PROFILE OF PRINCIPAL (As Per AICTE – Approval Process Handbook 2019-20)

1	Name	KRUPASHANKARA MYSORE SETHURAM
	Designation	PRINCIPAL
2	Date of Birth	MAY 08, 1969
3	Unique ID	GZ081
4	Education Qualification	B.E (MECHANICAL ENGINEERING) M.S (MATERIALS ENGINEERING), Ph.D (MECHANICAL ENGINEERING)
5	Work Experience Teaching Research Industry Others	 15 YEARS 10 YEARS 5 YEARS NIL
6	Area of Specialization	MANUFACTURING TECHNOLOGIES – Thin Film Processes, Additive Manufacturing (3D Printing); Microwave Processing of Materials
7	Courses Taught at UG/PG	**Under Graduate Courses :** 1. Material Science – III Sem 2. Manufacturing Technology – V Sem 3. Advanced Manufacturing Processes – VII sem **Post Graduate Courses:** 1. Creative Engineering & Design 2. Composite Materials 3. Materials Technology 4. Plastic Processing 5. Plastic Mould Design
8	Research Guidance No. of Papers Master Ph.D	 30- papers (Conference, National and International Journals) 20 – Master Degree Students 1 - Ph.D Student
9	Projects Carried Out	1. Synthesis of Tungsten Nanopowders: Rs. 10 lakhs – Armament Research Board 2. Synthesis & Densification of Nanoparticles for Magnets – Rs.48 lakhs – Naval Research Board 3. Carbon Nanotube Filled ABS Plastics for Fused Deposition Modeling Process (FDM) – Rs.45 lakhs – Naval Research Board 4. Multi-Layer Thin Film Coatings for Solar Thermal Applications – Rs.468 lakhs – Dept. of Science and Technology
10	Patents	Seven United States Patents in the Field of Nanotechnology US5989487; 6001304;6183690;6187087;6270718;6309591;6409851
11	Technology Transfer	One – Enerzi Microwave Systems P Ltd., Belagavi
12	Research Publications	20

	Google Scholar – Nov. 2019
1	**Synthesis and consolidation of iron nanopowders** R Kalyanaraman, S Yoo, **MS Krupashankara**… - Nanostructured …, 1998 - Elsevier A microwave plasma processing technique was used to synthesize iron nanopowders. The average particle size of these powders was~ 10 nm and the surface area was measured to be 42m 2/g. Powder production rates as high as 50 gm/hour were achieved. Magnetic … Cited by 132 Related articles All 3 versions
2	**Ultrahigh pressure consolidation (UHPC) of W-Cu composites** S Yoo, **MS Krupashankara**, TS Sudarshan… - Materials science and …, 1998 - Taylor & Francis Ultrahigh pressure consolidation was used to densify tungsten-copper (W-Cu) green compacts. The consolidation was carried out at temperatures rangingfrom 900 to 1400° C under pressures of 1'25 or 2.0 GPa for 10 min. The density measurements were carried out … Cited by 27 Related articles All 4 versions [PDF] researchgate.net
3	**Novel technique for synthesis and consolidation of aluminium nitride nanopowders** RK Kalyanaraman, SH Yoo, **MS Krupashankara**… - Powder …, 2000 - Taylor & Francis In this paper, the use of a microwave plasma method for the synthesis of aluminium nitride nanopowders is described. The powders were consolidated to near theoretical densities using the unique rapid consolidation technique, plasma pressure consolidation (P2C) … Cited by 14 Related articles All 5 versions [PDF] hindawi.com
4	**Cure kinetics and activation energy studies of modified bismaleimide resins** M Krishna, S Rai, **MS Krupashankara**… - ISRN Polymer …, 2012 - downloads.hindawi.com The cure kinetics and activation energy (Ea) of bismaleimide homopolymer and modified bismaleimide resin systems with different chain extenders were investigated. The bismaleimide resin under investigation was bismaleimidodiphenyl methane (BMPM) and the … Cited by 16 Related articles All 6 versions
5	**Photocatalytic Activity of Microwave Plasma-Synthesized TiO_2 Nanopowder** PA Deshpande, M Krishna, **MS Krupashankara**… - Plasma Chemistry and …, 2010 - Springer Nanocrystalline TiO 2 was synthesized using the microwave plasma technique and characterized using X-ray diffraction, transmission electron microscopy, scanning electron microscopy, laser particle size analyzer, UV–vis spectroscopy and BET surface area … Cited by 8 Related articles All 10 versions

6	**Microwave assisted extraction of oil from pongamia pinnata seeds** MM Benal, BD Prasad, **MS Krupashankara**… - Materials Today …, 2018 - Elsevier Extraction of oil from seeds is typically carried out by mechanical oil extraction machine. In this study, oil extraction of pongamia pinnata seeds has been carried out using energy from microwaves. A microwave assisted oil extraction system was developed and oil was … Cited by 8 Related articles [PDF] iop.org
7	**Effect of argon gas flow rate on the optical and mechanical properties of sputtered tungsten thin film coatings** G Vijaya, MM Singh, **MS Krupashankara**… - IOP Conference …, 2016 - iopscience.iop.org Tungsten thin film coatings were deposited on SS304 substrates by DC magnetron sputtering process. Optical and mechanical properties changes have been studied as a function of varying argon gas flow rate during magnetron sputtering process. The effect of … Cited by 3 Related articles All 3 versions
8	**Deposition and Characterization of Aluminium Thin film Coatings using DC Magnetron Sputtering Process** MM Singh, G Vijaya, **MS Krupashankara**… - Materials Today …, 2018 - Elsevier Aluminium (Al) thin film deposited using DC Magnetron sputtering combines many properties such as Optical, Mechanical properties on ceramic substrates. Properties of thin film coating depend on the deposition parameters employed. The aim of this work was to … Cited by 3 Related articles [PDF] iop.org
9	**Studies on nanostructure aluminium thin film coatings deposited using dc magnetron sputtering Process** M Singh, G Vijaya, **MS Krupashankara**… - IOP Conference …, 2016 - iopscience.iop.org Nanostructured thin film metallic coatings has become an area of intense research particularly in applications related solar, sensor technologies and many other optical applications such as laser windows, mirrors and reflectors. Thin film metallic coatings were … Cited by 2 Related articles
10	**Nanomechanical Properties of Aluminium Thin Films on Polycarbonate Substrates Using Nanoindentation** A Ray, PS Pillai, **MS Krupashankara**… - Nano Trends: A …, 2015 - researchgate.net We analyzed the effects of polycarbonate substrate on the determination of mechanical properties of aluminium thin films by nanoindentation. The properties of sputtered aluminium films on polycarbonate were tested with a variation in coating thickness. The resulting data … Cited by 1 Related articles All 2 versions
11	**Studies on Thin Film Multilayer Coatings Deposited using Sputtering Process** MM Singh, G Vijaya, **MS Krupashankara**… - Materials Today …, 2018 - Elsevier

	Multilayer coatings have been modelled and prepared experimentally for optical and mechanical properties for solar reflector applications on ceramic substrate. Aluminium thin films are ideally suited for reflector. This value of reflection is reduced reasonably by … Cited by 1 Related articles
12	**Mathematical modeling and experimental evaluation of the tensile properties of multiwalled carbon nanotubes filled Acrylonitrile Butadiene Styrene composites** **MS Krupashankara**, KK Shet… - i-Manager's Journal on …, 2015 - search.proquest.com Abstract Multiwalled Carbon Nanotubes (MWCNT) were melt-blended into ABS matrix using twin screw extrusion process. The percentage of MWCNT was varied from 0 to 15%. Tensile properties were measured using ASTM D638-10. At 10 wt.% these composites showed the … Cited by 1 Related articles
13	**Simulation and Experimental Studies on the Effect of Injection Moulding Parameters on Tensile Properties of ABS Thermoplastic Specimen** …, **MS Krupashankara** - … of Polymer & …, 2019 - engineeringjournals.stmjournals.in The injection moulding process is the most widely used method of manufacturing Engineering thermoplastics. Thermoplastic blends and composites are suitably replacing metals and ceramics in most circumstances. This trend is mainly due to the versatility and …
14	**Evaluation of Oil-Sorption Properties of Kapok Fiber for Cooking Oils: A Potential Check for Oil-ridden Wastewater from Restaurants** …, A Vivek, **MS Krupashankara**… - Journal of Water …, 2019 - techjournals.stmjournals.in Sewage is one of the leading sources of water pollution. The untreated water released from restaurants is the major contributor of oil pollution having devastating impact on aquatic life. Oil in water clogs pipelines, pumps and treatment equipment, decreases the efficiency of the …[PDF] stmjournals.in
15	**Studies on Effect of Varying Geometric Parameters of Solar Receiver Tube on Thermal Loss Suffered By It** …, MR Srinivas, **MS Krupashankara** - Research & …, 2018 - sciencejournals.stmjournals.in The radiative and convective heat losses from a solar receiver tube at a given operating temperature are a function of temperature of the outer glass envelope and outer surface area of the glass envelope. But the temperature of the outer glass envelope and its outer …
16	**Studies on Oil Extraction from Pongamia Seeds using Mechanical Expeller and Microwave Heating Technique** …, **MS Krupashankara**… - Journal of …, 2019 - engineeringjournals.stmjournals.in The extraction of oil from seeds is carried out traditionally by using mechanical expeller. In this study, four configurations of oil extraction systems, namely, single screw, modified single screw, twin screw and microwave assisted oil extraction have

	been evaluated for oil yield …
17	**Development and Analysis of Tungsten Thin film Coating for Solar Absorption** G Vijaya, MM Singh, **MS Krupashankara**… - Materials Today …, 2018 - Elsevier Tungsten thin film has the potential for application in the field of solar thermal multi-layer coating due to its high solar absorption, low thermal emittance, superior thermal stability and diffusion barrier characteristics. Magnetron sputtered tungsten thin films are ideally suited for …
18	**Effect Of Improving Damping Ratio On Surface Finish By Filling Particulate Reinforced Polymer Composites In Machine Tool Structures** A Vivek, V Holla, **MS Krupashankara**, A Vignesh… - Materials Today …, 2018 - Elsevier It is proven that the structural damping plays an important role in determining machine tool precision. Machine tool industries are trying to increase the machine tool precision by various passive and active damping methods with no appreciable success. However …
19	**Studies on Effect of Process Parameters on Sintering of Materials Using Laser Assisted Powder Bed Fusion Process** …, **MS KRUPASHANKARA** - i-Manager's Journal …, 2018 - search.proquest.com Additive Manufacturing (AM) is emerging as an innovative technology distinguished from traditional manufacturing techniques because of its ability to produce complex, fully functioning and end-use products with great design flexibility. This technology is going to …
20	**Development of eco-friendly and biodegradable Bio composites** A Sharma, NN Rao, **MS Krupashankara** - Materials Today: Proceedings, 2018 - Elsevier Bio composites offer a significant market in automotive and decking market but application in other sectors has been limited. An attempt has been made for the preparation of bio-degradable, eco-friendly green composites using the Coconut fiber and wheat husk weight …
21	**Development, Analysis of Tungsten-Aluminium oxide based solar thermal multilayer Coating** G Vijaya, MM Singh, **MS Krupashankara**… - Materials Today …, 2018 - Elsevier Abstract Development of magnetron sputtered tungsten based thin film coatings are considered as enhanced solar selective multilayer coatings for solar thermal applications. Tungsten thin film coatings deposited using magnetron sputtering process on stainless steel …
22	**Simulation and Experimental Studies on Injection Molding of Short Glass Fibers Filled Thermoplastic Composites** …, **MS Krupashankara** - i-Manager's Journal on …, 2015 - search.proquest.com Abstract Short Glass Fibers (SGF) reinforced thermoplastic are increasingly replacing metals and its alloys with the advent of new polymer alloys and blends. Concurrently the product designs are also becoming more complex, increasing the dependence on simulation …