

**SOLUTION-PROCESSED PV POSITION**  
**IBM T. J. WATSON RESEARCH CENTER**  
**Yorktown Heights, NY USA**

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**—PV Technology Postdoctoral Opening—**

**Job Description:** The postdoctoral position (projected start date between May and August 2012) will focus on optimizing solution-processed copper-zinc-tin-sulfide-selenide (CZTSSe) photovoltaic (PV) devices. In addition to design, fabrication and analysis of these devices using established chemistries and techniques, efforts will be made to prepare new soluble semiconductor precursors and employ these precursors in thin-film deposition processes for PV devices with targeted high device power conversion efficiency.

**Required Skills:** Experience with solid-state/solution-based inorganic synthesis and thin-film deposition processes (especially solution-based techniques such as spin coating, ink-jet or spray coating); familiarity with materials characterization techniques—e.g., powder X-ray diffraction, thermal analysis, spectroscopic techniques (e.g., UV-vis, IR spectroscopy), AFM, SEM and TEM; experience with design, fabrication and testing of optoelectronic devices; ability to work independently; excellent written/verbal communication skills.

**Preferred Skills:** Experience with PV device design, fabrication, testing and modeling.

**Background:** Ph.D. in Materials Science, Chemistry, Chemical Engineering or a closely related field.

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To apply for this position, please send cover letter/resume/publication list to:

David Mitzi at [dmitzi@us.ibm.com](mailto:dmitzi@us.ibm.com)