SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1) Poster Session (P)

Author: Dr. Ugur Guven United States

Mr. Gurunadh Velidi University of Petroleum and Energy Studies, India Mr. Rohan M Ganapathy Hindusthan College of Engineering and Technology, India

SPACE EDUCATION AT HIGH SCHOOL LEVEL FOR ADVANCEMENT OF SCIENCE AND TECHNOLOGY OF MANKIND AND CHALLENGES OF SPACE EDUCATION IN 21ST CENTURY

Abstract

"Le rêve d'étoiles" or the "Dream of Stars" has been one of the main modes of humankind's quest for advancement and for knowing the secrets of the universe. Today, we owe many of our scientific knowledge and technological advancements to space technology research and many of the day to day technologies like LCD TV or Microwave Oven has been influenced directly by advancements in space research. Hence, it is essential to address the importance of aeronautics and astronautics at the high school level, so that it will allow the public to have a greater appreciation of space technology, as high school students of today will become the adults of tomorrow who will influence space policy and also become tax payers to pay for the cost of space technology. Furthermore, a base education of aeronautics and astronautics can help those high school students who are interested in further studies by giving them a solid foundation. Of course, it is also essential to create a solid foundation that can also serve the purpose of science and technology as well. Unfortunately, many studies show decay in the quality of education at high school level and this has an indirect effect on space technology as well. However, more and more opportunities for space research has become possible at high school level with the inclusion of nano satellite projects as well as with do it yourself space projects. Furthermore, there are many field trip opportunities which would allow for greater understanding of these topics and these can be combined with simple summer school and internship opportunities to emphasize their importance. These should be explored in more detail and the curriculum of high school studies should have more emphasis on space education. In addition, special training of high school teachers with seminars and workshops can also make a significant difference. This paper discusses these issues as well as the challenges associated and tries to explore various solutions within budget constraints.