

Garó Khanarian



Principle Research Scientist at Dow Chemical (Electronic Materials)
Chemicals

<http://www.directoryinventor.com/profile/view/oOVzYRgr>

Experience

Principal Research Scientist and Technical Leader, Dow Electronic Materials

Dow Electronic Materials

10,001+ employees; Public Company; Chemicals
2009 - Present

Initiate and recommend several programs in alternate transparent conductors Technical leader of 10 person team to develop transparent conductor materials for display touch screens using silver nanowires, graphene, electrospinning metal wires, printing wire grids, roll to roll coating Joint development agreements with major display companies in U.S. and Korea Researched new optical and electrical models to predict and guide synthesis effort of nanowires Explored chemical vapor deposition and exfoliation routes to transparent graphene conductors Principal investigator for U. Berkeley-Dow program on low temperature metal oxides for solar cells Patented solar waveguide concentrator to increase efficiency and lower cost

Research Associate and Program Manager, Rohm and Haas Electronic Materials/Corporate Development

Rohm and Haas / England

Public Company; Chemicals
June 1998 - March 2009

Developed and patented several high refractive index silicones for light emitting diodes in collaboration with Department of Energy Invented and hermetically sealed smallest silicon packages for semiconductor lasers in collaboration with acquired startup company; licensed to Samsung Managed 3 person effort to synthesize thick photoresists for electroplating ball grid arrays for advanced packaging; resulted in \$1 MM sales/year Developed novel photoimageable polymer optical waveguides LightLink(TM) for interconnects Technical/Business assessment of startup company acquisition

Research Associate and Project Leader

Hoechst Celanese

Chemicals
1984 - 1998

Developed and commercialized optical grades of cyclic olefin copolymer TopasTM; sales of \$20 MM/year Invented polyesters using green chemistry for optical applications; licensed to DuPont Characterized and patented Polymer Dispersed Nano Liquid Crystals (PDLC) First to demonstrate nonlinear optical second harmonic generation in polymer waveguides with DARPA award; cited more than 100 times Pioneer of non linear optical polymers for photonic applications and integrated optics

Senior Development Engineer

Corning Incorporated

Public Company; Glass, Ceramics & Concrete
1983 - 1984

Developed fast UV curable coatings on draw towers for manufacture of fiber optics

Postdoctoral Fellow

Polymer Science and Engineering Research Center, Univ.of Massachusetts, Amherst, MA

Education Management
1983 - 1984

light scattering, liquid crystal polymers

Postdoctoral Fellow

Bell Labs Lucent Technologies

10,001+ employees; Public Company; Telecommunications
1980 - 1982

Kerr effect, light scattering, non linear dielectric properties of polymers

Education

University of Sydney

Physical Chemistry
1976 - 1980

University of New South Wales

Physics
1971 - 1975

Patents (33)

Phenoxyphenyl polysiloxane composition and method for making and using same

Kathleen A Auld, David M Conner, Garo Khanarian, David Wayne Mosley
January 28, 2014: 08637627

Curable liquid composite light emitting diode encapsulant

Weijun Zhou, Binghe Gu, John W Lyons, Allen S Bulick, Garo Khanarian, Paul J Popa, John R Ell
June 4, 2013: 08455607

Light emitting diode manufacturing method

John W Lyons, Binghe Gu, Allen S Bulick, Weijun Zhou, Paul J Popa, Garo Khanarian, John R Ell

May 28, 2013: 08450445

Method of making light emitting diodes

Paul Joseph Popa, Garo Khanarian, Weijun Zhou, John R Ell
September 4, 2012: 08257988

High refractive index curable liquid light emitting diode encapsulant formulation

Garo Khanarian, Paul Joseph Popa, John Ell, Weijun Zhou
September 4, 2012: 08258636

Heat stable aryl polysiloxane compositions (2 worldwide citation)

Garo Khanarian, David Wayne Mosley
March 27, 2012: 08142895

Micro-optical device and method of making same

Garo Khanarian, Margaret M Pafford, David Sherrer
November 1, 2011: 08050526

Aryl (thio)ether aryl polysiloxane composition and methods for making and using same (1 worldwide citation)

David Wayne Mosley, Garo Khanarian
October 4, 2011: 08029904

Thin film photovoltaic cell

Garo Khanarian, Nicola Pugliano, Charles R Szmanda, Jae Hyung Yi
September 29, 2011: 20110232758-A1

Patterned light extraction sheet and method of making same (5 worldwide citation)

Garo Khanarian
June 7, 2011: 07955531

[View all \(33\)](#)