

**GOVERNMENT OF INDIA  
SCIENCE AND TECHNOLOGY  
LOK SABHA**

STARRED QUESTION NO:504  
ANSWERED ON:13.08.2014  
COLLABORATIVE RESEARCH  
Tharoor Dr. Shashi

**Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:**

- (a) whether India has bilateral Science and Technology (S&T) cooperation agreement with various foreign countries/groupings/institutes and if so, the details thereof;
- (b) the total number of published research papers on S&T in which India has collaborated with other countries during each of the last three years and the current year;
- (c) whether the Government proposes to expand India's collaborative network in scientific research and development with other countries and if so, the details thereof and along with the steps taken by the Government in this regard;
- (d) whether there are any schemes to improve communications and connectivity between scientists in India and abroad; and
- (e) if so, the details thereof?

**Answer**

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY; MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF EARTH SCIENCES; MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE; AND MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS; (DR. JITENDRA SINGH)

(a) to (e): A Statement is laid on the Table of the House.

STATEMENT AS REFERRED IN REPLY TO PART (a) TO (e) OF LOK SABHA STARRED QUESTION NO.504 FOR 13 /08/2014 REGARDING 'COLLABORATIVE RESEARCH'

(a) Yes, Madam. India has signed bilateral Science and Technology (S&T) cooperation agreements with 83 countries, including EU. Currently, with 45 countries we are actively engaged in S&T collaboration.

(b) As per data accessed from Web-of-Science on 6th August 2014, the total number of S&T research papers in which India has collaborated with other countries is as follows:

Year	No. of Papers in Science & Engineering	No. of paper through International collaboration	Share of international collaborative paper (%)
2013	66,580	28551	42.88
2012	63,375	24788	39.11
2011	56,666	22009	38.84

Note: Data for 2014 is not available yet

(c) Yes, Madam. Government has initiated S&T cooperation with African nations under India- Africa Forum Summit; Research Training Fellowship for Developing Country Scientists to work in Indian institutions; under the Look-East Policy of the Government of India, S&T collaboration has been augmented with Far-east countries. Dedicated joint Research and Development (R&D) collaborative funds have been established with countries such as Australia, European Union (EU), France, Germany, Hungary, South Korea, Switzerland, United Kingdom (UK) and United States of America (USA).

(d) & (e): Communication and connectivity schemes have been enabled through mobility for Indian research students and young faculty to foreign countries through fellowships and internships such as Raman-Charpak for France, DST-Max Plank Fellowship for Germany; Indo- Swiss Research Fellowship, Indo-Korean Research Internship, Indo-US Research Fellowship, Lindau Nobel Laureate meet; Asian Science Camp; S.N. Bose and Khorana Internships for USA. In addition, joint project based activities, bilateral workshops and access to mega-science facilities abroad are being supported.