

November 2012: Solar Ovens To Warm Lunch At Educational Centers - Due to electric rationing imposed by local Costarican Electricity utility company in January 1979, Shyam S. Nandwani made the first solar oven for his family in Feb. 1979, to warm the lunch cooked previous night. He writes: I did not think of any energy crisis and global warming etc. Since that time I have designed, constructed and studied different solar cookers- hot box types, hybrid solar- 110 VAC electric, hybrid solar- 12 VDC electric, cooker cum dryer, solar electric microwave oven etc. Although solar cooker uses are increased, however these are not used as expected- could be around 2 to 2.5 million, constructed and or distributed worldwide, including in Refugee camp. Thanks to Solar Cookers International for promoting this simple but practical device. Low acceptance is due to different reasons- climate, initial cost, cultural, lack of sunny space and both husband wife working out of the house etc. Because of our promotional program, during past 4 years, author has observed the rising demand of our solar ovens at educational institutes to warm the lunch for the students at schools and colleges etc. According to school directors, the reason is to reduce the queue for using microwave ovens as well to reduce the electric bill for the institute and promote environmental culture for the students as well as also for the parents. Warming meal requires less temperature and thus less time. In addition to author who is using solar oven for cooking at home and warming lunch at office for last 33 years, according to our knowledge, at least 32 solar ovens have made been made of different sizes at 12 educational centre and including one at Travel Agency to warm meal for their employees. One of the school, Saint Paul in Heredia, (See Photo) made in 2009, eight solar ovens for warming good quantity of lunch boxes. According their official report, "with this project we could reduce the use of 16 Microwave ovens and electricity. Although the energy saving for warming individual meal is comparatively less as compared to cooking, the amount could be increased by using more solar ovens at different institutions. Because of research and promotional work with Solar Cookers and Cooking, author is recognized with National Energy Globe Award in 2009 and 2012, given by the Energy Globe Foundation base in Austria. Shyam S. Nandwani, Ph.D. Professor, Laboratorio. de Energía Solar, Departamento de Física, Universidad Nacional, Heredia, Costa Rica. Member Solar Cookers Internacional and Energy Globe Ambassador (Austria) 2012-2013 E mail: snandwan@una.ac.cr snandwan@yahoo.com



Solar box cookers warming school lunches.



Students using Solar ovens at Department of Physics for warming lunch