



SPEAKER

Prof. Shuzi Hayase

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Printable solar cells

Thursday, April 23, 2015 10:00 - 11:00

@ Meeting Room C016, Lab 1

Abstract: My talk covers research on printable solar cells including perovskite solar cells and dye-sensitized solar cells. We focus on IR sensitive perovskite photo-electric conversion systems, Pb free perovskite solar cells, charge injection interface architectures from the view point of surface passivation, trap distribution study using thermally stimulated current, carrier dynamic collaboration study, flexible perovskite solar cells, and so on. In addition, cylinder dye-sensitized solar cells without transparent conductive oxide layer (back contact DSSC) will be reported.

Biography:

Professional Experience:

- 1978: Joined Toshiba corporation, Research and Development Center (Latent catalysts for ring opening polymerization (epoxy compounds), LSI lithography, Opto and electronic polymers)
- 1988-1990: Joined a polysilane research group in Wisconsin University (Robert. West) (P-type conductive polymer-Polysilanes-)
- 1990-2000: Returned to Toshiba corporation, Research and Development Center (Application of polysilanes to LSI, materials for solar cells and fuel cells)
- 2001-present: Professor of Kyushu Institute of Technology (Solar cells, Organic FET, Fuel cells, Emission devices)
- 2009-present: Supervisor, PRESTO, Japan Science and Technology Agency (JST), "Photoenergy conversion systems and materials for the next generation solar cells" project
- 2012-present: Dean of Graduate school of life science and systems engineering, Kyushu Institute of Technology.

Education:

- 1978: Graduated from Osaka University (Major: Polymer Chemistry)
- 1983: Received Ph.D. from Osaka University (Stereo-selective polymerization catalysts)



Awards:

- 1996: Award for Technological Development by the Japan Electrical Manufacturers' Association
- 1992: The Chemical Society of Japan Award for Technological Development: Awarded for distinguished contributions in technological development in chemical industry
- 1987: National Commendation for Invention by Japan Institute of Invention and Innovation

For more information

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