

Doctorate Degrees from India: 1877 (first award) to 1920

B K Sen*

(Received 19 July 2015)

Abstract

India produced its first doctorate in the year 1904 when University of Allahabad (f. 1887) awarded D Sc to Annoda Prasad Sircar, about half a century after the establishment of the three premier Indian universities. Surprisingly, the first doctorate was produced by none of the three premier universities. Of the premier universities, University of Calcutta was the first to produce a doctorate when the famous medical practitioner Upendranath Brahmachari was awarded PhD in 1909. Till 1920, 13 doctorates were produced from India, one from Allahabad and the remaining 12 from the University of Calcutta. The subject-wise breakdown is as follows: Mathematics – 2; Physics – 3; Chemistry – 6; Earth sciences – 1; Medical sciences – 1; and Agriculture – 1.

Key words: Doctorate degrees, Twentieth century 1901-1920

1. INTRODUCTION

The three premier universities of India was established in 1857 at Calcutta, Bombay and Madras. However, none of these universities could produce any doctorate in the nineteenth century. The credit of producing the first doctorate goes to the University of Calcutta which awarded the first doctorate degrees in India in 1877. Gooroodas Bandyopadhyay and Trilokyanath Mitra (2010, p. 191, 279) were the first recipients of the degrees (law).

Inter-University Board of India brought out two volumes titled as *Physical sciences – A bibliography of doctoral dissertations accepted by Indian universities 1857-1970* and *Biological sciences – A bibliography of doctoral dissertations accepted by Indian universities 1857-1970* (Inter University Board of India, 1975)². These two volumes have exhaustively listed the doctoral dissertations accepted by Indian universities till 1970. The title of the bibliographies might lead

one to think that the first doctorate in India was produced in 1857, which is not the case.

As to this, the Preface of the sources notes – “The date of 1857 is a formal one in so far as the first Indian universities were established in that year. Research work at the doctoral level was undertaken only towards the end of last century [i.e. 19th century]. It may be noted here that Alexander Pedler was appointed professor of chemistry at Presidency College, Calcutta in 1874. Gradually facilities for practical classes in chemistry started developing there. However, research in chemistry started in full swing after the joining of Prafulla Chandra Ray as professor of chemistry in the aforesaid college in 1889 (Sen, 2014)³.

2. DOCTORATES FROM 1904-1920

From 1904-1920, in all 13 doctorates were produced from India. Except the first doctorate,

* Chairman, Expert Committee on Bibliometrics, DST, Govt. of India; Member, Research Council on History of Science, Indian National Science Academy; Formerly –Scientist, CSIR; Visiting Professor, University of Malaya, Project Investigator-Indian National Science Academy

Postal Address: 80, Shivalik Apartments, Alaknanda, New Delhi-110019, India;E-mail: bksen1938@gmail.com

all the other 12 were produced by the University of Calcutta (CU). The number of doctorates produced according to subjects were: Mathematics – 2; Physics – 3; Chemistry – 6; Earth sciences – 1; Medical sciences – 1; and Agriculture – 1. In the same order, the list is provided below. Under each subject, the entries are in chronological order.

Mathematics

1. Mukhopadhyay, Syamadas. Parametric coefficients in differential geometry of curves. PhD. CU. 1910.
2. Bagchi, Haridas. Curves of the third order, cubics, quartics. PhD. CU. 1912.

Physics

1. Bandyopadhyay, Suidhansu Kumar. On some problems of diffraction, wave motion and vibration. D Sc. CU. 1918.
2. Saha, Meghnad. A fundamental law of electrical action. D Sc. CU. 1919
3. Mitra, Sisir Kumar. Investigation on the interference and diffraction of light. PhD. CU. 1920.

Chemistry

1. Sircar, Annoda Prasad. By papers. D Sc. Allahabad Univ. 1904.
The first doctorate from India.
2. Sarkar, Anukulchandra. The relation between the chemical constitution and colour of azo compounds. PhD. CU. 1915.
3. Datta, Rasiklal. Hydrogenation of organic bodies: Indirect formation of double salts. D Sc. CU. 1916.

4. Niyogi, Panchanan. Iron in ancient India, copper in ancient India, and space representation of organic ammonium compounds. PhD. CU. 1918.
5. Ghosh, Jnanachandra. A general theory of electrolytic solutions. D Sc. CU. 1919.
6. Ghosh, Prafulla Chandra. Synthetic and natural dyes. PhD. CU. 1920.

Earth Sciences

1. Ghosh, Phanindranath. The colours of the striac in mica and other optical investigations. PhD. CU. 1920.

Medical Sciences

1. Brahmachari, Upendranath. Investigations on the haemolysis of the erythrocytes with some studies regarding their constitution. PhD. CU. 1909. *The first doctorate from the University of Calcutta.*

Agriculture

1. Sen, Jatindranath. Soil in aeration and plant growth. PhD. CU. 1920.

BIBLIOGRAPHY

- Samsad Bengali Charitabidhan*. 5th revised edition, Sahitya Samsad, Kolkata, 2010.
- Inter-University Board of India. Physical sciences – A bibliography of doctoral dissertations accepted by Indian universities 1857-1970. New Delhi: the Board, 1975.
- Inter-University Board of India. Biological sciences – A bibliography of doctoral dissertations accepted by Indian universities 1857-1970. New Delhi: the Board, 1975.
- Sen B K. Chemical research in British India (1788-1900). *Indian Journal of History of Science* 49.4(2014): 432-442.