<u>Biodata</u>

Name	Dr. Shany Joseph
Designation	Scientist D
Educational	BE (Chemical) – NIT, Raipur
qualification	M. Sc.(Engg) – Material Science – Indian Institute of Science, Bangalore
	Ph.D in Electronic Science, Pune University
Research area	• Electroplating of Lead-free solders
	Solder Bumping
	• Thick film materials
	Solder pastes
	Electronics Packaging
	• Low Temperature Co-fired Ceramic (LTCC) processes and
	Materials
Recognised	Life Member, ISSS
Awards/Honors/Fell	• Life Member, MRSI
OW	
Projects	Ongoing:
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	 Development of Solid oxide fuel cells (SOFC) using LTCC technology (Co-PI), DST, Rs. 210.17 lakhs, (Nov. 2019-Nov. 2022). LTCC based devices for "Integrated low cost water sensors for real time water monitoring and decision making (Co-PI), IUSSTF (DST), Rs 36.97 lakhs, June 2018-June 2021.
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	 Development of Solid oxide fuel cells (SOFC) using LTCC technology (Co-PI), DST, Rs. 210.17 lakhs, (Nov. 2019-Nov. 2022). LTCC based devices for "Integrated low cost water sensors for real time water monitoring and decision making (Co-PI), IUSSTF (DST), Rs 36.97 lakhs, June 2018-June 2021. Development of LTCC based 3D Printing technology for low cost optoelectronic packaging, Cent (Co-PI), Rs 488.17 lakhs, Aug. 2020- Aug. 2023. Completed:
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	 Development of Solid oxide fuel cells (SOFC) using LTCC technology (Co-PI), DST, Rs. 210.17 lakhs, (Nov. 2019-Nov. 2022). LTCC based devices for "Integrated low cost water sensors for real time water monitoring and decision making (Co-PI), IUSSTF (DST), Rs 36.97 lakhs, June 2018-June 2021. Development of LTCC based 3D Printing technology for low cost optoelectronic packaging, Cent (Co-PI), Rs 488.17 lakhs, Aug. 2020- Aug. 2023. Completed: Number of projects completed till December 2014. (12Nos) Completed projects from Jan 2015 to till date: Development of Sn-Ag-Cu based lead-free electrolyte for Surface finishing of PCBs (PI), DST, Rs. 69.25 Lakhs, May 2016-Dec 2019. Development of CNT-lead-free composites for Flip chip applications
	 Development of Solid oxide fuel cells (SOFC) using LTCC technology (Co-PI), DST, Rs. 210.17 lakhs, (Nov. 2019-Nov. 2022). LTCC based devices for "Integrated low cost water sensors for real time water monitoring and decision making (Co-PI), IUSSTF (DST), Rs 36.97 lakhs, June 2018-June 2021. Development of LTCC based 3D Printing technology for low cost optoelectronic packaging, Cent (Co-PI), Rs 488.17 lakhs, Aug. 2020- Aug. 2023. Completed: Number of projects completed till December 2014. (12Nos) Completed projects from Jan 2015 to till date: Development of Sn-Ag-Cu based lead-free electrolyte for Surface finishing of PCBs (PI), DST, Rs. 69.25 Lakhs, May 2016-Dec 2019. Development of CNT-lead-free composites for Flip chip applications (PI), Working group MEITY, Rs. 62 lakhs, Dec 2014-March 2017.
	 Development of Solid oxide fuel cells (SOFC) using LTCC technology (Co-PI), DST, Rs. 210.17 lakhs, (Nov. 2019-Nov. 2022). LTCC based devices for "Integrated low cost water sensors for real time water monitoring and decision making (Co-PI), IUSSTF (DST), Rs 36.97 lakhs, June 2018-June 2021. Development of LTCC based 3D Printing technology for low cost optoelectronic packaging, Cent (Co-PI), Rs 488.17 lakhs, Aug. 2020- Aug. 2023. Completed: Number of projects completed till December 2014. (12Nos) Completed projects from Jan 2015 to till date: Development of Sn-Ag-Cu based lead-free electrolyte for Surface finishing of PCBs (PI), DST, Rs. 69.25 Lakhs, May 2016-Dec 2019. Development of CNT-lead-free composites for Flip chip applications (PI), Working group MEITY, Rs. 62 lakhs, Dec 2014-March 2017. Development of Magnetic sensors in LTCC (Co-PI), BARC, Rs. 169.29 lakhs, Jan 2015-July 2018).
	 Development of Solid oxide fuel cells (SOFC) using LTCC technology (Co-PI), DST, Rs. 210.17 lakhs, (Nov. 2019-Nov. 2022). LTCC based devices for "Integrated low cost water sensors for real time water monitoring and decision making (Co-PI), IUSSTF (DST), Rs 36.97 lakhs, June 2018-June 2021. Development of LTCC based 3D Printing technology for low cost optoelectronic packaging, Cent (Co-PI), Rs 488.17 lakhs, Aug. 2020- Aug. 2023. Completed: Number of projects completed till December 2014. (12Nos) Completed projects from Jan 2015 to till date: Development of Sn-Ag-Cu based lead-free electrolyte for Surface finishing of PCBs (PI), DST, Rs. 69.25 Lakhs, May 2016-Dec 2019. Development of CNT-lead-free composites for Flip chip applications (PI), Working group MEITY, Rs. 62 lakhs, Dec 2014-March 2017. Development of Magnetic sensors in LTCC (Co-PI), BARC, Rs. 169.29 lakhs, Jan 2015-July 2018). LTCC based Pressure Sensor (Co-PI, M/s Eaton Technologies (P) Ltd, Rs. 35.63 lakhs, May 2015- July 2017).

	6. Fabrication of multilayer RF circuits on LTCC (Co-PI), SAC, ISRO Rs.
	45 lakhs), June 2011- March 2019.
	7. Prototype package fabrication in LTCC (Co-PI), BARC, Rs. 198.43
	lakhs, Nov. 09- July 2015.
Publications/Patents	Patents List (Past 5 years)
(Past 5 years)	1. A Non-conductive substrate with tracks formed by sand blasting, Girish
(=	Phatak, Shrikant Kulkarni, Vijaya Giramkar, Shany Joseph
	• US Patent Appl. No.15/542,567, Appln date 7 th July 2017, Patent approved,
	NoA issued
	• European Patent Appl. No. 16737136.8, Appln date :18 th July 2017
	• Indian Patent Appl. No. 130/MUM/2015, Appln date: 13 th Jan 2015
	• PCT Appl. No.PCT/IB2016/050083, Appln date 8 th Jan 2016
	2. A Non-Conductive Substrate with Conductive Tracks Formed by Laser
	Ablation Method, Shany Joseph, Paval Bhawtankar, Adwait Shitole, Adwaita
	Jadhay, Vijaya Giramkar and Girish Phatak. Indian Patent Appl. No.
	2335/MUM/2015. Appl Date: 18 th June 2015. Publication Date: 23 rd Dec
	2016