

## Winners of 2019 TISF (Young Scientist Award)

| No.    | Category/Country                         | Project                                                                                        | School                             | Finalist           | Award                 |
|--------|------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------|--------------------|-----------------------|
| 180021 | Earth and Environmental<br>United States | Satellite Modeling of Wildfire Susceptibility in California Using Artificial Neural Networking | Terre Haute South Vigo High School | Anthony David Weng | Young Scientist Award |

## Winners of 2019 TISF(Mathematics)

| No.    | Category/Country        | Project                                                               | School                                          | Finalist                                 | Award          |
|--------|-------------------------|-----------------------------------------------------------------------|-------------------------------------------------|------------------------------------------|----------------|
| 010044 | Mathematics<br>Thailand | The Study of the Relationship between<br>Global Warming and Acid Rain | Princess Chulabhorn<br>Science High School Loei | Ketklao Thanasoot<br>Chaloemkiat Yapolha | Third<br>Award |

# Winners of 2019 TISF(Chemistry)

| No.    | Category/Country | Project                                                      | School                  | Finalist        | Award           |
|--------|------------------|--------------------------------------------------------------|-------------------------|-----------------|-----------------|
| 030028 | Chemistry        | Findings of new oscillations in BR reaction                  | Shizuoka Municipal High | Ayato Hakamada  | First<br>Award  |
|        | Japan            |                                                              |                         | Mikana Sugimori |                 |
|        |                  |                                                              |                         | Ibuki Sugiyama  |                 |
| 030025 | Chemistry        | Plexiglas: from synthetic glass to cationic exchanging resin | Istituto di Istruzione  | Noor Gholam     | Fourth<br>Award |
|        | Italy            |                                                              |                         | Elisa Ausili    |                 |
|        |                  |                                                              |                         |                 |                 |

## Winners of 2019 TISF(Microbiology)

| No.    | Category/Country            | Project                                                              | School                                           | Finalist         | Award           |
|--------|-----------------------------|----------------------------------------------------------------------|--------------------------------------------------|------------------|-----------------|
| 070010 | Microbiology<br>Russia      | Co-evolution of transcription factors and their binding sites in DNA | Moscow South-Eastern<br>School named after V. I. | Tatiana Kadykova | Second<br>Award |
| 070009 | Microbiology<br>New Zealand | Antibacterial Properties of Mānuka                                   | King's High School                               | Liam Hewson      | Fourth<br>Award |

## Winners of 2019 TISF(Medicine and Health)

| No.    | Category/Country                 | Project                                                                               | School                            | Finalist                     | Award       |
|--------|----------------------------------|---------------------------------------------------------------------------------------|-----------------------------------|------------------------------|-------------|
| 090023 | Medicine and Health<br>Singapore | FAT10 Haplotypes as a Potential Biomarker for Cancer                                  | Raffles Institution               | Ho Choy Mun Gabrielle        | First Award |
| 090022 | Medicine and Health<br>Macau     | BA-ADA based ROS-responsive nanoparticles for selective drug delivery in cancer cells | PUI CHING MIDDLE SCHOOL,<br>MACAU | LAO SAP TOU<br><br>HUI I SAM | Third Award |

## Winners of 2019 TISF (Engineering)

| No.    | Category/Country            | Project                                                                               | School               | Finalist                                           | Award        |
|--------|-----------------------------|---------------------------------------------------------------------------------------|----------------------|----------------------------------------------------|--------------|
| 100017 | Engineering<br>Canada       | Improving Spinal Fusions: Redesigning the Pedicle Probe to Prevent Vertebral Breaches | Claremont Secondary  | Nicolas Fedrigo                                    | First Award  |
| 100024 | Engineering<br>Luxembourg   | A Modular Construction 3D Printer                                                     | Lycee Aline Mayrisch | Alex Muller<br>Valentin Ringlet<br>Maverick Schmit | Second Award |
| 100018 | Engineering<br>Saudi Arabia | An Innovative Design of Enhanced-Performance Solar Panel Using Heat Pipe and          | Al-Faisaliah Islamic | Norah Fahad Alamri                                 | Third Award  |
| 100022 | Engineering<br>South Africa | Robotic Search and Rescue                                                             | Hoerskool Waterkloof | Christiaan Bauman                                  | Fourth Award |

## Winners of 2019 TISF (Behavioral & Social Sciences)

| No.    | Category/Country                                | Project                                                                                             | School                         | Finalist                   | Award |
|--------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------|----------------------------|-------|
| 130011 | Behavioral &<br>Social Sciences<br>Saudi Arabia | Improving Communication for the Visually<br>Impaired Through an Innovative Arabic<br>Writing System | Al-Faisaliah Islamic<br>School | Taala Fahad Moahammadsadiq | 大會獎   |

## Winners of 2019 TISF (Physics & Astronomy)

| No.    | Category/Country                      | Project                                                              | School                          | Finalist                        | Award           |
|--------|---------------------------------------|----------------------------------------------------------------------|---------------------------------|---------------------------------|-----------------|
| 160029 | Physics &<br>Astronomy<br>South Korea | Effect of Air Resonance by Wind Speed<br>Difference on Falling fruit | Changwon Science High<br>School | GyeongMin Kim<br><br>Yewon Jang | Second<br>Award |
| 160028 | Physics &<br>Astronomy<br>Switzerland | Beautiful Butterfly: The Physics Behind The<br>Colors                | Gymnasium Kirschgarten          | Aashi Kalra                     | Fourth<br>Award |



## Winners of 2019 TISF (Earth and Environmental Sciences)

| No.    | Category/Country                                  | Project                                                                                                              | School                             | Finalist           | Award        |
|--------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------------|--------------|
| 180021 | Earth and Environmental Sciences<br>United States | Satellite Modeling of Wildfire Susceptibility in California Using Artificial Neural Networking                       | Terre Haute South Vigo High School | Anthony David Weng | First Award  |
| 180025 | Earth and Environmental Sciences<br>United States | Multiple Time-step Predictive Models for Hurricanes in the North Atlantic Basin Based on Machine Learning Algorithms | Oregon Episcopal School            | Aneesh Gupta       | Second Award |
| 180020 | Earth and Environmental Sciences<br>Switzerland   | The expansion of ticks in the valley of Poschiavo: a growing threat to the future?                                   | Bündner Kantonsschule Chur         | Michela Ferrari    | Third Award  |

# Winners of 2019 TISF Computer Science and Information Engineering)

| No.    | Category/Country                 | Project                                                                            | School               | Finalist              | Award          |
|--------|----------------------------------|------------------------------------------------------------------------------------|----------------------|-----------------------|----------------|
| 190018 | Computer Science<br>Saudi Arabia | Convert pixel image into paths saves in XYZ<br>format to use in CNC machines using | Al-Husan High-School | Ahmed Kamel Bukhamsin | Third<br>Award |

## Winners of 2019 TISF Environmental Engineering)

| No.    | Category/Country                         | Project                                                                                        | School                     | Finalist                                 | Award        |
|--------|------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------|------------------------------------------|--------------|
| 200018 | Environmental Engineering<br>New Zealand | (Alternating Rotational Conversion) Generator                                                  | John Paul College          | Cian Hinton                              | First Award  |
| 200016 | Environmental Engineering<br>Canada      | A 100% Solar Electric Vehicle: Applying high efficiency solar modules in sustainable transport | Semiahmoo Secondary School | Natasha Burgert                          | Third Award  |
| 200021 | Environmental Engineering<br>Tunisia     | "turn" -on (free food and renewable energy )                                                   | ATAST                      | YASSINE BEN SAID<br>MOHAMED RADHI BRIGUI | Fourth Award |