UNIVERSITY OF RUHUNA Department of Physics

in collaboration with the

Sivananthan Laboratories, USA, Institute of Fundamental Studies, Kandy and the National Science Foundation, Sri Lanka, will organize an

"Advanced Workshop on Thin-film Solar Cells: their science, fabrication, and characterization"

(19-21 March 2013)

Conducted by: Dr. Tim Coutts, Dr. Tim Gessert, Dr. Ramesh Dhere and Dr. Mowafak Al-Jassim, Sivananthan Laboratories, Inc., USA

Sivananthan Laboratories, Inc. Illinois, USA in collaboration with Sri Lankan universities and research institutes, has launched a programme to develop a trained workforce of scientists, engineers and technicians in Sri Lanka who will be competent in alternative energy technologies. In order to contribute toward this, a two day workshop on *Solar Photovoltaic Technology* was held at the Institute of Fundamental Studies, Kandy on 28th and 29th June 2012. The second "advanced" workshop in this series will be held at University of Ruhuna, Matara from 19th to 21st March, 2013.

Scientists and Engineers from universities/research institutes/other state and private sector organizations, preferably with a Ph.D./M.Phil/M.Sc. or equivalent postgraduate or professional qualifications, and also graduates in Engineering and Science who have an interest in participating in this activity and hoping to be active players of an vibrant photovoltaic R&D community in Sri Lanka are invited to send their applications to:

Dr. G.D.K. Mahanama, Coordinator, Solar PV Workshop, Department of Physics, University of Ruhuna, Maddewatta, Matara

on or before 20th February, 2013.

Further information can be obtained from: <u>mahanama@phy.ruh.ac.lk</u>

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Tentative programme

Day				
1	Welcome	8:30-8:40	Dean/Science	Welcome Speech
	Session	8:40-8:50	S. Sivananthan	Introduction/Overview
		8.50-9.00	Vice Chancellor	Vice Chancellor's Address
	Coffee/Tea	9:00-9:30	Morning Coffee/Tea	
	Item/	Time Slot	Presenter	Lecture Topic
	Lecture#			
	1	9:00-10:00	Tim Gessert	Overview of Renewable Energy
				Technologies (Wind, Bio, Solar, etc).
	2	10:30-11:30	Tim Coutts	Solid State Science for Solar Cells 1
	Lunch	11:30-1:00	Lunch	
	3	1:00-2:00	Tim Coutts	Solid State Science for Solar Cells 2
	4	2:00-3:00	Mowafak Al-Jassim	Si Solar Cells
	Tea	3:00-3:30	Afternoon Tea	
	5	3:30-4:30	Ramesh Dhere	General Polycrystalline Materials
2	6	9:00-10:00	Tim Gessert	Hardware of Thin-Film Growth
	Coffee/Tea	10-10:30	Morning Coffee/Tea	
	7	10:30-11:30	Ramesh Dhere	Thin Film CdTe: History to Present
				Devices
	Lunch	11:30-1:00	Lunch	
	8	1:00-2:00	Tim Gessert	Other Thin-Film Materials
	9	2:00-3:00	Mowafak Al-Jassim	III-VI PV Materials and Devices
	Tea	3:00-3:30	Afternoon Tea	
	10	3:30-4:30	Ramesh Dhere	Thin Film Characterization - Optical
3	11	9:00-10:00	Mowafak Al-Jassim	Thin Film Characterization –
				Structural and Chemical
	Coffee	10:00-10:30	Morning Coffee	
	12	10:30-11:30	Tim Coutts	Future Directions in Thin Films
	Closing	11:30-noon	S. Sivananthan	5-10 min
	session		G.D.K. Mahanama	10 min: Vote of Thanks
		12.00-1.00	Lunch	

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APPLICATION FORM

Name with Initials:				
Office address:				
E-mail:	Tel: Office	Mobile:		
Present Employment				
Educational Qualifications				
B.Sc. (University, Year)				
M.Sc. (University, Year)				
M.Phil. (University, Year)				
Ph.D. (University, Year)				
Other				

Area of Research Interest	
Any previous	
experience/exposure to	
semiconductors, solar cells,	
solar energy materials, solar	
panels, etc. Please give details.	
(Please attach any research	
publications as proof)	

Signature:

Date:

The registration fee for applicants from state sector organizations (universities, research institutes) and M.Phil./Ph.D. research students (proof of registration for a degree and recommendation from the supervisor are necessary), will be covered by a grant from the NSF. For all other applicants, the registration fee is Rs. 3000/=.

Lunch and tea during the workshop sessions and a book of hand outs will be provided to all participants free of charge. However, accommodation and transport will NOT be provided.

Please send your completed application by e-mail (<u>mahanama@phy.ruh.ac.lk</u> or solarpvur@yahoo.com) and a signed copy by mail or fax (041 2222683) to:

Dr. G.D.K. Mahanama, Department of Physics, University of Ruhuna, Maddewatta, Matara to reach him on or before 20th February 2013.

As there are only 50 places available, participants are selected on the first-come-first-serve basis, as the applications are received by the organizers. Selected applicants will be informed by an e-mail.

Organizers will be happy to assist in recommending suitable paid accommodation in private guest houses (close to Ruhuna) as given below. Please contact them as early as possible if you need to reserve a room.

1. Sarvodaya Guest: Mr. Dassanayaka/Mr. Hasantha, Tel:0412222145

2. Cooperative Guest: Mr. Prabash, <u>Tel:0412222401</u>, 0713081343