

## Selected Publications :

- Chusuei, C. C., K.L. Barth, R.A. Enzenroth and W. S. Sampath, "An XPS and SEM Study of an Efficient, Copper-doped Photovoltaic Cell", 224th ACS National Meeting, Division of Physical Chemistry, Boston, MA, August 18-22, 2002.
- Barth, K. L., R. A. Enzenroth, and W. S. Sampath, "Apparatus and Processes for the Mass Production of Photovoltaic Modules" US patent 6,423,565, July 23, 2002.
- Chusuei, Charles C., Kurt L. Barth, Robert A. Enzenroth, Walajabad S. Sampath, "Surface Characterization by X-ray Photoelectron Spectroscopy (XPS) and Scanning Electron Microscopy (SEM) of an Efficient, Copper-doped Solar Cell", ACS Middle Atlantic Regional Meeting, May 28-30, 2002.
- Barth, Kurt L., Robert A. Enzenroth and W. S. Sampath, "Advances in Continuous, In-Line Processing of Stable CdS/CdTe Devices", 29<sup>th</sup> IEEE PVSC, May 2002.
- Sites, J. R., A. O. Pudov, S. H. Demtsu, M. Gloeckler, K. L. Barth, R. A. Enzenroth, and W. S. Sampath, "Effect of Copper Concentration on CdTe Cell Operation", 29<sup>th</sup> IEEE PVSC, May 2002.
- Barth, Kurt L, Robert A. Enzenroth and W.S. Sampath, "Chlorine Issues", National Renewable Energy Laboratory's National CdTe Team Meeting, Coco Florida, March, 2002.
- Pudov, A. O., S. Demtsu, M. Gloeckler, J. Sites, A. Enzenroth, K. Barth, W. Sampath, "Variation of Cu Amount in the Back Contact of CSU CdTe Cells", National Renewable Energy Laboratory's National CdTe Team Meeting, Coco Florida, March, 2002.
- Barth, K. L., R. A. Enzenroth and W. S. Sampath, "Further Advances in Continuous Belt Air to Vacuum to Air (AVA) Processing ", NSF Grantees Conference, January 2002, published by the Society of Manufacturing Engineers (SME).
- Sampath, W. S., K. L. Barth, and R. A. Enzenroth, "Continuous, In-Line Processing of Stable CdS/CdTe Devices" Presented at the National Center for Photovoltaics Program Review Meeting, Lakewood, CO Oct 14-17 2001, published in proceedings.
- Barth, K. L., R. A. Enzenroth and W. S. Sampath, "Further Advances in Continuous Belt Air to Vacuum to Air (AVA) Processing ", NSF Grantees Conference, January 2002. published by the Society of Manufacturing Engineers (SME).
- Barth, K. L., R. A. Enzenroth and W. S. Sampath, "Further Advances in Continuous Belt Air to Vacuum to Air (AVA) Processing ", Presented at NSF Grantees Conference, January 2001. Published by the Society of Manufacturing Engineers (SME).
- Barth, K. L., R. A. Enzenroth and W. S. Sampath, "Continuous Belt Air to Vacuum to Air (AVA) Processing of Thin Films and Devices", Presented at NSF Grantees Conference, January 2000. Published by the Society of Manufacturing Engineers (SME).
- Sampath, W. S., K. L. Barth, and R. Enzenroth, "Continuous Air to Vacuum to Air (AVA) Manufacturing Processes," Presented at the NSF Grantees Conference, Jan. 1999, Published by the Society of Manufacturing Engineers.
- Congressional Record, Proceedings and Debates of the 105<sup>th</sup> Congress, Second Ed., September 11, 1998,
- Barth, K. L., P. Hebert, R. Enzenroth, D. Mathes and W. S. Sampath, "Progress in Air to Vacuum to Air (AVA) Deposition of Thin Films, Printed Circuit Boards (PCBs) and Solar Cells," Presented at NSF Grantees Conference, January 1998. Published by Society of Manufacturing Engineers.
- Barth, K. L., P. Hebert, R. Enzenroth, D. Mathes and W. S. Sampath, "Advances in Air to Vacuum to Air (AVA) Deposition of Thin Films and Solar Cells," Presented at NSF Grantees Conference, January 1997. Published by Society of Manufacturing Engineers.
- Barth, K. L. and W. S. Sampath, "Environmentally Benign Vacuum Deposition with Air to Vacuum to Air Technology", Journal of Materials Research, Vol. 10, No. 3, March 1995, pp. 493-496

Barth, K. L., A. Enzenroth, D. Mathes and W. S. Sampath, "Low Cost, High Throughput Vacuum Deposition with Air to Vacuum to Air (AVA) Technology", Invited talk presented at Materials Research Society (MRS) Fall Meeting, November 1995.