

Tutorial on Thin Film Solar Cells

- 주 관 : 한국태양광발전학회, 대경 태양전지/모듈 지역혁신센터(RIC),
영남대학교 태양전지 소재공정 고급인력양성사업단, LINC 사업단 및 태양에너지연구소
- 기 간 : 2013 년 8 월 20 일(화) – 22 일(목), 총 20 시간
- 장 소 : 영남대학교 CRC Building 502 호
- 등록비 : 일반 20 만원, 학생 10 만원 (교재, 중식, 주차권 포함) / 선착순 80 명
- 강사진 : Timothy J. Anderson (Dean, College of Engineering, U. Mass Amherst, tja@umass.edu)
Angus Rockett (Professor, U. Illinois at Urbana Champaign, arockett@ad.uiuc.edu)

● Course content:

Day 1 (August 20, Tuesday)

Lecture	Time period	Contents	Lecturer
1	10:00 – 10:50	Intro to renewable energy & PV -- deployment options	A. Rockett
2	11:00 – 11:50	Sunlight, CPV, split spectrum concepts	A. Rockett
Lunch break			
3	13:00 – 13:50	Fundamentals of photovoltaic devices & multijunctions	A. Rockett
4	14:00 – 14:50	Photovoltaic device characterization & modeling	A. Rockett
5	15:00 – 15:50	Engineering PV systems, modules & encapsulation	A. Rockett
6	16:00 – 16:50	Power inverters & system design	A. Rockett
7	17:00 – 17:50	TCO's	A. Rockett

Day 2 (August 21, Wednesday)

Lecture	Time period	Contents	Lecturer
1	09:00 – 09:50	Multijunction devices	T. Anderson
2	10:00 – 10:50	Third generation concepts	T. Anderson
3	11:00 – 11:50	CdTe	T. Anderson
Lunch break			
4	13:00 – 13:50	CdTe	T. Anderson
5	14:00 – 14:50	Crystalline Si PV	A. Rockett
6	15:00 – 15:50	Amorphous Si PV	A. Rockett
7	16:00 – 16:50	OPV	A. Rockett

Day 3 (August 22, Thursday)

Lecture	Time period	Contents	Lecturer
1	09:00 – 09:50	CIGS and CZTS Device fundamentals	T. Anderson
2	10:00 – 10:50	CIGS and CZTS Phases & phase equilibria	T. Anderson
3	11:00 – 11:50	CIGS and CZTS Processing	T. Anderson
Lunch break			
4	13:00 – 13:50	Thin film processing	T. Anderson
5	14:00 – 14:50	Thin film processing	T. Anderson
6	15:00 – 15:50	Wrap up & discussion	T. Anderson