

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

**LOK SABHA
UNSTARRED QUESTION NO.4589**

TO BE ANSWERED ON WEDNESDAY, MARCH 29, 2017

LITHIUM BATTERY TECHNIQUE

4589. SHRI DILIPKUMAR MANSUKHLAL GANDHI :

Will the PRIME MINISTER be pleased to state:

- (a) whether ISRO has developed a prototype of used lithium ion battery technique in automotive segment;**
- (b) if so, the details thereof along with the outcome of experiments done in this regard; and**
- (c) the steps taken by the Government to make this technology available to automobile manufacturers for commercial production of vehicles based on this technology?**

ANSWER

**MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG &
PENSIONS AND IN THE PRIME MINISTER'S OFFICE**

(DR. JITENDRA SINGH):

- (a) Yes Madam. ISRO has developed lithium ion battery for satellite and launch vehicle applications. Four types of batteries have been developed – 1.5Ah, 5Ah, 50Ah and 100Ah. Out of these, 1.5Ah & 50Ah have been used for space applications and 5Ah & 100Ah batteries are qualified and is ready for induction in space applications.**

- (b) ISRO has supplied 50 Ah lithium-ion cells to Automotive Research Association of India (ARAI). Lithium-ion battery developed by ISRO was successfully demonstrated in a prototype two-wheeler at the Symposium on International Automotive technologies (SIAT 2017) on 19th January, 2017. The prototype uses a 48V, 50Ah lithium-ion battery, which can attain speeds of 40-50 kmph and can run up to 98 km once charged for 2 hrs.**
- (c) Technology is ready for transfer to Indian industries for undertaking the production of Li-ion batteries. BHEL has expressed interest in the transfer of technology.**
