

## Correspondence

### Early Doctorates Conferred by Indian Universities

K Razi Naqvi\*

This refers to the paper “Doctorate Degrees from India: 1877 (first award) to 1920” by BK Sen published in *IJHS* 50.3 (2015): 533–534. The purpose of this note is to make two comments, first to correct a factual error and second to add some remarks, both cautionary and elaborative, as regards the meaning evoked (in the mind of a contemporary reader) by the term *doctorate*.

#### 1. INTRODUCTION

In an informative article which lists the doctorates awarded by Indian Universities during the period 1877–1920, Sen (2015) stated: “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. ... Till 1920, 13 doctorates were produced from India, one from Allahabad and the remaining 12 from the University of Calcutta.”

It will be convenient to quote one more excerpt (in the same format as that used by Sen):

#### Chemistry

1. Sircar, Annoda Prasad. By papers. D.Sc. Allahabad Univ. 1904. *The first doctorate from India*.

Two comments appear to be in order: (1) Unfortunately, Sen has overlooked the fact that a doctorate in mathematics was awarded by Allahabad in 1898 to Ganesh Prasad (*Allahabad Univeristy Calendar*, 1902, p. 710), and another

in 1901 to Zia-ud-din Ahmad (p. 729). (2) Many modern readers—particularly those accustomed to thinking of a doctorate as the recognition of independent research conducted by the awardee, and to reading European “theses” many of which consist of little more than a collection of published papers or submitted manuscripts under review—might be misled into thinking that every ‘doctorate’ was earned on the basis of a substantial body of original research work, or that the phrase “By papers” means “by submitting papers published in research journals”.

#### 2. SETTING THE RECORD STRAIGHT

To support the claims concerning Ganesh Prasad (hereafter GP) and Zia-ud-din Ahmad (hereafter ZUA), it will be sufficient to refer the reader to the *University of Allahabad Calendar* for the academic year 1902–1903, since it covers previous years as well. The award of a D.Sc. to GP (1898) is mentioned on p. 710; to ZUA (1901), on p. 729. Both names may be found on p. 307, which provides a list of scholars who were granted funds for travelling to England in the pursuit of higher studies; I add here for the sake of completeness, that ZUA’s name is spelt (p. 307) as *Zia-Uddin Ahmad*, and that the same name is written, much more often than not, as *Ziauddin*. Such is the difficulty of transcribing (into English) a compound word (in Arabic, Persian or Urdu) that even a university whose name begins with the definite article in Arabic could not cope with the problem of transcribing a name in which two nouns sandwich the two-lettered article *al!*

\* Department of Physics, Norwegian University of Science and Technology, N-7491 Trondheim, Norway.  
Email: razi.naqvi@ntnu.no

In the 1908 *Calendar* all three holders of D.Sc. have been listed on a single page (p.407).

### 3. REQUIREMENTS FOR AN ALLAHABAD D.Sc.

According to the 1902–3 *Calendar* (pp. 144–5), holding a Bachelor of Science degree was a prerequisite to commencing the prescribed course for the Doctor of Science degree. The examination for the D.Sc. degree consisted of three parts, each of which was called the “*N*-th D.Sc. Examination” (where *N*-th stands for First or Second or Third). The subject of the entire course could be any of the following: mathematics, physics and chemistry. The examination was to be conducted “partly by means of printed papers and partly practical”, but in mathematics the examination was by “printed papers only”.

Readers who are curious to scrutinize the syllabi should consult the *Calendar* and judge for themselves whether “Doctor of Science” was a felicitous choice for the name of the degree. They may also find it interesting to compare the D.Sc. syllabus with that for a Bachelor’s degree of a British university of the same period. Suffice it to say here that when ZUA went to Cambridge, he enrolled for Part II of the Mathematical Tripos as an “Advanced Student”, which amounts to equating his qualifications with Part I of the Mathematical Tripos (an undergraduate qualification). Despite a diligent search, I have not been able to find any hint of an original piece of mathematical research by ZUA. As for the other mathematics D.Sc., namely Ganesh Prasad (also the first recipient of an Indian doctorate), I refer the reader to two recent surveys (Dauben and Parikh, 2010; Narasimhan, 2017).

### 4. THE CHANGING STATUS OF THE DOCTORATE

During the five decades of my own scientific career, the significance of the doctorate (frequently called the Ph.D. degree) has been changing gradually. Even before I started (1964), original scientific work—carried out with little or no input

from someone else and culminating in essentially new results—had become the *sine qua non* for a Ph.D. degree. With scientific research becoming more and more collaborative, a solo publication has become a scientific rarity. Given that a modern research student usually begins her/his career by joining a group, and that apportioning credit for a significant discovery made by a team is no easier than separating conjoined twins, a Ph.D. degree should now be seen as a certificate for having participated in some research activity for a certain number of years in an institution of good repute (or bad, as the case may be). Despite these reservations, the concept of acquiring a doctorate purely by following a prescribed course remains alien to a contemporary researcher. For my part, when I think of Allahabad University of 1910±10, I will reinterpret (or renormalize), the words “Doctor of Science” as “Master of Science” and the abbreviation D.Sc. as M.Sc. The current status of the title *Doctor of Science* (D.Sc. or Sc.D.) is aptly summarized in *Wikipedia*: ‘In some countries, “Doctor of Science” is the title used for the standard doctorate in the sciences; elsewhere the Sc.D. is a “higher doctorate” awarded in recognition of a substantial and sustained contribution to scientific knowledge beyond that required for a Ph.D. It may also be awarded as an honorary degree.’

### BIBLIOGRAPHY

- Dauben, J W and Parikh, R. Beginnings of modern mathematics in India. *Current Science*, 99.3 (2010): 15–37.
- Narasimhan, R. The coming of age of mathematics in India. *Bhāvanā*, 1.1 (2017). <http://bhavana.org.in/coming-of-age-mathematics-india/>
- Sen, B K. Doctorate degrees from India: 1877 (first award) to 1920. *IJHS*, 50.3 (2015): 533–534.
- University of Allahabad Calendar for the Year 1902–1903*. Pioneer Press, Allahabad, 1902.
- University of Allahabad Calendar for the Year 1908*. Pioneer Press, Allahabad, 1908.
- Wikipedia* article on “Doctor of Science”( [https://en.wikipedia.org/wiki/Doctor\\_of\\_Science](https://en.wikipedia.org/wiki/Doctor_of_Science)). Retrieved on 29.01.2019.