Professor G. U. Kulkarni

President
Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)
Jakkur P.O., Bangalore 560 064

Education

Ph. D – Solid State and Structural Chemistry, Indian Institute of Science, 1992
Postdoctoral research at Indian Institute of Science, 1992 - 1993
Postdoctoral research fellow under UNILEVER project at Cardiff University, UK 1993-95
Visiting Scientist at Cardiff University, Tokyo University, TASC-INFM, Trieste; Scuola Normale Superiore, Pisa; Purdue University, Institut de Sciences Moléculaires d'Orsay, Université Paris Sud.

Research Interest

The present research interests are focused on new strategies in synthesis of nanomaterials, nanopatterning and nanodevice fabrication including of molecular systems. The recipes emphasize the importance of simple design, near ambient working conditions, solution based processing as well as low cost instrumentation. Our group strives to translate nanoresearch finding into affordable technology.

We have made contributions in many areas- nanomaterials, developing nanotools and prototype device fabrication, molecular systems and their properties etc. There is a concrete underlying theme, which makes the contributions unique. We have employed solid-state chemistry principles to nanomaterial synthesis which paved way, for the first time, to direct patterning by various lithography tools. Thus, the potential of metal-organic precursors as single source precursors for patterned synthesis of a variety of nanomaterials has been realized which has been applied effectively in e-beam lithography and soft molding. The functionality of the patterned materials is clearly demonstrated in prototype devices such as sensors. This is a fine example of chemistry applied to high-end device research.

Positions held

Position	Institution	Dates
Faculty Fellow	JNCASR, Bangalore	Sept 1995 – May 2001
Associate Professor	JNCASR, Bangalore	June 2001 - May 2007
Professor	JNCASR, Bangalore	June 2007 –
Associate Chair, Chemistry and Physics of Materials Unit	JNCASR, Bangalore	Oct 2007 – Oct 2008
Chair, Chemistry and Physics of Materials Unit	JNCASR, Bangalore	Nov 2008 – Sept 2011
Dean -Academic	JNCASR, Bangalore	Oct 2011 - Sept 2013
Dean - Faculty Affairs	JNCASR, Bangalore	Sept 2013- Apr2015
Director	Centre for Nano and Soft Matter Sciences, Bangalore	Apr 2015 – Apr 2020
Director (I/c)	Centre for Nano and Soft Matter Sciences, Bangalore	Jan 2020 – 30 June 2021
President	JNCASR, Bangalore	Jan 2020 -

Recognitions

- Sudborough medal and the Best Thesis award from Chemical Sciences Division, Indian Institute of Science, 1993
- Material Research Society of India Lecture medal, 1999
- Sir C. V. Raman Young Scientist award, 1999
- B.M.Birla Science prize in Chemistry, 2002
- Chemical Research Society of India Lecture medal, 2003
- Prof. C.N.R. Rao Oration award, 2006
- MRSI-ICSC Superconductivity and Materials Science Annual Prize -2011
- Bangalore Nano National Award – 2012
- Sheikh Saqr Senior Fellow – 2012 - 14
- International Senior Fellowship of University of Bayreuth 2016
- Adjunct Member of the faculty for Science and Technology, Gulbarga University, Gulbarga
- Prof. C.N.R. Rao Science award in 13th Kannada Science Conference, 2017
- MRSI-Distinguished Lectureship Award (2019-20)
- SASTRA-CNR Rao Award for Excellence in Chemistry & Materials Sciences (2019 - 20)
- Dr Raja Ramanna State Award 2019 -Karnataka State Council for Science and Technology (KSCTC)
- The Prof. C.N.R. Rao National Prize for Chemical Research-2020, by Chemical Research Society of India (CRSI)
- Hon. Fellowship of Karnataka S&T Academy (KSTA) 2020, Bengaluru
- Adjunct Professor of the Centre for Nano and Soft Matter Sciences
- Kannada Rajyotsava Award – 2021
- Member of NAAC General Council for 3-year term
- Member of UGC's Consortium for Academic Research & Ethics Committee-Empowered Committee (CARE-EC)

Fellow of the Academy

- National Academy of Sciences, Allahabad
- Indian Academy of Sciences, Bangalore
- Asia Pacific Academy of Materials (APAM)
- Indian National Science Academy
- Indian National Academy of Engineering.

Guidance of students for research conferment

No. of Ph.D. degrees awarded: 21
No. of M.S. degrees awarded: 7
No. of students registered: 6 (Ph.D)

Publications

Total No. of Publications in Journal: **312**

Web of Science
Sum of the Times Cited**: 8,987**
h-index: **48**

Google Scholar
Sum of the Times Cited**: 11,179**
h-index: **53**

Total number of Conference proceedings: **18**
Total Number of Patents: **26**
Book Chapters authored **16**
Books authored**: 01**

Researcher ID: B-8630-2013

ORCID QR code (ID: orcid.org/0000-0002-4317-1307)