

Curriculum and Vitae – A Brief



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Prof. Dr. Krishnan BASKAR is a former Vice-Chancellor of Manonmaniam Sundaranar University (Government of Tamil Nadu), during 16th February 2016 – 15th February 2019, for a period of three years on deputation from Anna University, Chennai. He was appointed as a Search committee member by the Governor of Jammu and Kashmir and Chancellor of Shri Mata Vaishno Devi University (SMVDU), Jammu for the selection of Vice-Chancellor in July 2019. He is serving as a Chairman of National Assessment and Accreditation Council (**NAAC**) Peer committee that assesses and recommends to NAAC to accredit higher education Institutions (HEIs) in India. He was formerly the Director of Centre for International Affairs, Anna University during 2008-2012 and the Director, Crystal Growth Centre (UGC-National facility) during 2012-2016. He is currently the Director, Centre for Technology Development and Transfer (CTDT), Anna University, Chennai with additional responsibilities as Coordinator-Technology Enabling Centre (TEC)-DST, Coordinator & Chairman, Centralized Procurement and Professor at Crystal Growth Centre-UGC: National Facility, Anna University, Chennai. He is also a NAAC-Accreditation Ambassador of UGC –Paramarsh Scheme.

He obtained his Master Degree in Physics from Madras University and got his Ph.D. from Anna University. He joined in Anna University, Chennai as a faculty in 1991. He has published 162 research papers in peer reviewed international journals and conference proceedings, filed a patent and contributed as a co-author for two scientific books. He has guided 22 Ph.D. full time scholars with Fellowship. He has signed 64 MoUs with various institutions all over the world for research and academic Collaborations. He has conducted research by generating research grant to the tune of about Rs. 10.00 crores through competitive funded projects. His h-index is 17, i-10 index is 36 and has 1190 citations. His cumulative impact factor for his research publications is 249.

He has over 33 years of teaching and research experience in government funded

educational institutions. He was a **postdoctoral fellow** for four years at Nagoya Institute of Technology (NIT) and Electrotechnical Laboratory (AIST-ETL), Tsukuba, **Japan**, during 1995-1999 with Monbusho Fellowship (two years) through Government of India and Science and Technology Agency Fellowship (two years) of Japanese Government. He worked three years as a **Visiting Professor** at Royal Institute of Technology (KTH), Stockholm, **Sweden**, during 2001-2004.

The Royal Institute of Technology (KTH) in Stockholm, Sweden, awarded him the title of "Docent" (D.Sc.) for his research accomplishments in semiconductor materials technology in 2001. Youngsters attractive research paper award winner (1,40,000 Yen) from IX-ICCG- Japan in 1989 as a Ph.D. Student. He is a recipient of the Active Researcher award (Cash Prize of Rs.25,000 and citation) in 2011 from Anna University, Chennai, INDIA.. ISPA-Life time achievement Award for the year 2018 by Indian Spectrophysics Association, India. Research Excellence Award for Outstanding Publications in Scopus indexed Journals – by Anna University, Chennai in 2019. He is a Fellow of Royal Society of Chemistry-London (FRSC) and Fellow of Academy of Sciences-Chennai (FASCh). He has received much recognition from India and abroad for his accomplishments in research. He is a member of many committees in DRDO, UGC, DST, IITs and Universities.

His research areas of interest are; compound semiconductors, particularly nitride based materials for high electron mobility transistors, UV(260-360nm) and visible light emitting diodes (LEDs), semiconductor Nanostructures, sensors and solar cells (21.4% efficiency @ AM0), MOCVD epitaxial growth of crystalline thin films, high resolution XRD, Photoluminescence and fabrication of optoelectronic semiconductor devices.

He has established the sophisticated class 10000 clean room (Rs.50 lakh), MOCVD (Rs.5.5 Crores); first of its kind in a University system in India, HXRD (Rs.1.50 crore) and PL with Raman (Rs.1.20 crore) at Crystal Growth Centre. He has taken efforts to establish sophisticated equipment like SEM with EDX, XRD, FT-IR imaging through UGC grants and have made them available to the researchers all over the country.

He has organized 30 national/international conferences/workshops. He is a member of several scientific societies. His initiative of 64 MoUs with various institutions all over the world paved the way for over 350 students to do semester abroad with a monthly scholarship of 1000 euro apart from free travel, insurance and tuition fee waiver. He was one of Coordinators for Erasmus Mundus bilateral projects of European

Commission with Italy, Sweden, France, and Belgium for the total grant of about 12 million Euros. He has travelled more than 27 countries (Japan, Sweden, Malaysia, Singapore, Germany, Finland, France, Switzerland, Italy, Norway, UK, USA, Canada, Australia, Belgium & So on) and visited over 100 top ranking educational institutions in the developed countries including long years of stay in abroad. He was responsible for the creation of the International Division with autonomous status and the introduction of Japanese language at Anna University. He is the Coordinator of Japan programs and brought grants and native teachers through Japanese embassy.

He has introduced double master degree programmes with top five Ecole Centrais in France and Anna University Chennai. An exclusive International hostel with state of art facilities for NRI and Foreign National students both for boys and girls at Anna University (Tulip & Lavender) has been created in 2010 at a cost of Rs.15.00 crores. Enhanced the admission of foreign and NRI students through transparent single window admission and increased the revenue of Centre for International Affairs, Anna University from less than Rs.1.00 crore to Rs. 36.00 crores by increasing students admission strength from less than hundred to over 900 within three years.

During his tenure 2016-2019 as a Vice-Chancellor of Manonmanium Sundaranar University (MSU), Tirunelveli, India, he has introduced eight number of five year integrated master degree programs and two number of two year master degree programs in addition to several diploma courses ,D.Pharm, B.VoC, value added certificate programs & courses in the main campus of MSU. He has introduced two compulsory subjects **1.Yoga for health & 2. Computers for modern era**, in all UG programs of affiliated colleges. Rs.20 Crores has been Received from RUSA (Rashtriya Uchcharar Shiksha Abhiyan) and effectively utilized in record time as per norms. Rs.1.5 crores has been received for research in Non-conventional Energy under RUSA. Corrective measures in the fee structure and collection of fee through online mode for Examinations, Affiliation, Research and Admissions have resulted in additional revenue and increased deposits of about Rs.40crores per annum. Rs.11.50 crores was sanctioned under the Scheme of Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNTT), MHRD, Government of India in 2019 to MSU based on his presentation in Delhi.

He has introduced Online courses (MOOCs) through Swayam and NPTEL up to twenty percent with effect from academic year 2018-19. Introduced Sundaranar meritorious Scholarship of Rs.2,000 per month with a provision of 400 scholarships for

students. Eighty one (81) research fellowships with monthly stipend of Rs.5000 in the name of 'Bharth Ratna Dr MGR Centenary Research Fellowships" have been created. Student strength has been increased from below 900 (in 2016) to above 2600 (in 2018) in the main campus apart from existed 10,10,000 students in 79 affiliated colleges of MSU. MoUs have been signed with Public Sector Organizations; (i). Software Technology Park of India (STPI), Government of India, New Delhi to develop incubation facility at a cost of Rs.30.00 crores with 35,000 sq.mts building and other infrastructure in three acres of land. (ii). Indian Institute of Geomagnetism (IIGM), Department of Science and Technology, Pune, for research cooperation with two fellowships in the name of Bharth Ratna Dr.APJ Abdulkalam every year for research. Procured 547 acres of land for MS University from the Government of Tamil Nadu at a cost of Rs.11.69 Crores from the funds generated through the corrective measures in the fee structure and collection of fee through online mode for Examinations, Affiliation, Research and Admissions.

One mega Watt (1.00 MW) grid connected solar power plant with Grid connectivity at a cost of Rs.6.00 crores was established and put in use. In fact, the foremost and only working system of this capacity today in a State Universities in the Country. New infrastructure, own buildings for constituent colleges, state of art amenities, green initiatives, wide roads of about 5 km length, new hostels, ICT enabled class rooms, Quarters (allocated 25 acres) for the first time to staff, Registrar and Vice-Chancellor have been planned, built in the campus and made in use within two years at cost of about Rs.50 crores at MSU.

MSU was ranked as 93 in the country in NIRF 2019 (which was not eligible in 2016 due to poor students strength and inadequate infrastructure). **MSU was subjected to NAAC accreditation process (3rd Cycle) and Elevated to A-grade Institution in August 2018 (triple jump from previous B- grade)** and bagged fifth position (Score 3.13 in 3rd Cycle out of 4 under new grading) among the State public universities in Tamil Nadu.

Six technologies have been transferred to industry due to his initiation and implementation of seamless process and 47 technologies have been mined, received the Certificate of Appreciation from Ministry of Finance, Government of India for prompt filing of returns and payment of GST (Rs.5.11 crores in FY 2020-21) up to the year ending 31st March 2021, thereby substantially contributing to building a strong and resilient nation, during his tenure as a Director-CTDT.