The Solar Research Laboratory

Focusing research directions in the Research Laboratory sun on the scientific fields broad nature applied with the study of the sun, as a source quasi eternal solar energy as well as the study of the sun as a body physicist as one of the stars, in addition to the study of the relationship between the sun and the earth, and the effects of the sun on the space environment around us and a reflection on the progress in space and reconstruction projects, as well as to keep track of the various solar phenomena and the work of physical models and its repercussions on some aspects of life on the ground, which requires continuous expansion in solar research and monitoring in different ways.

Overview:

Nowadays, with global energy consumption continuing to rise, the so called “renewable energy” arises from natural sources which are naturally and constantly replenished. Among them, great attention has been paid on the solar energy, where the sun provides an abundant source of sustainable energy-enough to supply all of humanity’s primary energy needs. Solar research laboratory focuses on a broad band of scientific applications depending on the solar energy as a permanent source for clean and renewable energy, especially solar cell applications. In addition, study the sun as a physical object as well as a star. Also, our research is much interested in studying the relationship between the sun and earth and the effects of solar energy on the surrounding environment and how these studies affect on the space research progress. as well as to keep track on the different solar phenomena and creating its physical models and its repercussions on the daily life applications, which requires continuous expansion in solar research and monitoring.

From right to left, Solar Telescope and Dome of Solar Telescope.

From right to left, and Solar Radiation Station and Solar Cell Tester.

From right to left, Effect of UV on microorganism and Sun photometer.

The Research Trends in the Research Laboratory are:-

- **Solar Physics**
- **Solar Radiation**
- **Solar-Terrestrial Studies**
- **Solar Energy**
- **Pollution and Environment**
- **Astronomical calculations and Calendars**
- **Observing the astronomical phenomena**
- **Islamic Astronomy**
- **Determine Qebla direction and calculation of prayer times**
- **Archeological Astronomy**
- **Calculating the geographic locations for some establishments**
- **Spectrographic**