

**GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF SCIENCE AND TECHNOLOGY  
LOK SABHA  
UNSTARRED QUESTION NO. 2112  
ANSWERED ON 12/03/2025**

**SCIENTIFIC PUBLICATIONS**

**2112. SHRI RAO RAJENDRA SINGH:**

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

- (a) **whether the Government has any data on the number of scientific publications in the country during the last five years and if so, the details thereof;**
- (b) **whether the Government is taking any steps to encourage scientific publications in the country, if so, the details thereof;**
- (c) **whether initiatives are also being taken to increase awareness in the scientific community with regards to Intellectual Property Rights (IPR) and if so, the details thereof; and**
- (d) **whether the Government is aware of the fact that most patents are published by non-residents and if so, the details thereof and the steps being taken to address the issue?**

**ANSWER**

**MINISTER OF STATE (INDEPENDENT CHARGE) OF THE  
MINISTRY OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES  
(DR. JITENDRA SINGH)**

विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान मंत्रालय के राज्य मंत्री (स्वतंत्र प्रभार)  
(डॉ. जितेंद्र सिंह)

(a) **As per the latest Science & Engineering Indicators report of the National Science Foundation, USA, the number of scientific publications in India is continuously increasing. The details are as under:**

<b>Year</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Number of Publications</b>	<b>130,235</b>	<b>132,820</b>	<b>148,410</b>	<b>179,806</b>	<b>207,390</b>

(b) **The government has taken several steps to strengthen the research ecosystem in the country and encourage researchers for scientific publications. This includes successive increase in budget allocations for scientific research, establishment of Anusandhan National Research Foundation (ANRF) through the**

**ANRF Act 2023, creation of centres of excellence, instituting research fellowships, research programmes, encouraging participation of industry in R&D, etc. The extramural project funding and fellowship schemes of Department of Science and Technology (DST), Department of Biotechnology (DBT) and Council of Scientific and Industrial Research (CSIR) have been designed to encourage researchers to do quality research. These include research and development funding in the area of clean energy, water, nano and advanced materials, cyber-physical, quantum science, geospatial, biotechnology, industrial technologies, etc. The outcome of these research initiatives includes research publications and creation of intellectual property, primarily in the form of patents, technology transfers and in some instances as industrial designs. Simultaneously, the researchers in the country are also encouraged to conduct research publications and create intellectual properties as they are considered to be one of the performance indicators for career progression.**

**(c) The government has taken several steps to create awareness about Intellectual Property Rights (IPR) and patent filing through various schemes/programmes such as: Patent Facilitating Centre supported by DST is helping scientists in filing and prosecution of patents and other IPRs for the inventions emanating from universities and other academic institutes, conducting IPR Awareness Workshops and Training Programmes for the scientists and technologists; DST-WISE Internship in IPR, provides one year training to women scientists in IPR and related areas; DST - State Science and Technology Programme (SSTP), extends support to the Patent Information Centres (PICs) established in the State Science & Technology Councils which facilitate the Intellectual Property Rights (IPR) related activities including awareness in their respective States; DST-Technology Development Programme (TDP) encourage Investigators / Innovators to file the provisional IPR as soon as the idea is generated and the complete filing is initiated when the prototypes are developed successfully; the DST supported Technology Enabling Centres (TEC) provide an Ecosystem for Technology Development in the Universities and engage professionals for IP management, encourage and facilitate the researchers to file patents; and DST supported Technology Business Incubators also encourage and provide assistance to their incubatees in filing Intellectual Property (IP). DBT has issued “DBT Intellectual Property Guidelines 2023” to facilitate seamless transfer of IP at academic institutes towards commercialization of technologies/products for larger social impact; and DBT - Biotechnology Industry Research Assistance Council (BIRAC), offers a wide range of IP & Technology Management services to Start-ups, SMEs, and Academic Institutions.**

**(d) As per the latest Annual Report, 2022-23 of the Office of Controller General of Patents, Designs & Trade Marks, the number of patent applications filed by Indian residents (43,301) exceeds that of non-residents (39,510).**

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