

**About the contest:** On the auspicious occasion of Azadi ka Amrit Mahotsav, Semiconductor Technology and Applied Research Centre (STARC), a unit of SITAR Society, is launching the सूक्ष्म संरचना 21 MEMS INNOVATION CHALLENGE.

It is an open challenge to encourage budding student MEMS designers in the country to design MEMS sensors of international standards for Aerospace & Defence applications. Participants may propose their designs for MEMS incorporating the emerging technologies to keep up with advancements in technology which requires businesses to have a vision for the next few years. Participants are also suggested to look out for "MEMS sensor fusion" by integrating multiple sensors into one package.

**About STARC:** STARC is a dedicated MEMS foundry for production of MEMS sensors for strategic applications. STARC serves its DRDO/ Defence customers from a 23-acre campus with a 16000 sq.ft. clean room area in Bangalore. STARC Foundry offers the flexibility to use substrate materials like silicon, SOI, glass, quartz, and CMOS-wafers of 6" (150 mm). STARC offers services with high quality and reliability, advanced process development, prototyping and low volume manufacturing. STARC is an ISO 9001:2015 certified company

**Eligibility Criteria:** Candidates pursuing BTech/MSc/MTech/Phd in any of the recognised Indian universities/ institutes and J.R.F., S.R.F., P.A., P.Assoc. working in government recognised institutions are eligible to submit their entries.

Participants are allowed to perform in teams with not more than 4 participants in each team.

There is no restriction on the number entries from a University/ Institution.

**Innovation Areas:**

सूक्ष्म संरचना 21 MEMS INNOVATION CHALLENGE may include the design of any one of the following devices used in Aerospace & Defence applications:

- Gyroscope (Single axis/Three axis)
- Magnetometer (Single axis/Three axis)
- G-switch, Impact Switch for Fuzing/Safety and Arming Systems
- Electrothermal Actuator

**Important Dates**

Launch of सूक्ष्म संरचना 21 MEMS INNOVATION CHALLENGE	18 <sup>th</sup> September 2021
Last Date for submission of proposals for preliminary screening	31 <sup>st</sup> October 2021
Preliminary Screening	1 <sup>st</sup> - 10 <sup>th</sup> November 2021
Last date for submission of final Proposals with refinements	30 <sup>th</sup> November 2021
Evaluation by the Jury	1 <sup>st</sup> - 10 <sup>th</sup> Dec 2021
Announcement of Results	11 <sup>th</sup> December 2021
Awards distribution	13 <sup>th</sup> -18 <sup>th</sup> December 2021

**Evaluation Parameters**

- Innovation in design
- Simulation results
- Fabrication Feasibility
- Overall device size (< 10 mm<sup>2</sup>)
- Scalability for commercial production

**Awards**

Award	Prize Amount
First	Rs. 1,00,000
Second	Rs. 75,000
Third	Rs. 50,000

For more Information visit [www.mems-innovation.sitar.in](http://www.mems-innovation.sitar.in)

**Contact us:**

**Semiconductor Technology and Applied Research Centre (STARC)**

**Vijinapura road, Doorvani Nagar P.O.,**

**Bangalore 560 016**

**Email: [mems-innovation@sitarindia.com](mailto:mems-innovation@sitarindia.com) Tel: +91 80 25653588/25669802 Extn: 9845, Fax: +91 80 25651702**