS-151	Error analysis of mathematics students who are taught by using the book of mathematics learning strategy in solving pedagogical problems based on Polya four-step approach <i>Budi Halomoan Siregar, Izwita Devi, Ade Andriani</i>	74
ABS-152	Characterization of Modified Asphalt With Palm Kernel Ash as the Filler Material <i>W. Ritonga, Eddyanto, M.A. Rangkuti</i>	75
ABS-153	Testing the Stability of Mathematical Seir Model in Spread of Dengue Fever Through The Heun Method Approach	75

Code	Title	Page
	<i>Hamidah Nasution, Yulita Mollig Rangkuti, Essa Novalia</i>	
ABS-154	Chitosan/graphene oxide biocomposite film from pencil rod <i>Saharman Gea, Juli Novita Sari, Rumondang Bulan, Suci Aisyah, Yasir Arafat Hutapea</i>	76
ABS-155	Bahasa Jaek In Community Siulak Kerinci: Paramagtic Review <i>Yelnim Zulfikar</i>	77
ABS-156	Development of Variation of Smash Exercises In Volley Ball Games <i>Dewi Endriani, Indah Dwi Zulyanti</i>	77
ABS-157	Teacher Professional Assistance Model Through Peer Coaching In North Sumatera: Material Coverage And Implementation Strategy <i>Eri Widayastuti, Susiana, Tiur Malasari Siregar</i>	78
ABS-158	Activity Test of Ethanol Extract Tea Parasite Herb (<i>Scurrullaartopurpurea</i>) as Immunostimulator on Wistar Strain Rat Sensitized With Sheep Red Blood Cell <i>Retno Yidianti, M.Dimas A, Aldi Hafiz, Muttia Amalia</i>	78
ABS-160	Efforts to Reduce Muscle Fatigue Through Gymnastics Relaxation and Ergonomic Approach on Computer Users in Central Building State University of Medan <i>Syamsul Gultom, Indra Darma Sitepu, Norman Hasibuan</i>	79
ABS-161	Magnetic Properties and Thermal Conductivity of MWCNTs/Fe ₃ O ₄ Nanocomposit as adsorben of Waste Water <i>Pintor Simamora, Joniastel Rajagukguk, Clara Sintha</i>	79
ABS-162	Effect Antioxidant and Antibacterial of extract etil asetat of crinum asiaticum leaves <i>Ida Duma Rivis</i>	80
ABS-163	KKNI Implementation through the Development of IT-Based Learning Media in the Fraternity Sendoratasik FBS <i>Uyuni Widiastuti</i>	80
ABS-164	Ngunting Buk: Dance Ritual Greeting Hair Drug for Karo Society <i>Nurwani, Martozet, Iskandar Muda</i>	81
ABS-165	Classification of ECG signal with Support Vector Machine Method for Arrhythmia Detection <i>Arjon Turnip and Dwi Esti Kusumandari</i>	81
ABS-166	Packing Dance Wira Pertiwi In Form Of Audio Visual As A Medium Of Learning In The Course Of Nusantara Dance III	82

Code	Title	Page
	<i>Rr. Ruth Hertami Dyah Nugrahaningsih, Dilinar Adlin; Inggit Prastyawan</i>	
ABS-167	Formulation of Media Audio Visual Dance Gubang in Learning Technique of Melayu Teknik <i>Yusnizar Heniwaty, Sitti Rahmah, Iskandar Muda</i>	82
ABS-168	Entrepreneurship Training in Labour Training Centre at North Sumatera <i>Abdul Muin Sibuea, Dadang Mulyana, dan Rahmat Hussein</i>	83
ABS-169	The Development of Training and Coaching Centre of Archery in North Sumatera <i>Budi Valianto, Ibrahim, IndahVerawati</i>	83
ABS-171	Landek Structures in Learning Techniques of Dance Karo <i>Dilinar Adlin, Yusnizar Heniwaty, Irvansyah</i>	84
ABS-70	Effect of Thinking Skills Enhancement Learning Strategy Based on Collaborative Using Exe Learning and Creative Thinking Skills Towards Students Achievement <i>Retno Dwi Suyanti, Nurul Wahidah</i>	84
ABS-72	Relationship Between Knowledge of Management Learning and Performance with Teachers pedagogic competence of The State Senior High School 8 in the city of Medan <i>Martua Manullang, Retno Dwi Suyanti</i>	85
ABS-172	The effect of Iron Supplement On VO2 Max And Haematology Parameter On Menstrual Woman <i>Rika Nailuvar Sinaga, Novita Sari Harahap, Rima Mediyana Sari</i>	85

THE
Character Building
 UNIVERSITY

[ABS-1]

Lexical Change in Javanese Dialect Used in Medan

Desi Haryati Nainggolan

English Applied Linguistics, Postgraduate School, State University of Medan
Corresponding Author:

Abstract - This research aimed to find out the lexical change in Javanese dialect and the lexical change occurs in Javanese dialect and to state the reasons the influence of lexical change in Javanese dialect used in Medan. The sources of data were from male and female in arrange age 30-35 years old. Firstly the data showed of 367 glosses achieved 1506 change namely the loss of lexical item the change of meaning and the creation of new lexical item. And the data will be analyzed by using interactive model proposed by Miles and Huberman (1994) with three phases of data analysis. Secondly the percentage of semantic change of Javanese language of Medan are verb to verb (28.51%) adjective to adjective (22.59%) noun to noun (21.48%) verb to noun (3.33%) verb to adjective (2.96%) pronoun to pronoun (6.29%) pronoun to adjective (0.37%) verb to noun (3.33%) verb to adjective (2.96%) noun to adverb (0.74%) noun to verb (2.96%) noun to adjective (4.07%) noun to pronoun (0.37%) adjective to noun (2.59%) adjective to adverb (0.37%) adjective to verb (3.11%) adverb to noun (0.37%) preposition to adjective (0.37%) preposition to adverb (0.37%) conjunction to conjunction (0.37%) preposition to preposition (0.37%) are not significant. Thirdly the creation of new lexical item of Javanese language in Medan pattern contains of external borrowing and it comprised Dialectal Borrowing, Archaism into Indonesian language and Archaism into another ethnic.

Keywords: Lexical Change and Javanese Dialect

Topic: Social Science and Humaniora

[ABS-3]

Reducing Heavy Metal Contamination in Marine Dredged Sediment in Its Use as Substitute Material in Road Construction

Ernesto Silitonga

State University of Medan
Corresponding Author:

Abstract - An experimental study of a laboratory-scale was realized to identify the feasibility of the reuse of contaminated marine dredged sediment as a new replaced material in road construction. The marine dredged sediment (MDS) was taken from port of Cherbourg Basse-Normandie France. Due to the large amount of sediment dredged every in France, the beneficial reuse of MDS is urgently needed to realize. The primary goal of this study is to stabilize MDS so that MDS could be used in road construction as a replacement material, which is needed to fulfill the road regulation criteria and harmless to environment. However, on its application, due to drying and oxidation process of polluted MDS may affect mobility and bioavailability of the land utilized. In order to achieve the primary goal, the addition of Silica Fume was realized. The present of Silica Fume besides to enhance the geotechnical characteristic, is aimed to reduce the pollution level, especially the heavy metal content. The serial of Geotechnical tests were realized to verify if MDS could be utilized as replacement material in road construction. After the geotechnical study in laboratory results show as expected thus the identification of chemical characteristic realized. To evaluate the environmental impacts of the used material, leaching test is performed. The leaching test result showed that the Silica Fume addition was capable to reduce the pollution level especially for Cadmium (Cd). The result confirmed that with the present of Silica Fume (in certain percentage) in the mixture, the stabilization process succeed to fulfill the geotechnical characteristic and the MDS can be used as a replacement material and harmless to the environment.

Keywords: Marine dredged sediment, pollutant level, road construction Silica Fume

Topic: Applied Science_Engineering



THE
Character Building
UNIVERSITY



Organized by:
Lembaga Penelitian, Universitas Negeri Medan
J. Willem Iskandar
Psr.V Medan, North Sumatera Indonesia 20122
Telp. (+6261) 6613355 - Fax: +6261- 6636731