



# POSTER PRESENTATION AWARD

## GROUP 6

สาขาวิชาฟิสิกส์ พลังงาน ดาราศาสตร์ และวัสดุศาสตร์





# CERTIFICATE OF GOOD POSTER PRESENTATION

is awarded to

**Nutkamon Sonchaopri, Rattiphorn Sumang, Supree Pinitsoontorn,  
Aurawan Rittidech and Theerachai Bongkarn**

for the Poster Presentation entitled

EFFECT OF FIRING TEMPERATURES ON PHASE FORMATION, MICROSTRUCTURE, DIELECTRIC  
AND MAGNETIC PROPERTIES OF  $\text{Ni}_{0.6}\text{Zn}_{0.4}\text{Fe}_2\text{O}_4$  CERAMICS SYNTHESIZED  
BY THE SOLID-STATE COMBUSTION TECHNIQUE

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



Associate Prof.Dr.Chayan Boonyarak  
Dean of School of Science, University of Phayao



# CERTIFICATE OF GOOD POSTER PRESENTATION

is awarded to

**Suphornphun Chootin, Anupong Luangpangai,  
Widchaya Somsri, Chanagon Menkun, Naratip Vittayakorn,  
Supree Pinitsoontorn and Theerachai Bongkarn**

for the Poster Presentation entitled

EFFECT OF FIRING TEMPERATURES ON PHASE STRUCTURE, MICROSTRUCTURE, ELECTRICAL  
AND MAGNETIC PROPERTIES OF  $(\text{Bi}_{0.5}\text{Na}_{0.5})_{0.7}\text{La}_{0.3}(\text{Ti}_{0.7}\text{Fe}_{0.3})\text{O}_3$  CERAMICS

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



Associate Prof.Dr.Chayan Boonyarak  
Dean of School of Science, University of Phayao



# CERTIFICATE OF GOOD POSTER PRESENTATION

is awarded to

**Wistsarut Chongsatan, Naratip Vittayakorn and Theerachai Bongkarn**

for the Poster Presentation entitled

EFFECT OF FIRING TEMPERATURES ON PHASE FORMATION, MICROSTRUCTURE, ELECTRICAL,  
AND ENERGY STORAGE PROPERTIES OF BNT-BT-BCTZ CERAMICS PREPARE  
VIA THE SOLID-STATE COMBUSTION TECHNIQUE

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



Associate Prof.Dr.Chayan Boonyarak  
Dean of School of Science, University of Phayao



# CERTIFICATE OF GOOD POSTER PRESENTATION

is awarded to

**Songsak Saeyang, Sirikamon Saengmee-anupharb,  
Somrit Unai and Sakda Koenrobket**

for the Poster Presentation entitled

EXPERIMENTAL STUDY OF HEAT CAPACITY TO MINIMIZE ERROR IN  
THE FIRST-YEAR STUDENT PHYSICS LABORATORY

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



Associate Prof.Dr.Chayan Boonyarak  
Dean of School of Science, University of Phayao



# CERTIFICATE OF EXCELLENT POSTER PRESENTATION

is awarded to

**Chitipat Chanasuek, Mada Boonruanglue,  
Nawarat Piromruk and Paveena Laokul**  
for the Poster Presentation entitled

**DEVELOPMENT OF MELTBLOWN NONWOVEN FABRIC WITH ANTIBACTERIAL ACTIVITY  
BY ZnO/AgBr NANOCOMPOSITES COATING**

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



Associate Prof.Dr.Chayan Boonyarak  
Dean of School of Science, University of Phayao



# CERTIFICATE OF EXCELLENT POSTER PRESENTATION

is awarded to

**Nilobol Wongsaita and Morakot Piemjai**

for the Poster Presentation entitled

COMPARISON OF SURFACE MICROHARDNESS OF RESTORATIVE RESIN COMPOSITE WITH  
DIFFERENT TYPES OF FILLERS

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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Dean of School of Science, University of Phayao



# CERTIFICATE OF EXCELLENT POSTER PRESENTATION

is awarded to

**Kotcharat Nantasen and Morakot Piemjai**

for the Poster Presentation entitled

**THE COLOR MASKING ABILITY OF RESIN COMPOSITE WITH DIFFERENT TYPES OF FILLERS**

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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Dean of School of Science, University of Phayao





# CERTIFICATE OF EXCELLENT POSTER PRESENTATION

is awarded to

**Wanchaloem Maitreesittikorn, Pathit Premwichit and Sasipohn Prasertpalichat**

for the Poster Presentation entitled

EFFECTS OF NA EXCESS ON THE PHASE STRUCTURE AND ELECTRICAL PROPERTIES OF  
(Bi<sub>0.487</sub>Na<sub>0.487</sub>K<sub>0.06</sub>Ba<sub>0.026</sub>)TiO<sub>3</sub> LEAD-FREE PIEZOCERAMICS

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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Dean of School of Science, University of Phayao



# CERTIFICATE OF EXCELLENT POSTER PRESENTATION

is awarded to

**Pathit Premwichit and Sasipohn Prasertpalichat**

for the Poster Presentation entitled

STUDY ON STRUCTURAL, DIELECTRIC, AND ENERGY STORAGE PROPERTIES OF Ba<sup>2+</sup> DOPED  
LEAD-FREE NaNbO<sub>3</sub>-BASED CERAMICS

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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# CERTIFICATE OF EXCELLENT POSTER PRESENTATION

is awarded to

**Nalinprapa Saranwong, Anuphong Suthatho, Kittiphol Rustanapong,  
Rittichai Boontarsai, Kantarat Lekkaew and Kanta Sangwijit**

for the Poster Presentation entitled

**ENHANCEMENT OF WATER RESISTANCE OF COTTON GAUZE BY Ar- AND He- COLD PLASMA TREATMENT**

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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Dean of School of Science, University of Phayao



# CERTIFICATE OF EXCELLENT POSTER PRESENTATION

is awarded to

**Nattawat Radjaroendee, Thammatorn Jamraschai and Ekapong Hirunsirisawat**

for the Poster Presentation entitled

ORBITS OF PHOTON AROUND THE BLACK HOLE WITH A LIGHT SOURCE

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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# CERTIFICATE OF OUTSTANDING POSTER PRESENTATION

is awarded to

**Kanisorn Kaewsritthong, Anucha Kaewpoonsuk, Pincha Torkittikul,  
Chatdanai Boonruang and Thanongsak Nochaiya**

for the Poster Presentation entitled

**EFFECTS OF WATER-TO-CEMENT RATIO AND CURING TIME ON THE ELECTRICAL OUTPUT OF  
CEMENT-BASED TRIBOELECTRIC NANOGENERATOR**

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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Dean of School of Science, University of Phayao



# CERTIFICATE OF OUTSTANDING POSTER PRESENTATION

is awarded to

**Pathit Premwichit and Sasipohn Prasertpalichat**

for the Poster Presentation entitled

DIELECTRIC AND IMPROVED ENERGY-STORAGE PROPERTIES IN COMPLEX PEROVSKITE  
(1-x)NaNbO<sub>3</sub>-xBi(Li<sub>1/3</sub>, Sn<sub>2/3</sub>)O<sub>3</sub> LEAD-FREE CERAMICS

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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Dean of School of Science, University of Phayao



# CERTIFICATE OF OUTSTANDING POSTER PRESENTATION

is awarded to

**Wittaya Thipaksorn**

for the Poster Presentation entitled

EVOLUTION OF THE BACKGROUND UNIVERSE IN DHOST THEORY WITH SHIFT-SYMMETRY

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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# CERTIFICATE OF OUTSTANDING POSTER PRESENTATION

is awarded to

**Chatuporn Nisaisue**

for the Poster Presentation entitled

QUANTIZE FLUXOID PROTECTION IN AN S-WAVE SUPERCONDUCTING RING

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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# CERTIFICATE OF OUTSTANDING POSTER PRESENTATION

is awarded to

**Nichtima Uapoonphol, Sasiwimon Naksuriyawong,  
Kanokporn Boonsirichai, Chakrit Saengkorakot, Jeelawat Esor,  
Ratchai Funklin and Vorapot Permnamtip**

for the Poster Presentation entitled

**DEVELOPMENT OF SUGAR ADULTERATION DETECTION IN FRUIT JUICE  
USING CAVITY-RINGDOWN SPECTROSCOPY TECHNIQUE**

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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# CERTIFICATE OF OUTSTANDING POSTER PRESENTATION

is awarded to

**Natsacha Inchoorun, Weerayuth Promjan, Rewadee Meesat, Sriwichai susuk,  
Wanee Suttivattanavet, Kusol Iamsub and Soravit Jamjumroon**

for the Poster Presentation entitled

DRYING HERBS WITH VERTICAL CYLINDRICAL SOLAR INCUBATOR

presented in 14th Science Research Conference held on 25-26 May 2023  
at the School of Science, University of Phayao.



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