



# Department of Education

## Region VII, Central Visayas

# **DIVISION OF CEBU PROVINCE**

Sudlon, Lahug, Cebu City



June 15, 2016

Division Memorandum No. 297, s.2016

# 5-DAY INTERNATIONAL SEMINAR WORKSHOP ON INQUIRY-BASED SCIENCE EDUCATION

To: Assistant Superintendent

**Education Supervisors/ Coordinators** 

District Supervisors/OICs

Elementary and Secondary School Heads

- 1. Attached is DepEd R7 Advisory No.071, s.2016, dated June 8, 2016, entitled, "5-Day International Seminar Workshop on Inquiry –Based Science Education."
- 2. Immediate dissemination of this Memorandum is desired.

RHEA MAR A. ANGTUD, Ed.D., CESO VI Schools Division Superintendent

Telephone Numbers:

Schools Division Superintendent:

(032) 255-6405

Website: <a href="https://www.depedeebuprovince.com">www.depedeebuprovince.com</a></a>
<a href="https://www.depedeebuprovince.com">E-mail Add</a>: <a href="https://depedeebuprovince.com">depedeebuprovince.com</a></a>

Accounting Section: Disbursing Section: (032) 254-2632 (032) 255-4401



## REPUBLIKA NG PILIPINAS REPUBLIC OF THE PHILIPPINES

#### KAGAWARAN NG EDUKASYON DEPARTMENT OF EDUCATION

#### REHIYON VII, GITNANG VISAYAS REGION VII, CENTRAL VISAYAS

Sudlon, Lahug, Cebu City



#### DepEd R7 Advisory No.071, s. 2016 June 8, 2016

(In compliance with DepEd Order No.8, s.2013, this advisory is issued for the information of DepEd officials, personnel/staff, as well as the concerned public.)

### 5 - Day International Seminar Workshop on Inquiry - Based Science Education

- This office is hereby disseminating the communication received from the Jag Center for Professional Development, inviting all interested parties to participate in its 5 - Day International Seminar Workshop on Inquiry - Based Science Education: Content and Strategies in Teaching K to 12 Science on August 18-21, 2016 at DepEd ECOTECH, Cebu City.
- 2. For more details of the said seminar-workshop, please refer to the attached communication and other related documents.
- 3. For the information of all interested and concerned parties.

JULIET A. JERUTA

Director III

OIC- Regional Director

RD ARV 06/08/ 2016

Office of the Director (ORDir), Tel. Nos.: (032) 231-1433; 231-1309; 414-7325; Office of the Assistant Director, Tel. No.: (032) 255-4542
Field Technical Assistance Division (FTAD), Tel. Nos.: (032) 414-7324 Curriculum Learning Management Division (CLMD), Tel Nos.: (032) 414-7323

Quality Assurance Division (QAD), Tel. Nos.: (032) 231-1071 Human Resource Development Division (HRDD), Tel. Nos.: (032) 255-5239

Quality Assurance Division (ESSD), Tel. No.: (032) 254-7062 Planning, Policy and Research Division (PPRD), Tel. Nos.: (032) 233-9030;

Education Support Services Division (ESSD), Tel. Nos.: (032) 256-2375; 253-8061; 414-7322; 414-4367

Finance Division, Tel. Nos.: (032) 256-2375; 253-8061; 414-7321

" EFA 2015: Karapatan ng Lahat, Tananagutan ng Lahat "



# JAG CENTER FOR Department of Education Region VII. Central Visayas PROFESSIONAL DEVELOPMENT DEVIATION OF PROFESSIONAL DEVELOPMENT DEVELOPM

Glenhaven 2-7G California Garden Square Condominium, RD2016-1630
Libertad St. Mandaluyong City
www. jagcenter.net • jag.professional@yahoo.com

June 3,2016

DR. JULIET A. JERUTA

Director Region VII Department of Education Sudlon, Lahuq, Cebu City

#### Dear Director Jeruta:

The JAG Center for Professional development intends to conduct a 5 -Day International Seminar-Workshop on Inquiry-Based Science Education: Content and Strategies in Teaching K to 12 Science with the theme on the following dates and venue listed below;

August 18-21,2016

DepEd ECOTECH Cebu City

Relative thereto, I would like to request for your approval and regional advisory of the 5-Day International Seminar-Workshop on Inquiry-Based Science Education: Content and Strategies in Teaching K to 12 Science .

The main objectives of this seminar-workshop are to provide the participants with the necessary knowledge, skills and values required to carry-out inquiry-based learning in science. Specifically, the participants should be able to:

#### I. Objectives

- Acquire knowledge and understanding of the philosophy of inquiry based science to carry out inquiry-based science learning;
- Adopt various inquiry-based learning approaches in teaching science;
- · Assess student learning in inquiry-based science;
- Utilize learning tools and resources to support inquiry-based science; and
- Plan and design science lesson adopting inquiry-based science learning.
- II. Target Participants: Preschool Teachers, Grade 1- senior high school teachers, school heads, science supervisors and coordinators, students and professors in teacher education both public and private.
- III. Registration fee: P4,500.00/participant to cover seminar fee, kit, materials, 6 snacks and 4 lunches. Early Registration until June 30,2016 P2,800.00, July 15,2016- P3,300.00, July 30,2016- P3,500.00, August 15,2016-P4,000.00 Group of 10 teachers free 1 per district. Interested individual may deposit their payment at , Smart Money/Padala No. 5577-5193-9763-5104 or metrobank account at 427-7-427-50267-4- JAG Center for Professional Development



# JAG CENTER FOR PROFESSIONAL DEVELOPMENT

Glenhaven 2-7G California Garden Square Condominium, Libertad St. Mandaluyong City www. jagcenter.net • jag.professional@yahoo.com

#### IV. Program

Time	Day 1	Day 2	Day 3	Day 4
8:00 a.m9:30 a.m.	Registration	Inquiry –based Science(Physics) Learning and Pedagogy	Content and Strategies in Teaching Physics	Resources for Inquiry- based Leaning
Resource Speaker		Dr. Joel T. Maquiling		
9:30 a.m 10:00 a.m.	Opening Program	Morning Break	Morning Break	
10:00 a.m12:00 noon	Fundamentals of Science Inquiry	Promoting Thinking Skills	Strategies in Teaching Physics	5-E Inquiry Instructional Design Model
Resource Speaker	Dr. Joel Maquiling	Mr. Dominador D. Mangao SEAMEO RECSAM Penang, Malaysia		Prof. Crist John Pastor PNU,Manila
12:00 noon -12:30 p.m.	Lunch Break	Lunch Break		Lunch Break
12:30 p.m2:30 p.m.	Inquiry –based Learning Approaches: Problem-based learning	Evaluation and Assessment of the Effectiveness and Efficiency of Inquiry-Based Science (Physics)	Content and Strategies in Teaching Life Science	Cross-Disciplinary Approach: STEM Education
Resource Speaker	Mr. Dominador D. Mangao SEAMEO RECSAM Penang, Malaysia			Mr. Dominador D. Mangao SEAMEO RECSAM Penang, Malaysia
2:30 p.m4:30 p.m.	Inquiry -based Learning Approaches: Project-based learning	Integrating/Using Technology in Inquiry – based Learning	Inquiry –based Science(Chemistry) Learning and Pedagogy	Science Inquiry and Global Citizenship
Resource Speaker	Mr. Dominador D. Mangao SEAMEO RECSAM Penang, Malaysia	Dr. Joel T. Maquiling		
4:30 p.m7:00 p.m.	Science Inquiry and Global Citizenship	Inquiry –based Science(Life Science) Learning and Pedagogy	Content and Strategies in Teaching Chemistry	
Resource Speaker	Mr. Dominador D. Mangao SEAMEO RECSAM Penang, Malaysia	3~3)	reaching chemistry	

V. Contact Information: Interested participants/individual may contact/ call at 054-288-1188/0906-493-9880/0919-6818801.

May this request merit your favourable and immediate response.

Thank you.

GENEROSO C. FILIO JR. President/Owner

#### **Brief CV**



#### Personal Background:

Name: Joel Tiu Maquiling, Ph. D.

Profession: University Professor of Physics

#### Institution:

Ateneo de Manila University, Loyola Heights, Quezon City 1108, Philippines

#### Research Interest(s):

Science Education, Physics Education, Disaster Science and

Geophysics (Granular Matter Dynamics, Rheology, and Fracture Mechanics and Failure Mechanisms)

Speaker and Resource Person: Science Education, Physics Education, Geohazards/Disaster Science Seminars/Workshops/Conferences, In Service Teacher—Training & Continuing Development & Professional Programs, UNESCO ALOP (Active Learning in Optics & Photonics) Workshops

#### Educational Background:

Ph.D. in Geophysics, Universita degli Studi di Padova, Padova, Italy [Under The Erasmus Mundus Mobility with Asia (EMMA) Scholarship Program]

M.S. in Physics. Ateneo de Manila University [Under the Ateneo Graduate Scholarship Fund (AGSF)]

B.S. in Physics for Teachers, Philippine Normal University (PNU) [Under the Department of Science and Technology (DOST) and Science Education Institute (SEI)]

### Membership in Learned Societies and Organizations:

Philippine Physical Society (SPP)

Asian Physics Education Network (ASPEN)

American Physical Society (APS)

Optical Society of America (OSA)

International Society for Optics and Photonics (SPIE)

Tunisian Optical Society (TSO)

#### **BIO-DATA OF DOMINADOR DIZON MANGAO**



Date of Birth: July 30, 1967

Place of Birth: Badiangan, Iloilo, Philippines

Nationality: Filipino Civil Status: Single

Email: dominador\_mangao@recsam.edu.my or dom.mangao@gmail.com

Phone (Malaysia): +60164623214

Mobile Phone (Philippines): +639495399937

Office Phone: 60-4-6522752

#### PRESENT POSITIONS HELD

Specialist, Research and Development Division

July 2014- present

Specialist, Training Programme Division

February 2007 - July 2014

Southeast Asia Ministers of Education Organization - Regional Center for Education in Science and

Mathematics (SEAMEO RECSAM)

Address: Jalan Sultan Azlan Shah, 11700 Gelugor, Penang, Malaysia

Tel. 60 – 4 6522700 Fax: 60 -4 6522737

Website: http://www.recsam.edu.my

#### **EDUCATIONAL QUALIFICATIONS**

Graduate: Docto

**Doctor of Education** 

Major in Educational Management (earned 30 credit units)

West Visayas State University La Paz, Iloilo City, Philippines

Master of Arts in Education (specialization in Biological Science)

West Visayas State University La Paz, Iloilo City, Philippines Graduate, March 1992

Master of Arts in Education

(Administration & Supervision-Completed Academic Requirements)

University of Iloilo

Rizal St. Iloilo City, Philippines April 1992 – March 1995

College:

Bachelor of Science in Agriculture (major in Agricultural Education)

West Visayas State University La Paz, Iloilo City, Philippines Cum Laude, March 1988

Secondary:

Badiangan Municipal High School Badiangan, Iloilo, Philippines Salutatorian, March 1984

Elementary:

Badiangan Central Elementary School, Badiangan, Iloilo, Philippines

With Honors: Third Honorable Mention, March 1980

#### SPECIALIZED TRAINING/SCHOLARSHIPS RECEIVED

- 10<sup>th</sup> APEC -Tsukuba International Conference: Innovation of Mathematics Education through Lesson Study Challenges to Energy Efficiency on STEM and Cross-border Education held on Februay 12-15, 2016 at University of Tsukuba, Japan.
- SEAMEO RECSAM-University of Tsukuba Joint Seminar: "Searching for Qaility Mathematics Curriculum Framework on the Era of Globalizatipon" held on February 15-18, 2016 at University of Tsukuba, Japan
- Expert Dispatched Program for Technical Assistance to Zambian Educators conducted at Lusaka and Livingstone, Zambia organized by Ministry of Education, Science, Vocational Training and Early Education, Republic of Zambia with funding support from Japan International Cooperation Agency (JICA) on 8-12 July 2013 and July 7-11, 2014
- Study Mission in Paris and Nice, France on La Main a La Pate (LAMAP) sponsored by French Academy of Science on March 2008
- La Main a la Pate (LAMAP) Workshop for SEAMEO Science Educators sponsored by French Academy of Science, Malaysian Academy of Science held at RECSAM, Penang, Malaysia on June 2004, June 2005 and September 2006
- Second International Conference on Primary and Secondary Schools Science and Mathematics Education, French Academy of Science, Malaysian Academy of Science, Kuala Lumpur, Malaysia, June 2004
- Integrated Short-term Scholarship Program for Science and Mathematics Supervisors (Science Education)
   University of the Philippines National Institute for Science and Mathematics Education (UPNISMED) May 2001
- Ministry of Education Science, Technology, and Culture (MONBUSHO) Scholar, Government of Japan (Science Education) College of Education, Toyama University Toyama, Japan April1, 1997 – March, 1998
- Intensive Japanese Language
   Kanazawa University International Student Center, Kanazawa University, Ishikawa Prefecture, Japan, October 1996 – March 1997
- RP-Japan Friendship Programme for the 21<sup>st</sup> Century (Study Visit to Japan)
  Japan International Cooperation Agency (JICA), Government of Japan
  Tokyo, Osaka, Yamanashi, Japan, June 1955

#### **Eligibility/Examinations**

- 1988 Professional Board Examination for Teachers (PBET Rating of 77.68%) registered with PRC – Professional Teacher's License #0350053
- P.D. 907, Cum laude, March 1988, West Visayas State University, La Paz, Iloilo City, Philippines

#### **PREVIOUS POSITIONS HELD**

- Education Program Specialist II
   Curriculum Development Division
   Bureau of Elementary Education
   Department of Education Central Office, Pasig City, Philippines
   July 2004 November 2010
- Education Supervisor II
   (Regional Supervisor: Science and Health)
   Elementary Education Division
   Department of Education Regional Office VI, Iloilo City, Philippines
   March 2001 July 2004
- Public Elementary School Principal II
   A. Montes II Elem. School
   Division of Iloilo City, Department of Education, Iloilo City, Philippines

   December 1998 March 2001
- Public Elementary School Principal I N.J. Ingore Elem. School Division of Iloilo City, Department of Education, Iloilo City, Philippines January 1997 – December 1998
- Head Teacher III
   Ticud Elem. School
   Division of Iloilo City, Department of Education, Iloilo City, Philippines
   August 1995 January 1997
- Teacher III
   La Paz I Elem. School
   Division of Iloilo City, Department of Education, Iloilo City, Philippines
   August 1992 August 1995
- Teacher I
   Nabitasan Elem. School
   Division of Iloilo City, Department of Education, Iloilo City, Philippines
   July 1990 August 1992

#### **WORK EXPERIENCES RELATED TO PUBLICATIONS IN MALAYSIA**

- Associate Editor: Journal of Science and Mathematics Education in Southeast Asia. SEAMEO RECSAM, Gelugor, Penang, Malaysia, January 2015 up to present.
- Editor: Journal of Science and Mathematics Education in Southeast Asia. SEAMEO RECSAM, Gelugor, Penang, Malaysia, January 2012 December 2014
- Module Writer Educational Leadership Course for Wawasan Open University, Penang, Malaysia
- Editor: Malaysian Toray Science Foundation Editing Workshop for Selected Winning Entries of MTSF Science Education Award, June 2012
- Paper Reviewer: The Fifth International Conference on Science and Mathematics Education (CoSMEd 2013), "Empowering the Future Generation through Science & Mathematics Education" 11-14 November 2013.SEAMEO RECSAM, Penang, Malaysia.
- Editorial Team Member: Proceedings. The Second International Conference on Science and Mathematics Education (CoSMEd 2007), "Redefining Learning Culture for Sustainability" 13-16 November 2007.SEAMEO RECSAM, Penang, Malaysia

#### **PUBLISHED ACADEMIC WRITINGS**

- Mangao, D.D. & Ng, K.T. (2014). In Zhang, B., Fulmer, G.W., Liu, X., Hu, W., Peng, S. and Wei, B. (Eds), International Conference on Science Education 2012 Proceedings Science Education: Policies and Social Responsibility. Springer
- Mangao, D.D., Hazura, Ab Bakar, Foo, L. K., Devadason R.P. (Eds). (2014). Making Sense of Science Through Inquiry: Problem-Based Learning at Work. SEAMEO RECSAM, Penang, Malaysia.
- Mangao, D.D. & Ui Hock, C. (2013). Case studies: Benefits of student research. In Campbell, C., & Robottom, I. (Eds.) (2013). Learning science beyond the classroom. Penang: SEAMEO RECSAM.
- Mangao, D.D. & Esdicul, A.M. (2010). Country reports: Philippines. In Devadason, R. P., Wahyudi, Cheah, U. H., & Ng, K. T. (Eds.) (2010). The State of Use of ICT in the Teaching and Learning of Science and Mathematics among Schools in SEAMEO Member Countries. Penang, Malaysia: SEAMEO RECSAM.
- Mangao, D.D. (2010). In Azian, A. (Ed.). (2010). Integrating Climate Change Issues in Southeast Asian Schools. A Teachers' Guidebook. Penang: SEAMEO RECSAM.

# <u>PUBLISHED AND UNPUBLISHED ACADEMIC WRITINGS</u>, <u>PAPER AND POSTER PRESENTATIONS IN INTERNATIONAL CONFERENCES</u>

Mangao, D.D. (2015). SEAMEO Basic Education Standards (SEA-BES): Responding to Equity and Equality in Education in the Southeast Asian Region. Paper presented at 6<sup>th</sup> International Conference on Science and Mathematics Education (6<sup>th</sup> CoSMEd 2015) at SEAMEO RECSAM Penang, Malaysia on 16-19 November 2015.