

Dr. M. S. Vijaya Kumar, Ph.D (Japan)

Ramanujan Faculty Fellow (SERB-DST)

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EDUCATION

- Doctor of Philosophy (Ph.D), Tokyo Metropolitan University, **Japan**
- Master of Science (M.Sc), University of Mysore, Mysore, **India**
- Bachelor of Science (B.Sc), University of Mysore, Mysore, **India**

PROFESSIONAL EXPERIENCE

Nov 2016 – Till date	Ramanujan Faculty Fellow, University of Mysore, Mysore, India
Feb 2014 – Oct 2016	Post-doctoral Research Associate, Tufts University, Boston, USA
Apr 2012 – Jan 2014	Post-doctoral Fellow, ISAS-JAXA, Tsukuba, Japan
Apr 2009 – Mar 2012	Research Associate, ISAS-JAXA, Sagamihara, Japan
Aug 2006 – Mar 2009	Research Assistant, ISAS, Sagamihara, Japan
Oct 2005 – Mar 2009	Research Scholar, Tokyo Metropolitan University, Tokyo, Japan
May 2004 – Sep 2005	Research Fellow, Tokyo Metropolitan University, Tokyo, Japan Research Fellow, University of Mysore, Mysore, India

AWARDS / HONOURS

- Ramanujan Fellowship, SERB-DST, India (Nov 2016)
- Tufts-NASA Postdoctoral fellowship, USA (2014)
- Japan Society for the Promotion of Science (JSPS) Fellowship, Japan (2012)
- JAXA Aerospace Project Research Fellowship, Japan (April 2009)
- Japan Government MEXT Scholarship (Monbu-kaga-kusho) (October 2005)
- AIEJ Scholarship: Short-Term Student Exchange Promotion Program (Inbound-Scholarship), Japan Student Service Organization (JASSO), Japan (2004)
- Invited to attend the Asian Winter School in SOKENDAI, Japan (2006)

RESEARCH INTERESTS

Chemistry of Materials, Solidification from Undercooled melt, High temperature materials, Advanced materials processing, Metal oxide, Molten oxide electrolysis, Extraction of metals, Microgravity sciences, Multiferroics, Oxides, Ceramics, Glass, Solar cells, Nanomaterials, crystal growth and Electro-chemistry.

PUBLICATIONS

Peer Reviewed Journals: International-45, National-04

Conference Proceedings: International-04, National-02

Invited Talks, Resource Person in International and National Conferences / Seminars / Workshops/Symposia:
140

RESEARCH EXPERIENCE:

Designation	Institution of affiliation	Area of Research	Period
Ramanujan Faculty Fellow (First fellow to UOM)	University of Mysore, Mysuru	Microgravity Materials Science, Oxides, Glasses, Solidification, Nano-chemistry	Nov.2016 – till date
Postdoctoral Research Associate	Department of Mechanical Engineering, TUFTS UNIVERSITY, USA In collaboration with NASA and MIT, USA	Space Experiments, Thermal Processing, Molten Oxide Electrolysis, Glass Flux	Feb 2014 – Oct.2016
JSPS Postdoctoral Fellow	Japan Aerospace Exploration Agency (JAXA), JAPAN	High Temperature Materials, Refractory Metals, Glasses, Ceramics	April 2012-Feb. 2014
Research Associate (1 st International fellow to get this Award)	Institute of Space and Astronautical Sciences (ISAS), Japan Aerospace Exploration Agency (JAXA), JAPAN	Fabrication of Magnetic and Multiferroic Materials, Materials preparation for Space Experiments	April 2009-Mar. 2012
Research Assistant	Japan Aerospace Exploration Agency (JAXA), JAPAN	Exploration of Metastable phases	Aug 2006 – Mar 2009
Research Assistant	Tokyo Metropolitan University, Tokyo, JAPAN	Development of Levitation Techniques	May 2004 – Aug. 2005

RESEARCH PROJECTS

Research Project	PI / Other(s)	Date of Commencement	Date of Completion	Funding Agency	Amount Sanctioned (Rs. In lakhs)
43 rd Series of Student Project Programme: 2019-20	Project Guide	March 2020	Aug. 2020	KSCST-Karnataka State Council for Science and Technology	
Utilization of Space Environment for Microgravity Materials Science Experiments	PI	Nov. 2016	Nov. 2021	SERB-DST, India	Rs. 109 Lakhs
Round Robin-Thermophysical Property Measurements	Support Staff	Jan 2017	Dec 2021	NASA, USA	\$6,00,000 (Rs.390 Lakhs)
Molten Oxide Inductolysis (MOI) Feasibility Study	Support Staff	Sept 2014	Aug 2015	NSF, USA	\$ 50,597 (Rs.33 Lakhs)
Research on the Metastable Phases and Property of Oxide Materials	PI	Apr 2012	Mar 2014	JSPS, JAPAN	\$1,07,440 (Rs.70 lakhs)
Development Research of an Electrostatic Levitator (ESL)	CO-PI	Apr 2009	Mar 2012	ISAS, JAXA, JAPAN	\$214,200 (Rs.140 Lakhs)
