



HUMAN SPACE MISSION LIFE SUPPORT SYSTEM ACTIVITY Gas Sensor Team Avionics, IIST

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OUR TEAM :

Dr. Palash Kumar Basu

Chemical sensor

• Anjitha R G (Ph.D. Scholar)

• Nisha Shreyan (Ph.D. Scholar)

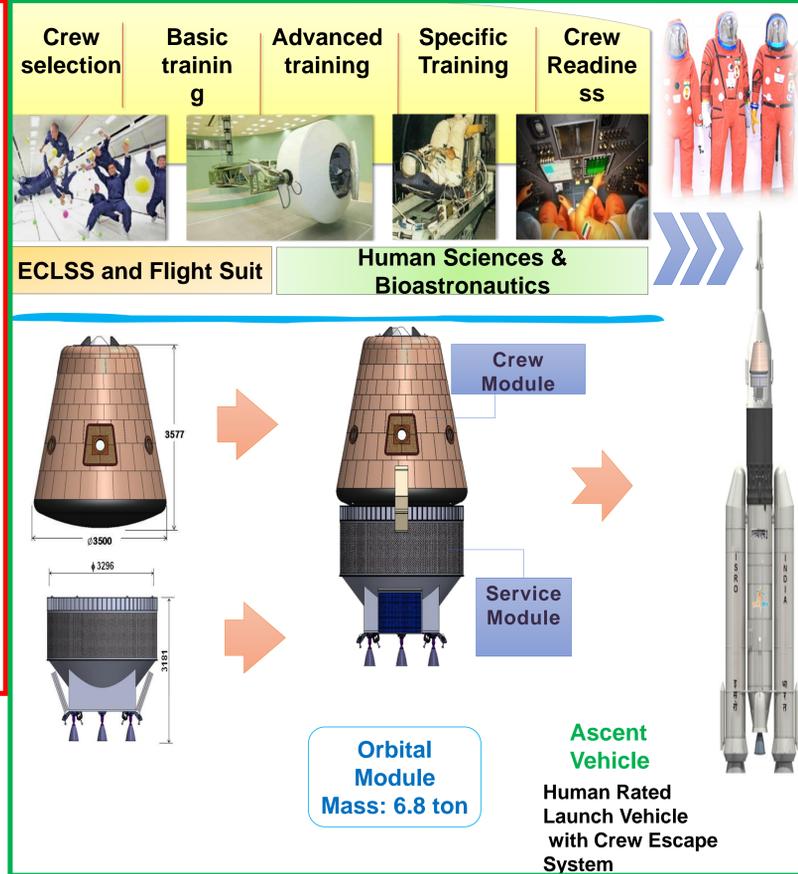
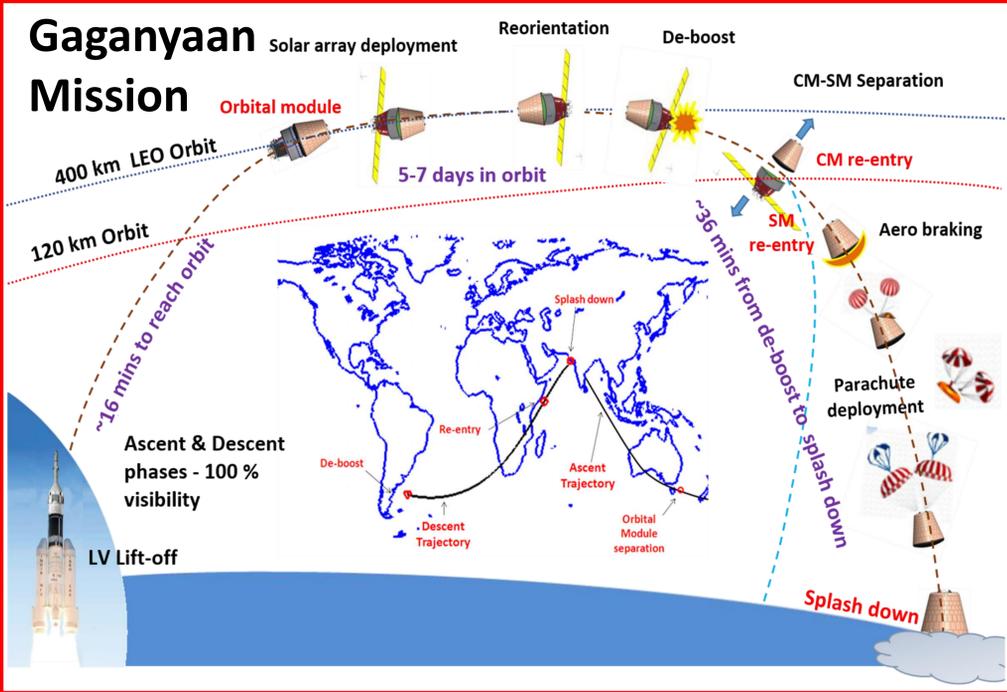
• Amala (Ph.D. Scholar)

• Akshaya M.V. (PhD Scholar-external candidate)

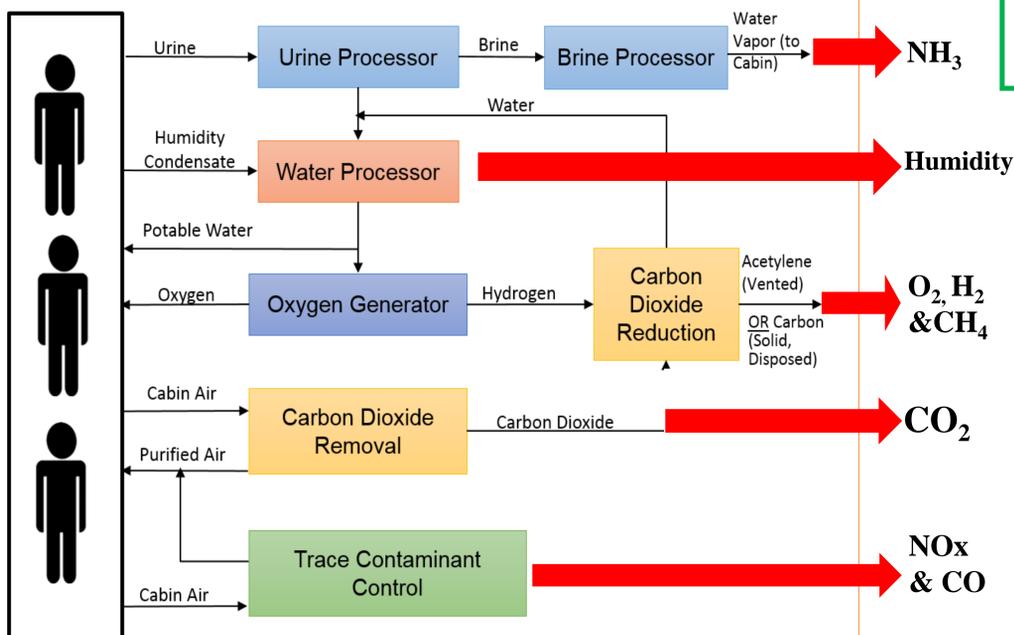
Biological sensor

• Krishna Pammi Thej (Ph.D. Scholar)

• Nusrat (Ph.D. scholar)



Simplified Life Support Systems Schematic



Motivation:

- ✓ There are no Space Qualified sensors available in the market.
- ✓ NASA has developed the first Sensor module by COTS. Currently NASA is exclusively using indigenously developed sensors for different gases
- ✓ NASA is proposing multitarget gas analyser.

Objective:

- Develop, Characterize and Qualify the Indigenously developed gas sensors (CH₄, NH₃, CO) to monitor Cabin/Spacecraft Atmosphere.
- Compare the Indigenous sensors against COTS one.
- Set up a characterization unit to qualify the sensors for Space Mission.

