MILSET SPC REPORT

MILSET STEAM PHOTO CONTEST 2020 REPORT

The International Movement for Leisure Activities in Science and Technology

www.milset.org

MILSET STEAM PHOTO CONTEST 2020 REPORT

The International Movement for Leisure Activities in Science and Technology (MILSET) organised the **edition 2020** of the **MILSET STEAM Photo Contest (SPC)** from May to November 2020. The SPC aims at creating a leeway for youth to express what they observe within science, in photos creatively. The activity is free and open to participants of 13 to 25 years old from all over the world.

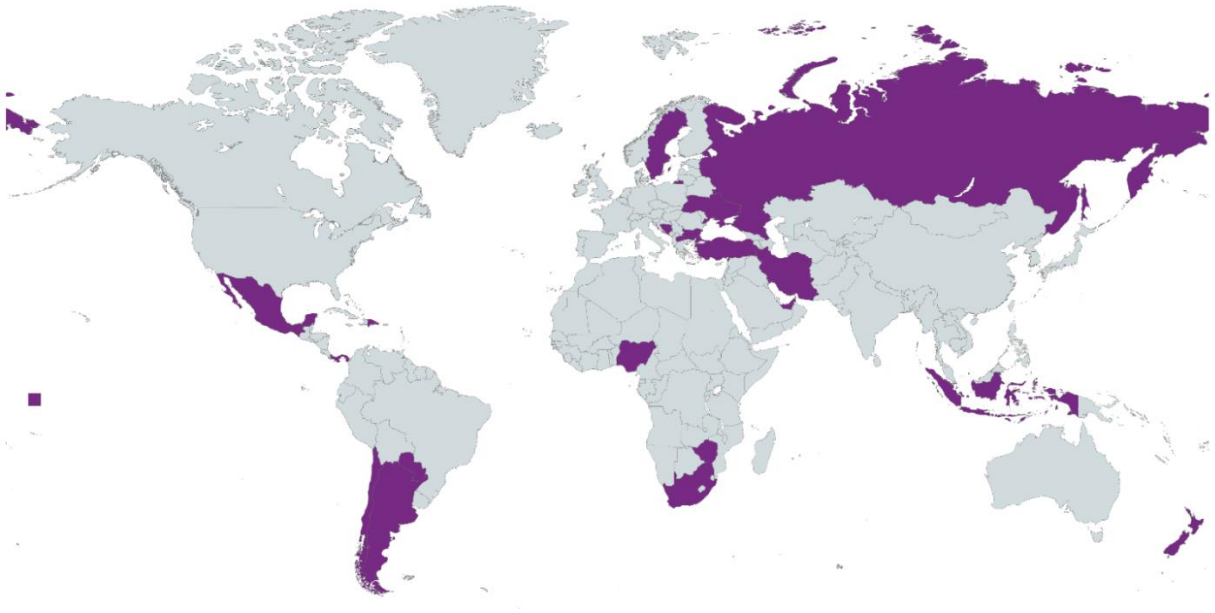
The **goals** of this activity are:

- Engage youth in science, technology, engineering, arts, mathematics (STEAM) by:
    - Exploring visual aspects of STEAM through the art and science of photography
    - Capturing images to demonstrate and communicate STEAM concepts and phenomena
    - Applying STEAM techniques to the capture of digital photos
- Build a collection of STEAM photos by youth worldwide to be used by MILSET and its member organisations.

Photo Eligibility

- Each contestant may submit a maximum of three photos for judging. An online form must be completed
- Any photo that demonstrates, communicates or explains a scientific, technological, engineering, or mathematical concept or phenomenon is eligible.
- The online form requires the contestant to describe the concept briefly or phenomenon associated with each photo.
- Photos must be the sole work of the contestant.
- Photos must be captured using a digital camera – photos created by software are not permitted
- Processing, including cropping and adjustments to correct or enhance exposure or colours, is acceptable; the addition, removal or distortion of meaningful content is not permitted.
- Photos must not include a watermark or descriptive text.

MILSET SPC 2020 is free of charge activity addressed to all youth worldwide. During the registration period from May to November 2020, **555 photographs from 20 countries were received**. The participants could submit from 1 to 3 photos, and their scientific explanation in the registration system developed. From 242 participants, 60% were adults (from 18 to 25 years old) and 40% minors (under age).



Each participant was requested to upload the photo(s) with its scientific explanation. For those participants under age (>18 years), a parent consent form was additionally requested.

The photographs received went through the following evaluation phases:

1. **Compliance of Rules:** During this step, all photographs were evaluated regarding their compliance with the rules (participant age within the range allowed, the scientific explanation in English, photographs without visible modifications, etc.). Those that followed the rules went to the next phase.

2. **Scientific explanation & quality of the image:** by this phase of evaluation, the jury defined the scores of the photographs based on the criteria mentioned below:

No.	***Description***	***Rating***
Photo Criteria – Technical Qualities		***Rate each criterion from 0 to 5 points***
1	Exposure	
2	Colour Balance	
3	Sharpness, Bokeh and Blur	
4	**Colour photo**: Hue and Saturation or **Black and white photo**: Tonality and contrast	

Photo Criteria – Creativity, Originality and Aesthetics		***Rate each criterion from 0 to 5 points***
5	Format and Framing	
6	Presence and Placement of Primary Subject	
7	Lighting (Natural or Artificial)	
8	Shapes and Lines	
9	Picture Depth (use of multiple planes)	
10	Dynamics between Key Picture Elements	

Photo criterion – STEAM Relevance		***Rate this criterion from 0 to 20 points***
11	How well is the STEAM concept or phenomenon captured in the photo	

Informational Content Criterion		***Rate this criterion from 0 to 15 points***
12	Demonstration of an in-depth understanding and knowledge of the STEAM concept or phenomenon presented in the photo	

Effective Communication Criterion		***Rate this criterion from 0 to 15 points***
13	Effective communication in rendering the STEAM concept or phenomenon accessible to the non-scientific observer	

	TOTAL	

After all this process only 292 photographs reached the second phase.

It was developed a MILSET SPC Virtual Gallery, space where the 10 photographs best scored are shown.

https://spc-virtual.milset.org/2020/

The 1st , 2nd and 3rd

places were obtained by:

1st Place

Author: **Danae Padilla**
Country: **Mexico**
Title: **"Life"**
Prize: **250 Euros**

What I want to represent with this photography is the art of life. You can find creatures so beautiful that you could not take your eyes off the creature. Biology teaches you how beautiful living organisms' lives can be considering their anatomy, physiology, evolution, development, distribution, and relationships. It is something that anyone would be delighted with. In my photography, the jellyfish are shown, since, in my opinion, they are beautiful and charming creatures, impossible not to appreciate, this creature is a living organism that in my opinion is art for my eyes. So I consider biology to be an art, to understand these living organisms and appreciate what life is.

2nd Place

Author: **Glafira Osipycheva**
Country: **Russia**
Title: **"Christmas"**
Prize: **National Geographic membership**

The photo shows the oil droplet stuck in between the water and spirit. Due to the Archimedes principle, the liquid with a lower density moves on top of that with a higher density. Therefore, we see the water with the highest density pushing the oil and spirit with lower densities up the beaker. The air bubbles on top of the oil droplets reflect light and create the impression that what we see is the Christmas decorations.

3rd Place

Author: **Kathya Juarez**
Country: **Mexico**
Title: **"Erosion"**
Prize: **National Geographic membership**

I found interesting this spot at my little town, as you can see there is a three on top of an eroded piece of land, anthropological actions caused this erosion. I found amazing that although the ecosystem in which this being lives was disturbed, it let this tree continue to grow. Thanks to this, the three continues providing oxygen in the Perote's Valley. Nature never ceases to amaze me do to that in a short time I have observed small shoots grow that will become large and healthy trees, in a space that was once destroyed by the human hand.

An official image and a Social media campaign were developed to promote the activity. This campaign included the following applications and channels:

- MILSET Facebook
  - MILSET Expo-Sciences International Facebook
  - MILSET AMLAT Facebook
  - MILSET Africa Facebook
  - MILSET Asia, Facebook.
- Twitter
- Instagram
- LinkedIn
- MILSET YouTube channel.

The following rate expresses the impact on social media: **High impact** (More than 2,000 people reached), **Medium impact** (from 500 to 2,000 people reached), **Low impact** (less than 500 people reached). For the campaign developed, the impact reached was:

Material	Published Date	Impact	Reproductions
Video Tip 1	June 30	Medium	435
Video Tip 2	July 9	Medium	254
Video Tip 3	July 16	Low	91
Video Tip 4	August 5	Medium	708

Material	Published Date	Impact	Organic Reach
Banner	September 22	High	2.4k
Banner "SPC 2020 Virtual Gallery"	December 17	Low	301
Banner "Judges ready to select."	December 10	Low	483
Ready to meet the best SPC photographers	January 6	Low	476
3 Days to meet the winners	January 8	Low	402
2 Days to meet the winners	January 9	Low	195
1 Day to meet the winners	January 10	Low	333
3rd place winner	January 11	Medium	827
2nd place winner	January 11	Low	681
1st place winner	January 11	Medium	794
Virtual gallery 2020	January 12	Low	478

A deep appreciation to the following people who made possible this activity:

JURY COMMITTEE

- Normand Fafard MILSET SPC Jury President
- Rod Zapién
- Dermot McElduff
- Carlos Richer
- Luis Monje Arenas

TECHNICAL COMMITTEE

- Berenice Suarez Rodriguez (MILSET Managing Director)
- Lisette Vela Reyes (MILSET Communication Manager)
- Jose Alberto Garcia Torres (MILSET IT Coordinator)

SPECIAL THANKS TO:

- Carole Charlebois (MILSET General Secretary & Treasurer)
- MILSET EXECUTIVE COMMITTEE
- MILSET Members that promoted the activity within their environment