

# Introduction

The International Congress on Natural Sciences (ICNS) was initiated by Prof. Tae Hwa Kim (Dean, College of Natural Sciences, Pukyong National University, Busan, Korea), Prof. Morimitsu Tanimoto (Former Dean, Faculty of Science, Niigata University, Niigata, Japan) and Prof. Wen-Chun Hong (Dean, College of Science, National Sun Yat-Sen University, Kaohsiung, Taiwan) to establish a forum for the exchange of academic resources among sisterhood universities. The first ICNS was held in Pukyong National University on August 25, 2011 (as named ICNS2011). The ICNS2011 offered five sessions (mathematics, physics, chemistry, biology, and earth science) for more than 80 participants to share their research achievement and scientific information.

The second ICNS was held in National Sun Yat-Sen University on October 23, 2012. A total of 145 participants attended this congress and 117 presentations, including 6 plenary lectures were delivered.

The third ICNS was held in Niigata University on October 12, 2013. The ICNS2013 offered five parallel sessions, a total of 149 participants attended this congress and 107 presentations.

The international organizing committee decided that National Changhua University of Education (NCUE) to host ICNS in 2015. Prof. Horng (Dean, College of Science, NCUE) accepted the obligation and coordinated to form the International Organizing Committee for ICNS-2015.

The International Organizing Committee offers five parallel sessions (mathematics, physics, chemistry, biology and science education & earth science) for participants. We wish that the participants will have opportunities to share their experience and friendship with each other during the ICNS-2015. We also hope that participating universities can establish a stronger international relationship to promote a better academic cooperation in the near future. We do wish that the tradition of ICNS will be continued to strengthen the comprehensive relationship among the sisterhood universities, and the forum of ICNS will be held annually to link the international cooperation relationship between the participating groups.



**Program for the 4th International Congress on Natural Sciences  
And 2015 International Conference on Low Dimensional Science  
September 10 (Thu.) – September 12 (Sat.) 2015, Changhua, Taiwan**

**Thursday, September 10, 2015**

<b>09:00 ~ 10:00</b>	Registration					Place: General Building (綜合中心)  Poster Sessions (Place: Teaching Building)
<b>10:00 ~ 10:30</b>	Opening Ceremony					
<b>10:30 ~ 11:15</b>	<b>Plenary Talk 1: Chih-Ta Chia (Physics, NTNU)</b> Chair: Jong-Ching Wu (NCUE)					
<b>11:15 ~ 12:00</b>	<b>Plenary Talk 2: Yeol-Je Cho(Mathematics, GNU)</b> Chair: Prof. Gue Myung Lee (PKNU)					
<b>12:00 ~ 13:30</b>	Lunch					
<b>Parallel sessions 13:30 ~ 15:00 (Chair) Room no.</b>	A(Bio) (Yi-Chih Chien) T001  *Dae-Jin Yun *Tatsuya Sakai *Shih-Feng Fu	B(Phys) (Shih-Yuin Lin) T005  *Kang Young Lee Shunsuke Tamaki Shinkuro Sakai Tetsuya Kobayashi Ryusuke Kataura	C(Chem) (Chih-Wei Chang) T006  *Myung Won Lee Kaori Shirai Jerson Lapetaje Nova Fe Anorico	D(Math) (Yeol-Je Cho) T004  *Sehie Park *Lai-Jiu Lin *Shin-Shin Kao	E(Erth S.) (Heng Tsai) T002  *M. Satish Kumar Eiichi Takazawa Huai-Jen Yang Yuan-Pin Chang	
<b>15:00 ~ 15:30</b>	Coffee Break					
<b>Parallel sessions 15:30 ~ 17:00 (Chair) Room no.</b>	A(Bio) (Yi-Chih Chien) T001  *Chang-Yi Wu *Minna J. Hsu Hsueh-Yu Lu Shih-Chen Ciou	B(Phys) (Chi-Yen Huang) T005  *Ming-Chang Chen Kiyohide Nomura Fang-Ming Chen Deng-Shiang Shiu Kao Fan Lai	C(Chem) (Chih-Wei Chang) T006  *Mine-Yine Liu Evelyn C. Creencia Jessa A. Payusan Fatimah N. Pautong	D(Math) (Shin-Shin Kao) T004  *Akinari Hoshi Da-Gyeong Hong Hye Yoon Heo Yuto Ogata Yutaka Saito	E(Erth S) (Pei-Hua Tan) T002  *Pei-Hua Tan Lin-Wen Cheng Che-Yu Lin Cheng-Hsiang Chih	
<b>18:00 ~ 21:00</b>	<b>Welcome Party (Teaching Building)</b> <b>Session Discussions/Organizing Committee Meeting with Deans</b>					

**Friday, September 11, 2015**

<b>08:00 ~ 09:00</b>	Registration (Shuttle bus from Hotel to NCUE)					Place: General Building (綜合中心)  Poster Sessions (Place: Teaching Building)
<b>09:00 ~ 09:45</b>	<b>Plenary Talk 3: Hissaki Kudo(Chemistry, NU)</b> Chair: Ching-Han Hu (NCUE)					
<b>09:45 ~ 10:30</b>	<b>Plenary Talk 4: John Wong(Biology, Academia Sinica)</b> Chair: Chi-Yung Lai (NCUE)					
<b>10:30 ~ 11:15</b>	<b>Plenary Talk 5: M. Satish Kumar(Geology, NU)</b> Chair: Heng Tsai (NCUE)					
<b>11:15 ~ 12:00</b>	<b>Plenary Talk 6: Hsiao-Lin Tuan(Science Education, NCUE)</b> Chair: Chorng-Jee Guo (NCUE)					
<b>12:00 ~ 13:30</b>	Lunch					
<b>Parallel sessions 13:30 ~ 15:00 (Chair) Room no.</b>	A(Bio) (Chi-Ying Lee) T001  *Nancy M. Wang Natsuko Hamamura Chi-Yung Lai	B(Phys) (Shih-Sen Chien) T005  *Günter Reiss *Hiroshi Shimada	C(Chem) (Yih-Chern Horng) T006  *Chih-Wei Chang Christopher Ambe Rushie Mae Cedeño Benjoe Rey B. Visayas	D(Math) (Lai-Jiu Lin) T004  *Tamaki Tanaka *Gue Myung Lee *Hang-Chih Lai	E(Sci. E) (Erh-Tsung Chih) T002  *Kai-Lin Yang *Chien-Rong Lu *Shih-Yin Lin	
<b>15:00 ~ 15:30</b>	Take Group Photos & Coffee Break					
<b>Parallel sessions 15:30 ~ 17:00 (Chair) Room no.</b>	A(Bio) (Jui-Yu Chou) T001  Hung-Wei Chen Pei-Feng Sun	B(Phys) (Watson Kuo) T005  *Chii-Dong Chen *Hsiung Chou	C(Chem) (Yang-Wei Lin) T006  Tadaaki Ikoma Tzu-En Hsu Chih-Yu Chien Temmy P. Vales	D(Math) (Tamaki Tanaka) T004  *Osamu Hatori *Ngai-Ching Wong *Jein-Shan Chen	D(Math) (Tsung-Lin Cheng) T002  *Zhi-You Chen *Xuefeng Liu Rachel M. Patangan	
<b>18:00 ~ 21:00</b>	Banquet (黑公雞餐廳)					

<i>Saturday, September 12, 2015</i> <i>2015 International Conference on Low Dimensional Science</i>	
<i>08:00 ~ 09:00</i>	Registration
<i>Parallel sessions</i> <i>09:00 ~ 10:15</i> <i>(Chair)</i> <i>Room no.</i>	B(Phys) (Deng-Shiang Shiu) T005  Cheng-En Cheng K.C. Lee Bi-Cheng Lei Yu-Jui Shih Cheng-Yang Zhang
<i>10:10 ~ 10:45</i>	Coffee Break
<i>Parallel sessions</i> <i>10:45 ~ 12:15</i> <i>(Chair)</i> <i>Room no.</i>	B(Phys) (Fang-Ming Chen) T005  Yun-Lien Hsieh Tzu-Feng Weng Jane Dai Wei-Chen Chien Jyun-Jia Jhang W. P. Tsai

<i>Saturday, September 12, 2015</i>	
<i>07:00 ~ 17:00</i>	Tour: Nan-Tou
<i>17:00 ~</i>	Hotel or Taiwan High-Speed Rail Station (Home return)

## PLENARY TALK

September 10, 2015 at General Building (綜合中心)

Chair: <b>Jon-Ching Wu</b> (National Changhua University of Education)				Page
<b>10:30-11:15</b>	<b>PT-1</b>	<b>Chih-Ta Chia</b> <i>National Taiwan Normal University</i>	<b>Report of Math- and Science-Olympiad Related Activities in Taiwan</b>	21

Chair: <b>Gue Myung Lee</b> (Pukyong National University)				
<b>11:15-12:00</b>	<b>PT-2</b>	<b>Yeol-Je Cho</b> <i>Gyeongsang National University</i>	<b>On Fixed Points of Nonlinear Mappings and some Problems</b>	22

September 11, 2015 at General Building (綜合中心)

Chair: <b>Ching-Han Hu</b> (National Changhua University of Education)				
<b>09:00-09:45</b>	<b>PT-3</b>	<b>Hisaaki Kudo</b> <i>Niigata University</i>	<b>Synthesis of super heavy elements by cold fusion-type reactions</b>	23

Chair: <b>Chi-Yung Lai</b> (National Changhua University of Education)				
<b>09:45-10:30</b>	<b>PT-4</b>	<b>John Wang</b> <i>Academia Sinica</i>	<b>Dissecting the fire ant social supergene</b>	24

Chair: <b>Heng Tsai</b> (National Changhua University of Education)				
<b>10:30-11:15</b>	<b>PT-5</b>	<b>M. Satish-Kumar</b> <i>Niigata University</i>	<b>A carbon isotope perspective on the geodynamic cycle of carbon</b>	25

Chair: <b>Chorng-Jee Guo</b> (National Changhua University of Education)				
<b>11:15-12:00</b>	<b>PT-6</b>	<b>Hsiao-Lin Tuan</b> <i>National Changhua University of Education</i>	<b>Inquiry-Based Instruction and Learning Motivation</b>	26

## Session A: BIOLOGY

September 10, 2015 at Teaching Building, T001

Chair: <b>Yi-Chih Chien</b> (National Changhua University of Education)				Page
<b>13:30-14:00</b>	<b>A1-Invited Talk</b>	<b>Dae-Jin Yun</b> <i>Gyeongsang National University</i>	<b>Cross-talks between the control of flowering time and the response to salinity stress in <i>Arabidopsis</i></b>	27
<b>14:00-14:30</b>	<b>A2-Invited Talk</b>	<b>Tatsuya Sakai</b> <i>Niigata University</i>	<b>Plant Adaptation Mechanisms to High-Intensity Light in Phototropic Responses</b> Tatsuya Sakai, Ken Haga	28
<b>14:30-15:00</b>	<b>A3-Invited Talk</b>	<b>Shih-Feng Fu</b> <i>National Chunghua University of Education</i>	<b>Developmental- and tissue-specific expression of <i>NbCMT3-2</i> encoding a chromomethylase in <i>Nicotiana benthamiana</i></b>	29

### 15:00-15:30 Coffee Break

September 10, 2015 at Teaching Building, T001

Chair: <b>Yi-Chih Chien</b> (National Changhua University of Education)				Page
<b>15:30-16:00</b>	<b>A4-Invited Talk</b>	<b>Chang-Yi Wu</b> <i>National Sun Yat-sen University</i>	<b><i>Prdx1</i> encode peroxiredoxin is important for vascular development in zebrafish</b> Hai-Hong Syue, Ting-Yun Wu, and Chang-Yi Wu	30
<b>16:00-16:30</b>	<b>A5-Invited Talk</b>	<b>Minna J. Hsu</b> <i>National Sun Yat-sen University</i>	<b>Dominance rank acquisition of female Formosan macaques (<i>Macaca cyclopis</i>) in Mt. Longevity</b> Minna J. Hsu, Mei-Yi Lin, Jin-Fu Lin, Govindasamy Agoramoorthy	31
<b>16:30-16:45</b>	<b>A6</b>	<b>Hsueh-Yu Lu</b> <i>National Chunghua University of Education</i>	<b>Rapid creation of doubled-haploid plants in <i>Brassica oleracea</i> var. <i>italica</i> by centromere-mediated genome elimination</b> Hsueh-Yu Lu and Shih-Feng Fu	32
<b>16:45-17:00</b>	<b>A7</b>	<b>Shih-Chen Ciou</b> <i>National Chunghua University of Education</i>	<b>To Generate a Humanize Fish Scale for Biocornea by Using Transgenic Zebrafish as Model</b> Shih-Chen Ciou, Chuian- Fu Ken	33

## Session A: BIOLOGY

September 11, 2015 at Teaching Building, T001

Chair: <b>Chi-Ying Lee</b> (National Changhua University of Education)				Page
<b>13:30-14:00</b>	<b>A8-Invited Talk</b>	<b>Nancy M. Wang</b> <i>National Changhua University of Education</i>	<b>Endometrial mesenchymal stem cells for cell therapy</b> Nancy M. Wang, Ming-Hsien Hu, Che-Yu Liu, Chih-Hao Huang, Kun-I Lin	34
<b>14:00-14:30</b>	<b>A9</b>	<b>Natsuko Hamamura</b> <i>Kyushu University</i>	<b>Diversity of Microbial Arsenic Transformation Pathways Associated with Arsenic Impacted Environments</b>	35
<b>14:30-15:00</b>	<b>A10</b>	<b>Chi-Yung Lai</b> <i>National Changhua University of Education</i>	<b>Diversity of the Laccase Gene Family from the Termite-Associated Fungus <i>Termitomyces</i></b> Shr-Shiuan Wang and Chi-Yung Lai	36

### 15:00-15:30 Coffee Break

September 11, 2015 at Teaching Building, T001

Chair: <b>Jui-Yu Chou</b> (National Changhua University of Education)				Page
<b>15:30-15:45</b>	<b>A11</b>	<b>Hung-Wei Chen</b> <i>National Changhua University of Education</i>	<b>Yeast compositions from <i>Forcipomyia taiwana</i> and potential control strategy</b> Hung-Wei Chen, Wei-Lung Wang, Chung-Chi Lin, Yu-Der Wen, Jui-Yu Chou	37
<b>15:45-16:00</b>	<b>A12</b>	<b>Pei-Feng Sun</b> <i>National Changhua University of Education</i>	<b>Plant Growth-Promoting Traits of Yeasts Isolated in the Phyllosphere and Rhizosphere of the Carnivorous Plant <i>Drosera spathulata</i> Lab.</b> Pei-Feng Sun, Shih-Feng Fu, Hsueh-Yu Lu, Jyuan-Yu Wei, Hong-Su Xiao, Wei-Ta Fang, Bai-You Cheng, and Jui-Yu Chou	38



**Session B: PHYSICS**  
**2015 International Conference on Low Dimensional Science**

September 10, 2015 at Teaching Building, T005

Chair: <b>Shih-Yuin Lin</b> (National Changhua University of Education)				Page
<b>13:30-14:00</b>	<b>B1-Invited Talk</b>	<b>Kang Young Lee</b> <i>Gyeongsang National University</i>	<b>Invisible World</b>	39
<b>14:00-14:15</b>	<b>B2</b>	<b>Shunsuke Tamaki</b> <i>Niigata University,</i>	<b>Monopole pair transfer of the neutron-rich N=84 isotones: the characteristic pair-vibration state</b> Shunsuke Tamaki, Matsuo Matsuo	40
<b>14:15-14:30</b>	<b>B3</b>	<b>Shinkuro Sakai</b> <i>Niigata University</i>	<b>Pair correlation and deformation in neutron-rich Ne isotopes</b> S. Sakai, and K. Yoshida	41
<b>14:30-14:45</b>	<b>B4</b>	<b>Tetsuya Kobayashi</b> <i>Niigata University</i>	<b>Readout Electronics for the Belle II Aerogel RICH detector</b> Tetsuya Kobayashi, I.Adachi, R.Kataura, S.Nishida, K.Ogawa, L.Santelj, M.Shoji, Y.Yusa	42
<b>14:45-15:00</b>	<b>B5</b>	<b>Ryusuke Kataura</b> <i>Niigata University</i>	<b>Background study of Hybrid Avalanche Photo Detector for the Belle II Aerogel RICH counter</b> Ryusuke Kataura, Y.Yusa, T.Kobayashi, I.Adachi, S.Nishida, L.Santelj, T.Sumiyoshi, H.Kakuno, S.Iwata, and Belle II Collaborator	43

**15:00-15:30 Coffee Break**

September 10, 2015 at Teaching Building, T005

Chair: <b>Chi-Yen Huang</b> (National Changhua University of Education)				Page
<b>15:30-16:00</b>	<b>B6-Invited Talk</b>	<b>Ming-Chang Chen</b> <i>National Tsing Hua University</i>	<b>Harness the Attosecond Science</b>	44
<b>16:00-16:15</b>	<b>B7</b>	<b>Kiyohide Nomura</b> <i>Kyushu University</i>	<b>Extension of the Lieb-Schultz-Mattis theorem</b> Kiyohide Nomura, Junpei Morishige and Takaichi Isoyama	45
<b>16:15-16:30</b>	<b>B8</b>	<b>Fang-Ming Chen</b> <i>National Changhua University of Education</i>	<b>Effect of barrier doping on the characteristics of near ultraviolet light-emitting diodes</b> Fang-Ming Chen, Jih-Yuan Chang, Ya-Hsuan Shih, Hui-Tzu Chang and Yen-Kuang Kuo	46
<b>16:30-16:45</b>	<b>B9</b>	<b>Deng-Shiang Shiu</b> <i>National Changhua University of Education</i>	<b>Study of the Domain Wall Motion with Different Pad and Magnetic Field</b> Deng-Shiang Shiu, Kao-Fan Lai, Than-ChiuanWu and Lance Horng	47
<b>16:45-17:00</b>	<b>B10</b>	<b>Kao-Fan Lai</b> <i>National Changhua University of Education</i>	<b>Switching Behavior of 360 Degree Domain Wall in Permalloy Thin Film Ring</b> Kao Fan,Lai, Li Hao,Chan, Deng-Shiang Shiu, Than-Chiuan Wu and Lance Horng	48

**Session B: PHYSICS**  
**2015 International Conference on Low Dimensional Science**

September 11, 2015 at Teaching Building, T005

Chair: <b>Shih-Sen Chien</b> (Tunghai University)				Page
<b>13:30-14:20</b>	<b>B11-Invited Talk</b>	<b>Günter Reiss</b> <i>Universität Bielefeld</i>	<b>Spin dependent transport in magnetic nanostructures</b> G. Reiss, A. Böhnke, M. Glas, D. Meier, T. Kuschel, Ch. Klewe, H.W.Schumacher, S. Serrano-Guisan, M. Walter, M. Münzenberg, J. Kimling, K. Nielsch	49
<b>14:20-15:10</b>	<b>B12-Invited Talk</b>	<b>Hiroshi Shimada</b> <i>The University of Electro-Communications</i>	<b>Electrostatic control of tunnel-magnetoresistance polarity in ferromagnetic single-electron transistors</b>	50

**15:00-15:30 Coffee Break**

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Chair: <b>Watson Kuo</b> (National Chung Hsing University)				Page
<b>15:30-16:20</b>	<b>B13-Invited Talk</b>	<b>Chii-Dong Chen</b> <i>Academia Sinica</i>	<b>Spin Accumulation induced Magnetocapacitance in a Ferromagnetic Single Electron Transistor</b>	51
<b>16:20-16:50</b>	<b>B14-Invited Talk</b>	<b>Hsiung Chou</b> <i>National Sun Yat-sen University</i>	<b>INVERSE PROXIMITY EFFECT ON THE [YBCO/LSMO]<sub>4</sub> SUPERLATTICE FILMS ON STO (001) SUBSTRATE</b> Hsiung Chou, Gopeshwar D Dwivedi, C.-H.Chen, C-Y Li, W. H. Li, S.-L. Tseng and J. G. Lin	52

**Session B: PHYSICS**  
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September 12, 2015 at Teaching Building, T005

Chair: <b>Deng-Shiang Shiu</b> (National Changhua University of Education)				Page
<b>09:00-09:15</b>	<b>B15</b>	<b>Cheng-En Cheng</b> <i>Tunghai University</i>	<b>Pt Ultrathin Films as Counter Electrodes for Bifacial Dye-Sensitized Solar Cells</b> Cheng-En Cheng, Zheng-Kun Lin, Chen-Shiung Chang and Forest Shih-Sen Chien	53
<b>09:15-09:30</b>	<b>B16</b>	<b>K. C. Lee</b> <i>National Chung Hsing University</i>	<b>Photocurrent Distribution of Multilayer MoS<sub>2</sub> Transistors</b> K. C. Lee, L. C. Liu, L. C. Li, Y. W. Suen	54
<b>09:30-09:45</b>	<b>B17</b>	<b>Bi-Cheng Lei</b> <i>Tunghai University</i>	<b>Improvements in Long-Term Stability of Dye-Sensitized Solar Cells With Liquid Crystal-Doped Electrolyte</b> Chi-Yen Huang, Chang-Feng You, Cheng-En Cheng, Bi-Cheng Lei, Jia-Cih Jhang, Fang-Cheng Yu, Chen-Shiung Chang, and Forest Shih-Sen Chien	55
<b>09:45-10:00</b>	<b>B18</b>	<b>Yu-Jui Shih</b> <i>National Changhua University of Education</i>	<b>Synthesis and Optical Characterization of CuIn<sub>x</sub>Ga<sub>1-x</sub>S<sub>2</sub> Nanocrystals</b> Yu-Jui Shih and Yu-Tai Shif	56
<b>10:00-10:15</b>	<b>B19</b>	<b>Cheng-Yang Zhang</b> <i>National Changhua University of Education</i>	<b>Synthesis and Optical Characterization of CuInS<sub>2</sub> Quantum Dots</b> Cheng-Yang Zhang and Yu-Tai Shih	57

**10:10-10:45 Coffee Break**

September 12, 2015 at Teaching Building, T005

Chair: <b>Fang-Ming Chen</b> (National Chung Hsing University)				Page
<b>10:45-11:00</b>	<b>B20</b>	<b>Yun-Lien Hsieh</b> <i>National Changhua University of Education</i>	<b>Accurate Human Pulse Sensing Using Gold Nanoparticles Strain Devices</b> YunLien Hsieh, IChi Ni, ChunHan Chen, ChihHao Chiu, ChienLin Chen, BoHao Jiang, JhenMing Song, ShienDer Tzeng and Watson Kuo	58
<b>11:00-11:15</b>	<b>B21</b>	<b>Tzu-Feng Weng</b> <i>National Changhua University of Education</i>	<b>Monoclinic-Ga<sub>2</sub>O<sub>3</sub> nanowire-based gas sensor</b> Tzu-Feng Weng, Mon-Shu Ho	59
<b>11:15-11:30</b>	<b>B22</b>	<b>Jane Dai</b> <i>National Changhua University of Education</i>	<b>Determination of effects of TiO<sub>2</sub>, Au and Ag nanoparticles on NIH 3T3</b> Betty He, Mon Shu Ho, Jane Dai	60
<b>11:30-11:45</b>	<b>B23</b>	<b>Wei-Chen Chien</b> <i>National Changhua University of Education</i>	<b>Microwave emission of one-dimensional Josephson junction arrays</b> Wei-Chen Chien, Chien-Han Chen, Cen-Shawn Wu, Shimada Hiroshi and Watson Kuo	61
<b>11:45-12:00</b>	<b>B24</b>	<b>Jyun-Jia Jhang</b> <i>National Changhua University of Education</i>	<b>Low Voltage Liquid Crystal Lens with a Ring Floating Electrode</b> Jyun-Jia Jhang, Che-Ju Hsu, Chi-Yen Huang	62
<b>12:00-12:15</b>	<b>B25</b>	<b>W.P. Tsai</b> <i>Institute of NanoScience</i>	<b>ZnO nanowires based on CO gas sensor</b> W.P. Tsai, Y.L. Chen and M.S. Ho	63

## Session C: CHEMISTRY

September 10, 2015 at Teaching Building, T006

Chair: <b>Chih-Wei Chang</b> (National Changhua University of Education)				Page
<b>13:30-14:00</b>	<b>C1-Invited Talk</b>	<b>Myung Won Lee</b> <i>Pukyong National University</i>	<b>Investigation of Solvated Cyanide Ion by Molecular Dynamics Simulations</b>	64
<b>14:00-14:20</b>	<b>C2</b>	<b>Kaori Shirai</b> <i>Niigata University</i>	<b>Gas chromatographic behavior of chloride compounds of group 4 elements</b> K. Shirai, Y. Oshimi, S. Goto, K. Ooe, H. Kudo	65
<b>14:20-14:40</b>	<b>C3</b>	<b>Jerson E. Lapetaje</b> <i>Mindanao State University-Iligan Institute of Technology</i>	<b>Synthesis of 2-substituted-1<i>H</i>-benzimidazoles and their activity towards the Brine Shrimp <i>Artemiasalina</i></b> Jerson E. Lapetaje, Evelyn C. Creencia	66
<b>14:40-15:00</b>	<b>C4</b>	<b>Nova Fe E. Anorico</b> <i>Mindanao State University – Iligan Institute of Technology</i>	<b>Microwave-Assisted Synthesis of 6-Nitrobenzimidazole Derivatives and Their Toxicities Toward The Brine Shrimp <i>Artemia salina</i></b> Nova Fe E. Anorico, Evelyn C. Creencia	67

### 15:00-15:30 Coffee Break

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Chair: <b>Chih-Wei Chang</b> (National Changhua University of Education)				Page
<b>15:30-16:00</b>	<b>C5-Invited Talk</b>	<b>Mine-Yine Liu</b> <i>National Changhua University of Education</i>	<b>Identification of C-reactive Protein and Oxidized Phospholipids in Cardiovascular Disease by Liquid Chromatography-Tandem Mass Spectrometry</b> Mine-Yine Liu, You-Sian Lin, Wen-Jie Li	68
<b>16:00-16:20</b>	<b>C6</b>	<b>Evelyn C. Creencia</b> <i>MSU-Iligan Institute of Technology</i>	<b>Microwave-assisted Friedländer synthesis of quinolines catalyzed by various heterogeneous solid catalysts</b> Evelyn Cuevas Creencia, Ryo Matsuya and Takaaki Horaguchi	69
<b>16:20-16:40</b>	<b>C7</b>	<b>Jessa A. Payusan</b> <i>Mindanao State University-Iligan Institute of Technology</i>	<b>Microwave-Assisted Solvent-Free Synthesis of 2-substituted-1<i>H</i>-benzimidazoles and the Evaluation of Their Bioactivities toward Brine Shrimp <i>Artemiasalina</i></b> Jessa A. Payusan, Evelyn C. Creencia	70
<b>16:40-17:00</b>	<b>C8</b>	<b>Fatimah Nasra Pautong</b>		

## Session C: CHEMISTRY

September 11, 2015 at Teaching Building, T006

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